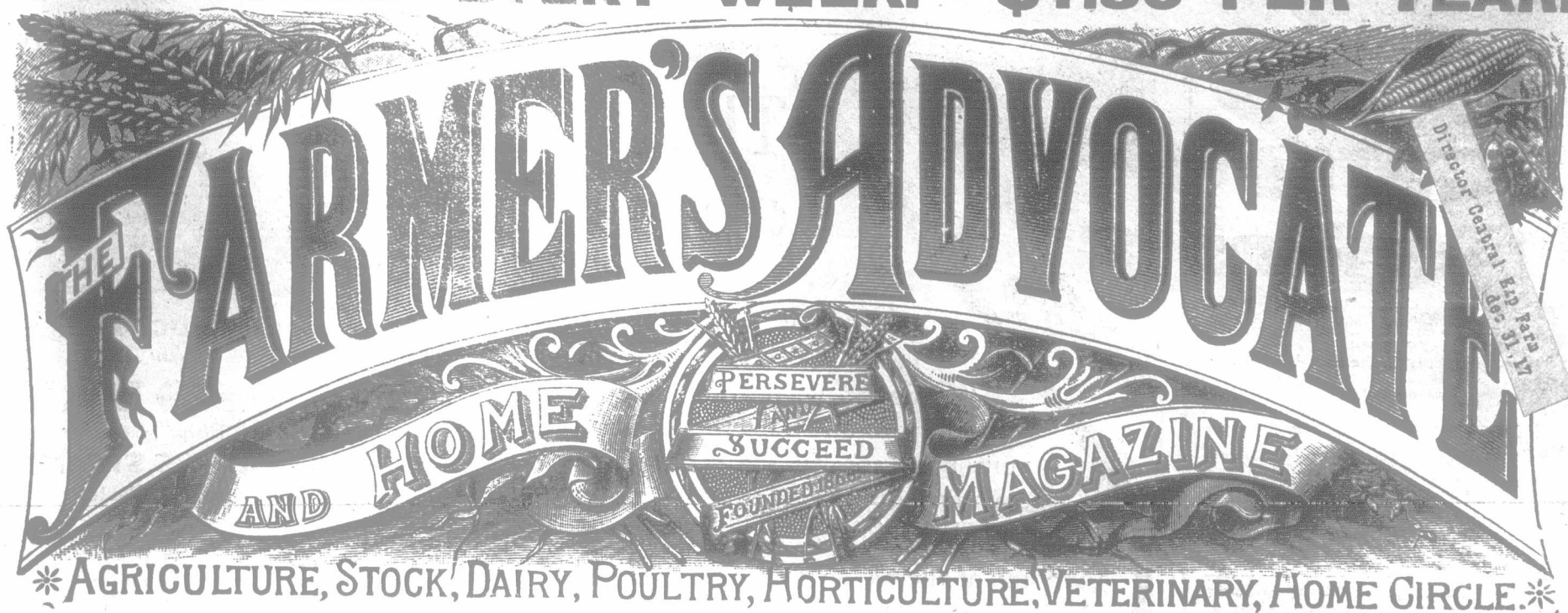


PUBLISHED EVERY WEEK. \$1.50 PER YEAR.



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

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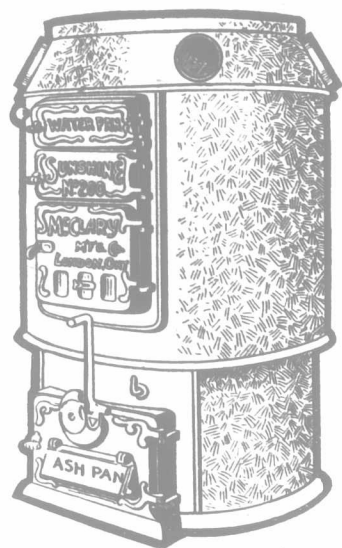
VOL. LII.

LONDON, ONTARIO, JUNE 28, 1917.

No. 1292

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 cellar stairs.
 Directions which joists 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" the rooms not to be heated _____
 Do you want Coil in Furnace to heat Water Tank? _____
 What is the coldest winter temperature? _____
 Name _____
 Post Office _____ Prov. _____
 Nearest R. R. 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.

WANTED Artillery Horses

Age, 6 to 9 years. Height, 15.2 to 16 hands. Weight, 1,200 to 1,350 lbs., and 1,500 lbs. and stand 16.1 hands.

COLOURS

Any, except Light Gray, White or Light Buckskin. All horses must be sound, of good conformation, free from blemishes and broken to harness or saddle.

Horses will be inspected as follows:

- June 28, London
- June 29 Peterboro
- June 30 Listowel. 11.00 a. m.
- July 2 Toronto
- July 3 Brampton. 11.00 a. m.
- July 4 Toronto
- July 5 Port Perry. 12.00 noon.
- July 6 Lindsay. 9.00 a. m.
- July 7 Ottawa. 10.00 a. m.

**FILL YOUR SILO
WITH YOUR OWN ENGINE**
—and a wonderful, light running Gilson Blower Cutter. Your 4 or 6 h.p. engine and our small cutter will make an ideal individual outfit.

Write to-day for free catalog and letters from users.

Beware of imitations and infringements.




GILSON
GILSON MFG. CO. LTD. 329 YORK ST. GUELPH CAN.

**THE MARTIN
DITCHER AND GRADER**
DIGS YOUR DITCHES
GRADES YOUR ROADS

EASILY QUICKLY CHEAPLY

REVERSIBLE ADJUSTABLE



PAYS FOR ITSELF IN ONE DAY
DOES THE WORK OF 50 MEN
SEND FOR FREE BOOKLET

THE PRESTON CAR & COACH CO. LIMITED
97 DOVER ST. PRESTON CANADA

Cream Wanted

We want your cream. We pay highest market price for butter-fat. Supply cans for shipping.

We have opened a Creamery at Prescott, Ont., where we will be able to take care of our Eastern shippers.

Write for particulars, either to Toronto or Prescott.

We guarantee satisfaction in all our dealings with you.

The T. Eaton Co., Ltd.

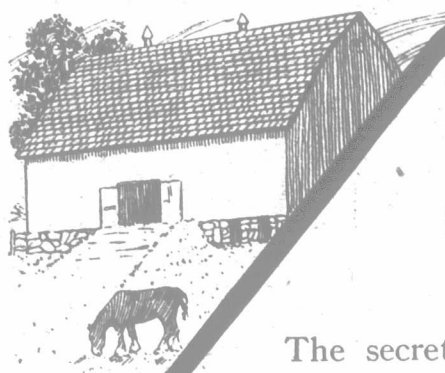
"HANDY"
LONDON CONCRETE MIXER No. 4
Capacity, 40 cu. yards per day. Price, complete with gasoline engine, \$225. Pays for itself in fifteen days' use. Built to last a lifetime.

Send for catalogue No. 1 K.

LONDON CONCRETE MACHINERY CO.,
Lept. B., London, Ontario
World's Largest Mfrs. of Concrete Machinery



When Building—specify
MILTON BRICK
Specially Made Close-Fit Write for booklet.
MILTON BRICK COMPANY
Milton, Ontario



The Secret of the Barn

The secret of good barn service lies in the roof. Dozens of alleged "roofings" flood the market, but if you want a roof that will not flood your barn specify the good, old-fashioned covering of great-grandfather's day—the White Cedar Shingle.

Some of the higher-priced artificial "roofings" will last 5, 10, or possibly 20 years, if given a frequent coat of paint, and weather permitting; the wooden shingle has been known to last 80 years, and to defy successfully rain, frost, snow, sun and wind all that time.

There is no better shingle made to-day than

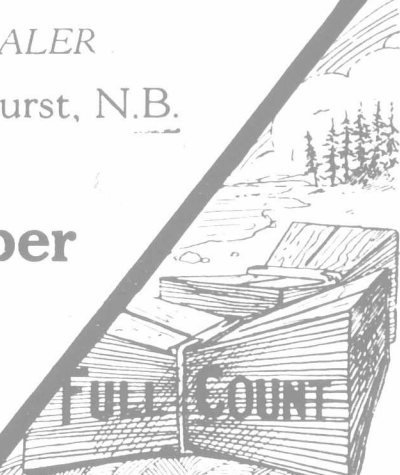
BEAVER BRAND WHITE CEDAR SHINGLES

BEAVER Shingles are made in New Brunswick, Canada, from sound, live logs, by skilled sawyers. They are cheaper in first cost than any "made up" roofing, and they cost little or nothing for repairs. No paint needed. Easily fixed to stay fixed.

ASK YOUR DEALER

Manufactured at Bathurst, N.B.
BY

**Bathurst Lumber
Company
LIMITED**



**WE WANT TO DEMONSTRATE
ON YOUR FARM**



GILSON

We will send a Gilson Engine, any size, without charge, to any responsible farmer in Canada, to try out on his own farm at his own work. Write for further particulars of our free trial offer, catalogue and special introductory prices.

**Gilson Mfg. Co.,
Limited.**
269 York St., Guelph, Ont.

FROST & WOOD RAKES

Save hand work and ensure better hay.

SEND FOR NEW FOLDER.

FROST & WOOD CO., LIMITED
Smith's Falls, Ont.

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 Mtg. Corpn.

Our booklet, entitled Profits from Savings, tells you all about it. Write now for a copy. It's free.

STANDARD RELIANCE MTG. CORPN.
82-88 King St. E., Toronto, Ont.

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MAY 8th TO OCTOBER 30th
Every

TUESDAY
"ALL RAIL" - also by
THURSDAY'S STEAMER
"Great Lakes Routes"
(Season Navigation)

Your Future is in the West

The fertile prairies have put Western Canada on the map. There are still thousands of acres waiting for the man who wants a home and prosperity. Take advantage of Low Rates and travel via

Canadian Pacific

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

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!



GRAND TRUNK RAILWAY SYSTEM ATTRACTIVE TRIPS

TO
MUSKOKA LAKES
ALGONQUIN PARK
MAGANETAWAN RIVER
LAKE OF BAYS
KAWARTHA LAKES
GEORGIAN BAY

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

Get Your Tickets in Advance

Berth reservations and full information at all Grand Trunk Ticket Offices, or write C. E. HORNING, District Passenger Agent, G. T. Ry. System, Toronto, Ont.

You can assure your family a **MONTHLY INCOME for LIFE** or assure yourself an income during your old age by means of an

Imperial Monthly Income Policy

Write for particulars now and mention The Farmer's Advocate. Address:
Imperial Life Assurance Co. of Canada
Head Office: TORONTO

BALED SHAVINGS

We have a few cars of baled shavings at 15c. per bale, f.o.b. Burlington, ready for immediate shipment. We advise farmers to take them in now, as they will not be available next winter.
The NICHOLSON LUMBER COMPANY, Ltd.
Burlington Ontario

FULL
Write for Catalogue
THE ADAM
BEAVER H OX
Cows with calf
Shearling rams
One Ayrshire b
Alex. McKinn

Massey-Harris Service

Talk No. 3.—*Extra Parts for Repairs.*

MASSEY-HARRIS Implements are built to last, and many have been known to give splendid satisfaction for twenty or twenty-five years. It is only natural, however, that some parts will wear and others be accidentally broken, and the matter of securing extra parts promptly is an exceedingly important one.

We have always prided ourselves on being able to promptly supply duplicate parts for any Massey-Harris machine no matter how long in use. All Massey-Harris parts are interchangeable, that is when any part is worn out by long continued use or broken by accident, it can be promptly replaced by one exactly like it. This is true whether the part desired be made of Wood, Steel, Cast or Malleable Iron, or Canvas. Parts that go into the machines and parts for Repairs are made from the same patterns, are identical in every respect and will give satisfaction in every case.

By our complete organization for the handling of Extra Parts, we are in a position to give prompt service to our many thousands of customers.

Parts in common use are kept on hand at thousands of Local Agencies throughout Canada, while large stocks are maintained at our factories, branch houses and other convenient points from which other parts can be had promptly.

Some idea of the expense of maintaining this efficient Repair Service may be gained from the fact that the number of different parts listed in our Extras Lists is approximately fifty thousand, some of which are kept on hand by the hundreds or even thousands, representing a value in Parts and necessary Warehouse accommodation for same running into millions of dollars, with many thousands of dollars paid annually to maintain competent and experienced staffs at various points to handle same.

The importance of this service will be best realized during Seeding or Harvesting when every hour counts, and great loss may be sustained if parts cannot be secured promptly.

MASSEY-HARRIS CO., LIMITED

Head Offices—Toronto.

Factories at Toronto, Brantford and Woodstock.

Branches at:—Montreal, Moncton, Winnipeg, Regina, Saskatoon, Swift Current, Yorkton, Calgary, Edmonton.

AGENCIES EVERYWHERE

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

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

LITTLE CHILDREN

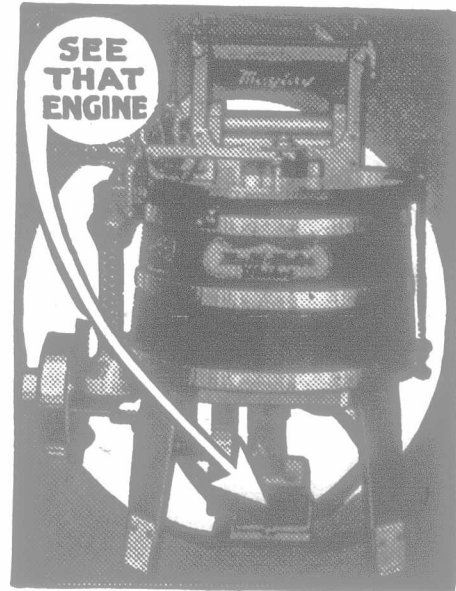
show by their dress and behavior the care they receive at home. Little orphans show by their condition whether or not their parents had the wisdom to insure. Sometimes it is put off a little too long for the welfare of the family.

Don't YOU put it off too long.

Write at once for particulars of our attractive plans, giving date of birth, to

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

"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.

FERTILIZERS

For Fall Wheat and Seeding Down

HIGH GRADE

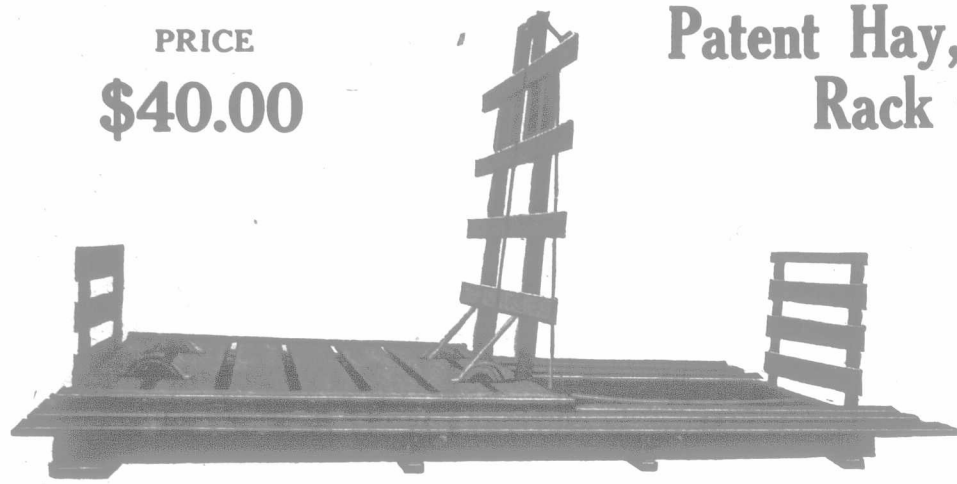
Write for Prices

THE W. A. FREEMAN CO. Limited
HAMILTON CANADA

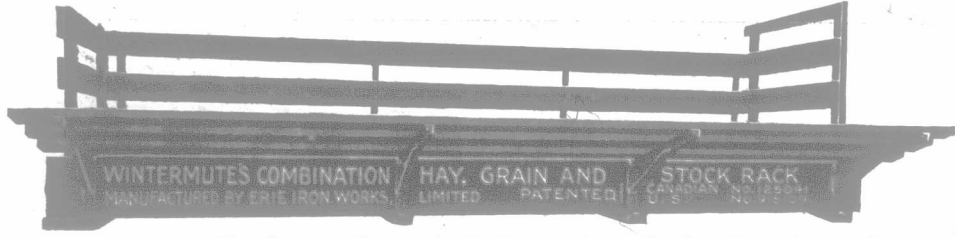
Ask your Grocer for
McCormick's
JERSEY CREAM
Sodas
Always crisp and delicious

PRICE
\$40.00

Patent Hay, Grain and Stock Rack Combination



Shows complete one-man hay-loading outfit.



Shows one side of wagon-box rack tilted to make a sheaf rack, and opposite side and ends set up for a stock rack.

One-man outfit during haying-time! Grasp what that means with the present scarcity of help and high wages!

Ten good features and reasons why every farmer should buy this rack:

1. Farmers' wagon box.
2. Farmers' flat rack.
3. Farmers' sheaf tilt side rack.
4. Farmers' stock rack.
5. Farmers' combination one-man hay-loading rack.
6. All changes made without loosening a nut or taking out a bolt.
7. The material used is the highest grade that can be bought, and weight is added where strength is required.
8. The rack is well painted and finished.
9. The price is within a reasonable figure, and because of the many uses it can be put to, will earn the money paid for it in less than one season.
10. It is made in Canada by Canadian workmen.

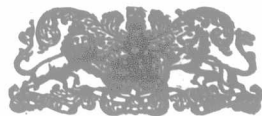
Write to

The Erie Iron Works, Limited
St. Thomas, Ontario

for full particulars. Price is \$40.00 for the complete outfit for a 14-foot rack. Be sure and get this money-saving proposition.

Patented in U. S., No. 918109; in Canada, No. 125041.

All infringements will be prosecuted.



SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Supplying Coal for the Dominion Buildings," will be received at this office until 4 P.M., on Tuesday, July 3, 1917, for the supply of coal for the Public Buildings throughout the Dominion.

Combined specification and form of tenders can be obtained on application at this office and from the caretakers of the different Dominion Buildings. Persons tendering are notified that tenders will not be considered unless made on the printed form supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, equal to ten per cent. (10 p.c.) of the amount of the tender, which will be forfeited if the person tendering decline to enter into a contract when called upon to do so or fail to complete the contract. If the tender be not accepted, the cheque will be returned.

By order,

R. C. DESROCHERS,
Secretary.

Department of Public Works,
Ottawa, June 9, 1917.

Newspapers will not be paid for this advertisement if they insert it without authority from the Department.

PATENTS AND LEGAL
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.

FARMERS SHIP YOUR WOOL DIRECT TO US

We Are Now Paying the Highest Prices Ever Paid for Wool

Mr. Farmer, you can get more money for your wool by sending it direct to us.

In all probability it will come to us anyway at some time, no matter to whom you sell it.

For over thirty years we have been one of the largest buyers of wool in Canada.

This proves we always treat our customers fairly, and pay top prices.

We are now paying for wool as follows:

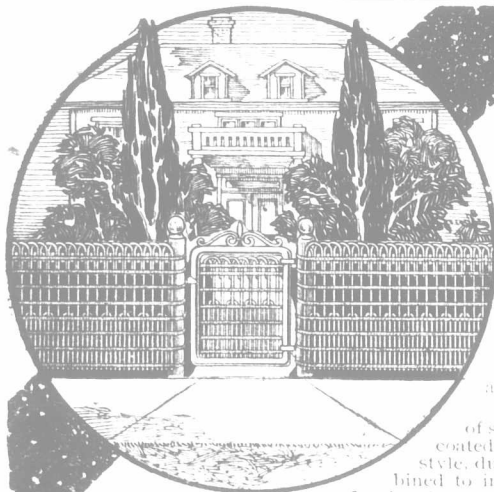
Unwashed fleece, fine	53c. to 55c. per lb.
Unwashed fleece, coarse	52c. to 53c. per lb.
Washed fleece, fine	67c. to 69c. per lb.
Washed fleece, coarse	65c. to 67c. per lb.

We send your money the same day as wool is received, only deducting freight or express charges.

Ship to-day, or write us, telling how much wool you have, if washed or unwashed, and breed of sheep clipped from.

We will then quote you a straight price and send you shipping tags, with full instructions.

John Hallam Limited TORONTO



You will say with a feeling of solid satisfaction—*all is now complete.*

Peerless Lawn Fencing

is the finish, the last word to beautify, protect and to enhance the value of your property. It safeguards your children, keeps out marauding dogs, animals and destructive chickens, protects the lawn, shrubs and flowers, and prevents trespassing.

Peerless Ornamental Fencing is built of strong, stiff wire, heavily galvanized and coated with zinc enamel to prevent rust. In style, durability, service and every feature combined to insure absolute satisfaction, the Peerless fencing is true to its name. It will not sag and cannot break down with ordinary use.

SEND FOR CATALOG. Shows many beautiful designs of fencing for lawns, parks, schools, churches, communities, etc. DEALERS NEARLY EVERYWHERE.
The Banwell-Hoxie Wire Fence Company, Ltd., Winnipeg, Man., Hamilton, Ont.

You cannot afford to wait until next year before buying a silo

If you own cows you need a silo, and the sooner you get one the less it is going to cost you.

It is not merely that the advancing price of lumber makes it certain that you will have to pay more for the silo itself next year. That fact alone might not be important enough to induce you to buy now. The really big, important saving to consider is the saving a silo would make possible during the next twelve months, and the profits it would prevent you from throwing away.

Everything produced on the land is increasing in value

You can put your acreage to more profitable use than merely letting it produce hay and pasturage.

A silo will enable you to feed your cows from less land and so will allow you to put more acreage into valuable crops that you can sell.

It will mean 25% more milk next winter.

It will mean 15 to 20% lower feed bills.

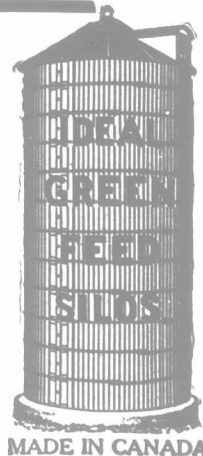
It will mean a saving in a dozen other directions—but you cannot make these savings merely by reading about them.

The thing to do is to place your order for an Ideal Green Feed Silo, and to do it NOW.

Write to-day for our large, illustrated catalogue, which shows you every detail of this silo and explains just why you get more in it for your money than in any other.

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 Buttermakers. Catalogues of any of our lines mailed upon request.
MONTREAL PETERBORO WINNIPEG VANCOUVER
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



MADE IN CANADA



MAIL CONTRACT

SEALED TENDERS, addressed to the Postmaster General, will be received at Ottawa, until Noon, on Friday, the 27th day of July, 1917, for the conveyance of His Majesty's Mails, on a proposed Contract for four years, six times per week over Longwood No. 2 Rural, Route, from the 1st of October, next.

Printed notices containing further information as to conditions of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Offices of Longwood, Melbourne and Appin, and at the office of the Post Office Inspector, London.

C. C. ANDERSON,
Superintendent

Post Office Department, Canada, Mail Service Branch, Ottawa, 15th June, 1917.

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, Ont.

THE VETERINARIAN

A valuable book which tells you 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—

When writing please mention this paper.

The Farmer's Advocate and Home Magazine

PERSEVERE
AND
SUCCEED

ESTABLISHED
1863

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LII.

LONDON, ONTARIO, JUNE 28, 1917.

1292

EDITORIAL.

Fight and pay now, not later.

Canada has only one course—fill the gaps.

German frightfulness grows more frightful and yet does not frighten.

Good roads are as necessary for loaded wagons as for touring cars.

If the men must be taken, organize all resources so each does his part.

It is not always those who cheer loudest or talk most who accomplish most.

Feed, finance or fight is Billy Sunday's apt phrase pointing to the duty of every man.

Duty-dodgers are bad enough anywhere but infinitely more harmful when in high places.

The people of Canada will back up the man who points a clear way ahead in the present crisis.

German airmen feel safer dropping bombs on school children than fighting Allied machinery of war.

A clean and well-fertilized summer-fallow is a strong initial step toward a satisfactory wheat crop in 1918.

One of the biggest problems the Fuel Controller is likely to find in his new office will be to get sufficient fuel to control.

According to the calendar the longest day of 1917 is past, but the farmer will have many long days before his crop is harvested.

Every day the final decision with regard to conscription and its application is delayed, means so much more lack of efficient organization.

Where hoeing is necessary do it well. Once over where every weed falls is much more satisfactory than two or three times "running through."

Ontario and the Eastern Provinces have planted more potatoes than usual. If the weather does its part no Canadian child should be without his mashed potatoes next winter, and there should be many to spare.

Working up a community spirit between small town and country is worth while, and will lead to a better understanding between the man on the land and the man in town. It is necessary right now.

At first those clamoring for food control seemed to think that food was the only necessary thing advancing in price. We are not strong for control, other than to prevent speculation, but if it must come for food why not extend it to all necessities? It is a bigger subject than most people think.

In three years the Dominion Department of Agriculture have distributed throughout Canada over 3,000 pure-bred sires, stallions, bulls, rams and boars. These going to outlying districts should work some improvement in the live stock of the country. The system is one which should be carefully watched that every district get the class of sire desired, and must always be worked in the interests of the communities served, and not for the special benefit of any individual, breed or class.

Stock Values.

In travelling through the country one notices a large preponderance of live stock which could not be classed as good grades, and which really show no system whatever in breeding. There is, in this country, unlimited scope for the work now being carried on so well by our comparatively few breeders of high-class, pure-bred stock. There are thousands of herds and flocks, even in the choicest sections of Old Ontario, which would be vastly improved by the continuous use of pure-bred sires. There are many herds which should eventually be cleaned out altogether and replaced by better stock. However, most of them could be successfully graded up if the best of pure-bred sires were used. Never was the outlook brighter for the live-stock industry and never was the investment in the right kind of pure-bred sire safer than at the present time. And it would be well to mention that we need more herds of pure-breds in this Province, and in fact all over Canada. It is impossible to get too many good pure-breds. Each new herd of the right kind of stock, properly cared for, makes more interest in better stock and consequently improves the live-stock business for the owner of pure-breds. Prices never reached a higher level than at the present time. Very recently in the country to the south of us a bull calf of the Holstein breed sold for \$53,200; a cow for \$18,300, and 143 head for \$296,470. One hundred and twenty-three head of Aberdeen-Angus cattle, one of our best beef breeds, brought a grand total of \$95,285 or an average of \$774 per head, with a female going at over \$3,000 and a bull at over \$2,000. The same week 107 head of Shorthorns were sold in Chicago for \$146,575, an average of \$1,370 each; the top of the lot going at \$7,000. A large herd of Herefords averaged \$1,700 each. These are only a few of the sales of pure-bred cattle which have made high record prices, and they indicate the trend of the times. True, the highest prices are paid by men of wealth for fancy animals with fancy breeding and they set a very fast pace, but notwithstanding this fact we must remember that prices for beef and other forms of meat produced on the market, as well as for dairy products have advanced steadily during the past two years and while moneyed men vie with one another in paying high prices for fancy stock, the cow which produces milk and cream and the animal which produces beef, mutton, or pork and does it most economically and in the end turns out the highest-quality product is the animal which will always be in the best demand. The beef animal, the bacon hog, the mutton sheep, and the dairy cow are worth to the producer exactly what the results at the block or at the pail show, and these results have proven time and again that the well-bred animal is the kind which makes the farmer the largest returns. It is the best which proves profitable in improving the poorer classes of stock. No one can estimate the value of fancy and high-class pure-breds in this regard.

The Transportation Problem.

One of the biggest problems this country faces at the present time is that of transportation. We are told that shortage of labor and increased demand on our railway lines have caused a depletion in equipment and a lack of needed upkeep on the roads. From time to time during the past winter embargoes were placed on certain classes of freight in order that the railways might catch up with the work they had to do. There is nothing at the present moment which points to a bettering of conditions next winter. It may be that the railway organization will not be sufficient to handle the grain from the West at the proper time. We are told by those familiar with the coal situation that we may look for a "hand-to-mouth" supply of coal for the coming winter, and that the transportation com-

panies are not likely to be able to handle it fast enough to give a liberal supply. An insufficient, broken-down, or in any way impaired or depleted set of railway transportation facilities is the biggest drawback that can come to us at this time. It affects agriculture, manufacturing and all lines of business and makes a general tie-up in the country. Anything which can be done to relieve the situation and to put our railroads on the best possible basis for the present and future would meet with the approval of the Canadian people and it is time now that a bold policy were inaugurated.

The Hay Crop.

In 1917 it was the hay crop that saved the situation on many a farm in Eastern Canada. Present indications are for a fair crop this year, and for feeding purposes a certain amount of emphasis should be placed on the importance of hay, for it is one of the safest and best crops produced on the farm, clover or alfalfa being particularly valuable in conjunction with silage for cattle-feeding purposes and the clover is always of first value in crop rotation, and as feed for not only cattle but horses and sheep, and, in fact, pigs. To make the most of the hay crop it should be cut at the proper time. Clover makes about the best feed when cut at the time that about one-third of the bloom turns brown. Alfalfa should be cut when a small percentage of the plants show bloom, or when new growth is noticed shooting up from the basal leaves on the stalk and sweet clover should be cut just before bloom appears. Timothy or mixtures of clover and timothy stands a little later and should be cut between the periods of blossoming. However, it makes better feed cut early than left too late. Considerable of the hay, particularly in years of catchy weather, is left too long before cutting and consequently loses some of its palatability and feed value. Clover also gives a better chance of the second crop either for hay or seed when cut early. In curing, care should be taken to save the leaves on the stalk. Of course, the weather has a great deal to do with the hay made, but growers will plan to make the most of the crop this year because it is the roughage, hay, corn and roots grown on the farm, which will carry the stock over winter most economically and which will release for sale grains necessary for food consumption and which at the present time command high prices. In cutting sweet clover or alfalfa the mower should be set high enough that the bottom rosettes of leaves are left on the stalks. This is very important in sweet clover because if cut low the plants would be killed.

A Credit Due Co-Operation.

In discussing the merits and demerits of co-operation and in comparing the prices and returns received through selling co-operatively with those obtainable where sales are made individually, one important feature favorable to co-operation is often entirely overlooked. We refer to the fact that co-operation almost invariably forces the other fellow to pay a higher price and thus the margin between his price and that received through co-operative sales does not appear so large. In fact, in some instances private individuals or sets of individuals or companies will boost prices higher than the co-operative price in order to force the co-operative system to the wall. In comparing the returns received through co-operation with those available through individual sales one should always take into account the fact that were the co-operative system not in existence individual prices would likely be much lower than those obtainable after the co-operative system has gained a footing. The comparison should be made between the co-operative price and that which would likely have obtained had no co-operative system been in existence. If this were done no one would

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

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think of breaking away from the co-operative system and the system should be given due credit for any price increase which comes after its inception; such credit in fact that no co-operator could be induced to break away from co-operation no matter what inducements those anxious to break the movement hold out.

Publicity to Prevent Food Speculation.

We have, on previous occasions, pointed out that in a country situated as Canada is and producing large quantities of food for export that the main good any interference with the law of supply and demand and private dealing in food products could do would be to control speculation or dealing in futures, for instance, on the wheat exchange. Food speculation is possible largely because people generally have no knowledge of the quantities of food such as flour, meat, eggs and butter and other products stored or held in obscurity. Almost all speculation is based on the ignorance of the public in general, as to actual conditions. It is possible by overworking the storage idea to create an artificial scarcity, which inflates prices and which in return makes dollars for the speculator. On the other hand, the storing of products is a legitimate and necessary business and the public should expect to pay for storage and the losses which naturally occur in storing. But the storages, or the speculators should not be left in a position to take advantage of people through their ignorance of quantities on hand. We believe that every legitimate business should return a fair profit to the man operating it, and there should be a means in connection with food products and storage of preventing undue speculation and profits which are out of reason. It would not be impossible for a Government agency to gather data from month to month regarding quantities of food in storage as well as quantities in the raw state, and this data should be regularly placed before the people. This would automatically put an end to any undue speculation which might occur. A visible supply of which the people were aware would leave the law of supply and demand to work, as it should work, unhampered. Once established such a system should be retained in peace as well as war times. Storages

are good and necessary to the welfare of the people, but the food speculator is unnecessary either in times of war or peace. On the other hand, the food dealer is entitled to a fair margin of profit on the business which he does.

Indexed For Reference.

We wish to draw the attention of our readers to the index, which appears in this issue. This is not a new feature. "The Farmer's Advocate" has been indexed half-yearly for many years, but we simply direct our readers to this index that they may see something of its importance and realize the usefulness of each issue saved and compiled in book form. Questions on every phase of practical agriculture are answered in these papers, and the index will direct those desiring information to almost anything they want to know in regard to practical agriculture. It is a good plan to save all the issues of the paper and then remember that the last issue in June and the last issue in December contain a full and complete index which will help solve many of your farm problems.

We Get Only by Giving.

BY ALLAN MCDIARMID.

It strikes me that this campaign of thrift and economy is being carried a little too far in certain directions. I read a letter recently in which the writer advocated the doing away with the feeding of grain of any description to the animals on the farm, so that the said grain might be utilized for human consumption. His idea was to grow corn and roots to a larger extent than is being done at present, and make them the staple feeds for cows, pigs, hens and horses. Then all the grain grown in the country could be turned to account as food for man. He seemed to look on silage as a sort of general-purpose stock ration that would take the place of anything in the shape of grain. Even hens could eat it if it was cut fine enough.

Now it seems to me that this is going back to the old times when the farmers used to half starve their cattle and got paid back by being half starved in return. I can remember in my younger days breaking off the ears of corn and feeding the bare stalks to the cows, as a matter of economy. I sold the grain, but I have figured since that I lost about four times as much as I gained by this practice in lessened production and in the direct loss of animals as well. If it is good policy to sell all our grain in time of war for human consumption, then some of the men who are supposed to be our best farmers, have been working along wrong lines all along. The grain they have turned into milk, cream, butter, cheese, eggs, pork and beef, should have been sold and sent to feed the nations of the world. There would have been, of course, a certain amount of these other products for sale, and the question is, which is the most profitable method of procedure? There is no use treating this grain-selling as a temporary measure, for no one knows how long present conditions will continue. It is a question of what will be best in the long run. Can we make a success of raising live-stock and selling dairy produce, and of grain farming at the same time?

I don't think it can be done. In the first place take the case of the farm horse. Without his grain ration he cannot do a full day's work. Nothing has ever been found to satisfactorily take the place of oats as a horse feed. A poorly fed horse will not only waste his own time but that of his owner or driver as well. It is poor economy to save a bushel of oats and waste a couple of dollars' worth of time.

As to the dairy cow, I have had some experience with her and I know that she must, during the winter at least, get a fair grain ration if she is to give a reasonable amount of milk, and at the same time keep in good flesh. A cow that is turned out in poor condition in the spring will take the best part of the summer to build up and get ready to produce enough to pay for her keep. By that time the pastures are getting short and her opportunity is gone. The cow that comes on to the grass in good condition milks up to her capacity for a time at least.

With pigs, a profit can be made, it is claimed, of 100 per cent., by buying all grain and feeding them nothing else of any practical value. This statement was made to me by a man who said he kept track of every item of cost, and so is in a position to know the facts. So, if ten dollars worth of grain will make twenty dollars worth of pork, or if it makes only fifteen dollars worth, it seems to me that it is poor economy to sell the grain in its original condition. If food production is the all important thing in war-time let us do it in a scientific way, and give the produce of our fields to the world in a form that will be of most service to it. The idea of fining farmers for feeding certain kinds of grain to live stock, as they are doing in some countries, is the shortest of short-sighted policy. They are destroying the possibility of creating a more valuable food than they are saving, and they are bringing about a state of poverty of the land that will take them years to recover from.

The case of the hen and of egg-production is worth a little notice. This is claimed to be a profitable line of business by most farmer's wives at least. The majority of men are not so sure of it. I heard one man say this spring that he had kept two hundred hens all winter

and they had given him one egg, which had cost him just one hundred dollars. If this was the case it was probably owing to the fact that the hens had been fed on a very poor quality of grain since the previous fall, as oats especially, were not up to the usual standard last year. Admitting, for the sake of argument that hens can be kept at a profit in normal times, the above case proves that grain of good quality can be increased in value by turning it into eggs, as nothing else can take its place, apparently.

The important point, however, in this question, is one that has already been referred to, namely, that of keeping up the fertility of our farm lands. Some people talk as though the war and food shortage would be a matter of short duration, when in all probability the question of the world's food supply will be one that will require a good deal more than usual attention for several years at least. Consequently it is up to us to see that our farms are fed if we want them to feed ourselves and others. And if the high price of grain tempts us to sell it, or prevents us from buying it, when we run short, then we are reducing the amount of plant-food, in the shape of stable manure, that should go into the soil, and we are stealing from the future years for the sake of a very temporary advantage in the present. One of the worst tendencies of the present generation is that which makes people forget posterity and think only of self. It will be a bad one on some of us if we should have to go through this world a second time. We might get a chance then, to reap what we had sown.

A text for a sermon that I heard recently made a good deal of impression on me. It was this. "There is that scattereth and yet increaseth, and there is that withholdeth more than is meet, but it tendeth to poverty." It seems to me that this statement applies to the question under discussion particularly, and to farming in general at all times. We can continue to get only by giving, and we don't want to let this war, or any unusual conditions it has brought into existence, cause us to forget it.

Nature's Diary.

BY A. B. KLUGH, M. A.

One of our commonest butterflies, and certainly the most abundant species in our gardens, is an imported insect—the White Cabbage Butterfly. It was first noticed on the American continent at Quebec in 1860, when a single species was captured, and was not seen again for two years. In 1865 it was observed to be extending its range, in 1868 it reached Montreal and in 1872 Ontario. It now ranges practically across the continent.

This well-known species has a wing expanse of about two inches, the female has two distinct black spots on the fore-wings, while the male has only one such spot, though in both sexes the fore-wings are tipped with black. The eggs are pale yellow in color, turnip-shaped, strongly ribbed and large enough to be seen with the naked eye. They are deposited singly on the underside of the leaves of cabbage and other food-plants, and hatch in from 4 to 8 days. The caterpillar is the familiar velvety green "worm" with a faint yellow stripe down the middle of the back and a row of yellow spots along each side. This caterpillar is not a form which we take much pleasure in seeing at any time, though most of us prefer to meet it alive rather than cooked. The caterpillar is a greedy feeder and grows rapidly, attaining maturity in from ten to fourteen days after hatching. It moults four times, the first time at the end of two days, the second time two to three days later, and the third and fourth times after further periods of one or two days. It then pupates, changing to a chrysalis which is of a gray, green or yellow color and about three-quarters of an inch in length. The pupal stage lasts from seven to twelve days in the summer but in the case of the later broods it lasts through the winter. Thus the life cycle during the summer is completed in from twenty-two to thirty-four days, and there are three broods in the season.

The caterpillars feed on the leaves of plants belonging to the family Cruciferae, such as the cabbage, cauliflower, turnip, kale, radish, mustard and horseradish among vegetables, and the nasturtium, mignonette, and sweet alyssum among ornamental plants, their favorites undoubtedly being cabbage and cauliflower.

The butterflies feed on the nectar of flowers of various kinds, being especially fond of that of flowers belonging to the family Cruciferae and of the white aster, heliotrope and thistle. They are on the wing from early morning until dusk and are capable of flying long distances. The loss due to the ravages of this insect on cabbage is estimated at \$1,300,000, or one-tenth of the value of the entire cabbage crop of North America, and the loss on cauliflower and other crops is also heavy. Before the use of sprays became general it was not unusual for the entire cabbage crop of a locality to be completely ruined by this species. If it were not for certain natural enemies this pest would be far harder to control than it is. One of the most efficient checks upon it is a small Ichneumon-fly, purposely introduced from England in 1883. This insect lays eggs on the body of the caterpillar, the larvæ on hatching burrow into the body of the host, feed upon its tissues and weaken it so that it dies before developing into an adult. Some species of wasps also render valuable aid by preying on the caterpillars, as do also many birds such as the Chipping Sparrow and House Wren.

A great many remedies have been tried in combatting this insect, and the two which have been found to give the best results are arsenate of lead and Paris green. Of these the former is preferable, as it is less

harmful to the foliage plants so that plants have undergone as has Pa with water gallons, a nozzle which should be sometimes but usually to be made need for of applica flowers, b danger is cabbage tr by an adu effects co winning " bage feast by chemi in the or arsenical s mained.

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harmful to the growth of the plants, adheres better to the foliage, leaves, on drying, a white coating on the plants so that it can be determined after spraying which plants have been effectively treated, and it has not undergone the same advance in price, due to the war, as has Paris green. The dry powder should be mixed with water in the proportion of two pounds to fifty gallons, and should be sprayed from a machine with a nozzle which will give a very fine spray. The plants should be sprayed a few days after setting out, and sometimes this spraying will be all that is required, but usually two or three applications will be necessary to be made, when examination of the plants show the need for it. We read a good deal about the danger of application of arsenicals to cabbages and cauliflowers, but it has been conclusively proved that this danger is an imaginary one, as twenty-eight heads of cabbage treated with arsenical would have to be eaten by an adult human being at one meal before poisonous effects could be produced. Even one of the prize-winning "great eaters" would, I fancy, balk at a cabbage feast of such proportions. It has also been shown by chemical analysis that cabbages prepared for cooking in the ordinary way a week after spraying with an arsenical showed that not even a trace of arsenic remained.

THE HORSE.

Weak Fetlocks in Foals.

The most common form of weak fetlocks in foals is that form in which the fetlocks knuckle forwards, often to such a degree as to allow the anterior surface to come in contact with the ground, with the result, in many cases, of the skin becoming raw, and in some cases wearing through to the underlying tissues. The opposite condition (not so often seen) is when the fetlock descends backwards, the foot turns upwards at the toe, hence the heel and fetlock pad come in contact with the ground.

In order that either condition may be intelligently treated it is necessary that the person giving treatment should know where the weakness exists. Is it in the joint? We answer "No." The bones of the joint are held together by ligaments, but these ligaments have little or nothing to do with keeping the bones between different joints in position; their function simply being to keep the bones of the joint together in proper opposition. The relation and relative position of the bones of the joint to the bones of the limb is largely controlled by the muscles and their tendons. The muscles are composed of what is commonly called flesh. Each muscle is prolonged at each end by a tendon, the end of which is firmly attached to a bone. Tendons are composed of white, fibrous tissue, and are practically non-elastic; between the tendons is the flesh or muscle, which is capable of great extension and contraction at the will of the animal, but when at rest is of definite length between its tendons, hence making a definite distance between the attachment of the bone of the tendon of origin and the attachment to a bone at the other end of the tendon of insertion.

An examination of a horse's leg will show muscles both in front and in rear of the bone, between the elbow and the knee. Below the knee there is practically no muscular tissue, but the tendons of the muscles extend well down, some of them being attached to the bone of the foot. The muscles posterior to the bones are called "flexor muscles," their function being to flex or bend the limb during progression. Those anterior to the bone are called "extensor muscles," their function being to extend or straighten the limb and carry the foot forward. When each set of muscles is of normal strength the bones of the limb remain in the proper position when the animal is either standing or in motion.

When the anterior or extensor muscles are weak, there is too little tension exerted on the tendons, and the fetlock joints drop forward to a greater or less degree, according to the comparative weakness of the said muscles to the strength of the flexor ones. As stated, in many cases the anterior surface of the fetlock joint strikes the ground. When the weakness exists in the flexor muscles, there is not sufficient tension exerted on their tendons to prevent descent, to a greater or less degree, of the fetlock backwards and downwards.

Being acquainted with the above facts and knowing that neither ligaments nor tendons are elastic, neither are they, to any appreciable degree, susceptible to the action of applications to cause either contraction or relaxation of their elements, we can readily see that the application of ingredients of any kind whatever to the tissues between the knee and the foot have little effect for the purpose under discussion. If we could exert the desired action upon the tendons, we should, in a case where the joints drop forward, cause contraction of the extensor, and relaxation of the flexor tendons, and produce the reverse actions where the joints descend backwards.

Many recommend strong astringents, stimulants, and even blisters to the whole circumference of the leg from the knee to the foot. If such should have any marked action upon the tendons, both flexor and extensor would be acted on alike, hence no relative difference would be caused. Applications to muscles have some effect. Hence it can readily be seen that if we can cause a contraction, hence a shortening of a muscle it will cause greater stress upon its tendons, as in like manner, if we cause a relaxation, hence a lengthening of a muscle eases the tension upon its tendons.

Theoretically, the application of stimulants or blisters causes a contraction of muscular tissue, and the application of relaxers, as a solution of belladonna, causes a relaxation. Hence, when the joints drop forwards, stimulants should be applied to the anterior muscles above the knees, and relaxers to the posterior ones. When the joints descend backwards the applications should be reversed. Our experience with applications for this purpose has been somewhat extensive but very unsatisfactory.

The object in treatment should be to supply temporary support to the limbs between the feet and the knees, support which will hold the bones in normal position, thereby giving the muscles rest and an opportunity to gain the necessary strength and tone to properly perform their functions. For this purpose plaster of Paris or starch bandages, splints and bandages, leather boots, felt boots, etc., have been extensively tried. The great trouble is the tendency of these applications to scarify and complicate the trouble. Whatever device is used should be such as can readily be removed and readjusted, and should be removed and left off for at least a few minutes two or three times daily, in order to allow the air to circulate around the limb and cool it. We have had the best results from boots made of thick felt, such as harness-makers use for sweat pads, housings, etc. The felt should reach from the foot to the knee, and be wide enough to surround the whole limb, or even overlap a little. Attached to this, of course running crosswise, should be six straps with buckles, these straps being about equal distances apart. Extending from above downwards, between the straps and the felt, and tacked to the straps, should be three pieces of tough, green hickory or elm or other hard wood about 1 to 1½ inches wide and about ¾ of an inch thick. One of these should be in the centre

Watch Navel-III.

The greatest danger to the foal crop each year is from navel-ill, sometimes called joint-ill or septic arthritis and the disease is generally most prevalent where the usual precautions as to cleanliness and disinfection are not taken. Foals born in a grass paddock are not, as a usual thing, so likely to become contaminated as those dropped in a box stall, and particularly in a stall which has not been regularly cleaned and freshly bedded. The best place for the mare to drop a foal is in a clean grass field, and she should be prevented from foaling near watering troughs or in corners of the field under shade trees, where the grass has been tramped away and stock filth has accumulated. The best method of prevention has been outlined several times in this paper, and consists in thoroughly disinfecting the navel cord immediately after the foal is dropped and two or three times a day until it is dried up. A ten-per-cent. solution of carbolic acid or a one to thirty solution of corrosive sublimate will do the trick. When it is necessary to bring the mare to a box stall at night or on account of wet weather be sure it is clean and well bedded.

Breed The Draft Mare.

We read that the American and French Governments have suddenly ceased buying horses in the United States, and that this has somewhat upset the horse market in that country. On the other hand, it is announced that the British Government is about to buy extensively in Canada, and we believe that in the near future the American army will require thousands upon thousands of horses. In the end the demand for horses should stiffen and probably will outstrip the supply in

this country. Activity may not be great in the horse markets throughout the summer, but indications are that the best and safest plan for all owners of good heavy draft mares would be to breed them this year to the best available horses. The tractor and the motor can never drive the horse completely out of business. It has been proven without a doubt that in war the horse is absolutely essential, notwithstanding the increased use made of all kinds of motor vehicles. On the farms the tractor will no doubt increase, but as work increases year after year horses in great numbers will continue to be a necessity, and on the smaller farms, of course, will be the only practicable means of working the land. Certain types of horses will never see the demand which they once enjoyed, namely, light horses for fast work and fancy horses for city driving. The automobile has taken their place very largely, but there will always remain a demand for the top-



Good Live Stock Increases Production.

and pass down the front of the limb, the wood extending a short distance down the hoof, and one pass down each side of the limb, but not extending over the hoof.

Before applying it is good practice to wrap the limb with wadding or batton, making it thicker where there are hollows, as below the fetlock pad, on each side just above the fetlock joint, etc., then the boot is applied and each strap buckled securely, but not too tightly.

These can be readily removed and readjusted, and when weakness is manifested in the fetlocks only, will generally effect a cure; but where the knees also are weak and turn outwards to a marked degree the prospects of a cure are less, as, if appliances to keep the knees in position are used, it interferes very materially with the power of progression.

Since the use of starch for laundry purposes has been forbidden in Britain, there will be a great deal more comfort around John Bull's neck, wrists and bosom. Sunday shirts and collars are still board-like in Canada, however, and relief would come from such an order here.

notchers in high steppers and speed. However, the one horse which cannot be gotten along without is the drafter or the best type of farm horse, and the only horse which it pays the farmer to breed on a large scale is the heavy-draft animal. To this end use the farm mares this year and breed all that can be spared from the heaviest of the work. As a general thing the best success comes from working the brood mare. Make the mare do her share of the farm work and at the same time raise a colt.

A 100 Per Cent. Investment.

EDITOR "THE FARMER'S ADVOCATE":

We herewith hand you our renewal subscription to the "Advocate" also two new subscribers, and in doing so we wish to say aloud that we consider it a 100 per cent. investment—that it is the great medium through which the farmer may keep abreast of the times in his own trade.

Wolfe Co., Que.

J. O. GILBERT & SON.

LIVE STOCK.

Never did good breeding and feeding pay better than now.

The average fleece of wool is now worth more than was an ordinary breeding ewe not many years back.

Feeding unpasteurized whey from the factory to calves or pigs is an excellent way to spread tuberculosis.

When remodelling buildings for next winter's occupation don't be afraid to allow for plenty of light and ventilation.

Concrete is steadily replacing the lumber and earth floors in cattle stables. It is more sanitary and, in the end, less expensive.

Flies are a nuisance which should not be permitted to worry the cows and calves. Spray with some repellent and keep the windows darkened.

Some fresh, tender clover or alfalfa cut now and cured so the leaves still cling to the stalks will make excellent feed for pigs and poultry next winter. Take time by the forelock.

Calves and pigs confined in pens or runs should have all the fresh, clean water they will drink. Milk for calves and slop for pigs are not sufficient. They require water as well.

A scrub sire is about the poorest investment known to the agricultural or financial world. Horse-race betting is a safer game for occasionally one wins, but placing coin on a scrub is throwing it away.

A patch of rape sown in drills next week and cultivated as required should develop into a splendid field in which to flush ewes during the coming autumn. Cattle, sheep and swine all profit by having access to such pasturage.

While cattle for meat purposes have risen in value by dollars per cwt, pure-breds have risen by hundreds and thousands of dollars per head. This can only happen when a country offers unlimited possibility for the development of its live-stock industry.

There is considerable being said about calf conservation in the United States. It emanates of course from those not engaged in farming. We feel sympathetic towards our farming neighbors to the South because we are often obliged to listen to just such nonsense in this country. Our cattle stocks should be increased, but that does not mean that all scrub and dairy-bred calves should be reared for beef.

Surely farmers will not deplete their swine herds this fall as they did last season, unless something, now unexpected, looms up before autumn passes and winter sets in. With proper care and management pork can be made on 4 to 4½ lbs. of grain to 100 lbs. of gain; that is, on the class of pigs common in this country. One can easily estimate his profit or losses, knowing the price of feeding stuffs and the probable market quotation for hogs.

The Increased Difficulty of Getting Stock From Great Britain.

Breeders of pedigree stock in Britain are somewhat exercised over a question asked by Mr. Field, a member of the House of Commons in the United Kingdom, as to whether the President of the Board of Agriculture would consider the advisability of taking measures to prevent the exportation of cattle, sheep and horses for breeding purposes to foreign countries, and whether an export duty will at once be imposed on all live-stock exports from the United Kingdom.

Sir R. Winfrey replied: "The export of cattle, sheep and horses to foreign countries is prohibited, but licences are issued on the recommendation of the Board by the War Trade Department for the export of live stock in special cases. These licences are not numerous, and are practically confined to pedigree stock. The suggestions which my honorable friend makes are not, therefore, relevant to the existing facts."

"The Live Stock Journal," however, deemed the incident of some importance and says:

"Mr. Field could not have known, when he asked that question, under what difficult conditions pedigree cattle are exported to-day. Ocean freight before the war was £15 15s.; ocean freight now is £26 5s. All fodder required for live stock when shipped is 150 per cent. dearer than it was in pre-war days. The stock itself is 80 per cent. dearer for exporters to buy than it was in pre-war days. At present the war risk is £5 2s. 6d. per £100, and this item was not in the list of charges made by people who sent or took out cattle in pre-war days. As well as all this, the prices paid for stock in foreign countries have not advanced to anything like the extent that they have in this country. Even fat cattle in the Argentine to-day are not ½d. per lb. dearer than they were in 1913. If the pedigree stock which are being exported to-day were killed instead they would only realize from £10 to £80 each. We all know what they are fetching otherwise. It is true that a certain number of cheap cattle are being exported—i. e., cattle costing £40 to £60 at dispersal sales and the like—and

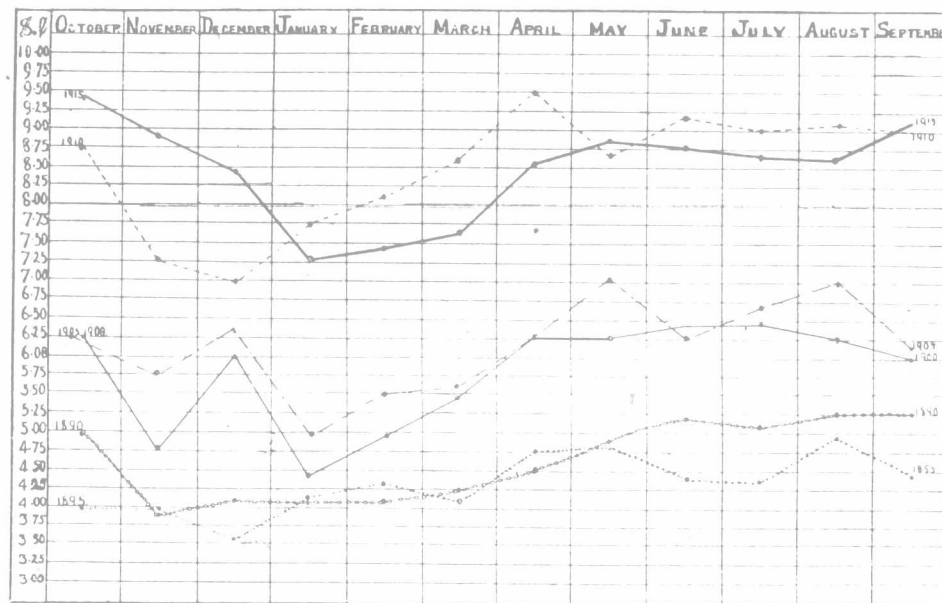
their going abroad might be prevented at a time like the present. Exporters, particularly of high-class stock, are very wild with Mr. Field at the moment, and believe firmly that he will not leave the matter where his question did. It would be ridiculous if any 'agricultural policy' was allowed to be framed to hinder British breeders from exporting their stock. All this is but further proof of the dire necessity of having our agricultural and live-stock interests properly safeguarded in the House of Commons."

This matter will interest Canadian breeders and importers of pure-bred live stock. It costs money to import under present conditions, and the way is not getting any easier as the war progresses.

The Traditions of the Hog Market.

In spite of the abnormal demand and the necessity of importing supply into Canada in order to meet orders for products, the traditions of the hog market have been lived up to, partially if not entirely, during the last twelve months. Eleven dollars for hogs in November last had a tendency to cause forgetfulness of the past when producers persistently unloaded their finished stock at greatly reduced values in order to meet the obligations peculiar to that season of the year. The upward trend of the market quotations from then onward led us to consider for a moment that history was not being repeated, but a further analysis of the situation shows the variation of prices by month to be more in accordance with the past than appeared to be the case.

In former years November has seen low prices with little improvement and often a decline until the middle of January. Prices have then risen until May, from which time on to October they have been steady on a fairly high level. After this the fall movement of hogs again begins and down goes the price, not to recover until after January. The reason for these conditions are obvious. Out of the 248,962 hogs marketed at the Union Stock Yards,



A Graphic Explanation of Hog Prices.

The chart shows the variations by months for the years 1890, 1895, 1900, 1905, 1910 and 1915.

Toronto, in 1912, 30 per cent. came forward during the months of November and December. In 1913 the percentage dropped to 18, but in 1914 it rose again to 28 per cent. Threshing time and taxes due are two common and potent factors behind the fall movement of hogs which assumes the ascendancy in October. Another reason is that sows are bred to farrow in April and May, thus making the summer pig crop all ready to move at about the same time. The accompanying chart, prepared by the Live Stock Branch, Ottawa, graphically depicts what has just been written. November, December, January and February are shown to be months of declining or low prices, although frequently February reveals an upward trend. April, May, June, July and August have usually been good months in which to sell hogs. The farmer, to take advantage of these conditions, must time the coming of the litters somewhat contrary to general custom, and this he has never been in a hurry to do.

A brief study of the market for the last twelve months shows abnormally high prices, but the November drop could not be overcome. Taking fed and watered hogs at the Union Stock Yards, Toronto, as the basis of calculation this condition presents itself: In July of 1916 the price of hogs was \$12.10 per cwt.; in August it rose to \$13, but September experienced a drop to between \$12.50 and \$12.75. October saw a further carving which left top bids around \$11.60, and these were decreased to between \$10 and \$10.25 in the middle of November. Farmers realized that their grain bins were low, particularly in Ontario, and that feeding stuffs would undoubtedly be high. Liquidation of pig stocks was carried on during October and November, as usual, and the price dropped according to the time-honored custom of the market. From this on trading gathered strength. In December, \$12 was paid and by the end of January \$14.25 was bid. In normal times January has been a bad month in which to sell hogs. Sellers asked \$15 in February, and got it and it appeared like a good price, but another dollar and over was added to that in March and still another 50 cents

in April. During the latter part of April and the first few days of May good hogs fetched between \$17 and \$17.15, and this marked about the strongest market of the first half of this year. During the latter part of May trade weakened slightly, gradually declining to around \$16 at the middle of this month. Usually in April or May a good stiff price prevails and the traditions of the market were lived up to as they were in November last.

Year in and year out if a farmer had a good lot of hogs ready to go in April or May and could avoid selling during the November rush, he would have a plan upon which he could depend for the best prices.

Calf Disorders in Hot Weather.

With the coming of July and August weather we should expect the ever recurrent calf disorders peculiar to summer temperatures. A calf running with its dam is not subject to the attacks of indigestion and scours which so often retard the development of the pail-fed bovine. The reasons are obvious. The nursing young get their milk at approximately the same temperature on every occasion and furthermore it is not contaminated by coming in contact with dirty, sour vessels. Herein lies the secret of healthy, lusty calves. Supply the milk at or as near as possible to the same temperature at every feeding and scald the pails and utensils thoroughly after each time used. Boiling water and exposure to the sunlight will keep the milk pails clean and sweet. Both are cheap and it pays well to use them.

Another cause of indigestion and scours is feeding too much at one time. An ordinary calf, three weeks old, will consume about twelve pounds of milk per day, divided into two feeds, as well as a little linseed-meal porridge. One does not need to increase very much in this quantity up to four weeks of age, and two or three tablespoonfuls of porridge at each feed will be sufficient. At this age the calf will begin to eat silage, roots or grass in small quantities and meal will begin to taste

good to him. From this stage on the milk supply may be increased gradually to twenty-four pounds per day, and the linseed porridge to half a pint as the calf develops. A mixture of five parts oats, three parts bran, one part linseed meal and one part corn meal is a good mixture of concentrates to provide the calf which is five to seven weeks old, and sometimes they will consume a little even at a younger age. The linseed porridge should, of course, be dispensed with when it is being taken in the grain allowance.

A normal calf will consume in the neighborhood of ½ pound of concentrates daily when 6 weeks old; at 2 months, about 1 pound, and at 3 months about 2 pounds. Take the box of grain away after the calf has had ample time to eat all it desires at one time. Stale grain that has been picked over and breathed on becomes objectionable. The same is true regarding the roughage.

Calf Disorders.

Scours and indigestion are frequently caused by too much feed, sour, dirty utensils, changes in temperature of the feed and unsanitary stabling conditions. Keep everything clean as heretofore advised and if a case of ordinary scours presents itself try to locate the cause and remove it. The trouble can often be corrected by scalding the milk or feeding lime water up to ½ the total allowance at each feed. Lime water is easily made. Slake some lump lime with water and the clear liquid which rises to the top is the material required. Be sure enough lime is used to make a saturated solution, the strength will then always be the same. Do not stir the contents of the vessel when taking out the lime water for the clear liquid at the top contains the desired properties.

Another recipe often used is as follows: Powdered chalk 2 ounces; powdered catechu, 1 ounce; ginger, ½ ounce; opium, 2 drams; peppermint water, 1 pint. Give a tablespoonful night and morning. It is well to first mildly purge the calf with two ounces of castor oil shaken up in some milk, and after this has acted give the cordial as advised.

Contagious or white scours is a more difficult disease to treat. It is infectious and greater precautions must be exercised in cleaning and disinfecting the stables. As a remedy give the castor oil as previously advised. Mix ½ ounce of formalin in 15½ ounces of distilled or freshly-boiled water, and keep in an amber-colored bottle to prevent chemical changes. The dose consists of one teaspoonful of the mixture per pound of milk for a young calf. Many stockmen believe that proper attention to the calf's navel immediately after birth and for the first few days will preclude all difficulty. This treatment consists in disinfecting the navel thoroughly at first and several times daily and the application of some drying or caustic material.

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The Influence of Sire and Dam.

The Farmers Gazette seems to have little faith in the ability of any stockman to so mate his animals that he is reasonably sure that prepotency of sire or dam will be in evidence in the offspring. There is a great deal which seems to be left to chance in breeding, and yet we do not expect high-class stock from careless matings. Here is what the Gazette says:

"At present an interesting discussion is being held among stock owners as to whether more reliance should be placed on the sire's side rather than the dam's side in successful breeding. The opinions expressed on the subject vary widely. There is so much chance in the mating of animals that the results obtained defy any law. No one observer feels that he has enough proof to lay down a theory which can be relied on to work out satisfactorily all round. There are those who attach much weight to the sires on the female side for a couple of generations back, and regard the immediate sire as counting but for little; others aver that prepotency in either sire or dam asserts itself irregularly and unforeseenly, and is thus largely a matter of chance. It is a chance, or rather a piece of luck, which many a breeder would give much to know how to set about obtaining. Like something in the old fables, it comes often to those who look little for it, and least expect it, and persistently eludes those who lay sound and costly plans to capture it. Is a good bull half the herd, and on him alone must the venture rest, or may a mediocre dam be expected to produce an excellence inherited from the prepotency of her g.s. or g.g.s.? The problem is one that adds a perpetual fascination to the breeding of pedigree stock. It appeals as much to the breeder of blood-stock in horses as to the owner of pedigree cattle herds. In both branches of stock the selection of sire for dam and dam for sire is at the choice of the breeder, yet he cannot ensure results, though he may expect them. Often, too often, he is disappointed, while others, with no plan of promised success mapped out, reap an unlooked-for reward. Instances of such luck in the selection or chance purchase of stallions or bulls on the one side, and mares or cows on the other, are common in this country. They make fine stories of the luck, which, as it were, pushes itself on some men, and to an extent encourage many to follow on with a hope that is as natural as it is beneficial. Sober ones in the stock world resent such a position of uncertainty. It is unsatisfactory at this period of development in stock-breeding, and there is surely a sufficient basis of experience available on which to lay down laws of mating which may be trusted to give fixed results. Here rests the pivot of the discussion. Does the experience gained so far show anything definite in breeding, or is the position to be that, with all possible chances of success set on the right side, results cannot be foretold, but must be awaited? So far, the discussion does not appear to carry beyond this. Prepotency, or the power of a sire or dam to impress his or her merit—whatever this may be, shape, stamina, or speed—is an elusive quantity which appears as often in likely-bred animals as in those unlikely bred. The task of elucidating the laws which govern it, if such exist, must of necessity be slow. The chances are as much in favor of investigation ending in a dead wall as not. If not, much glamour will be removed from the lives of those who plan crosses, or follow line breeding, or adhere to one of the many plans for producing the something extra aimed at. There are still things left in nature which refuse to be co-ordinated by scientific workers, and the search for a system of breeding which will ensure the ability to transmit certain shapes or capacity is one of them. The factors are so many that the problem appears well-nigh insoluble. Perhaps it were as well so, if only to give hope to those who frame their breeding plan on the off-chance. At any rate, the philosophy of accepting the presently inevitable is a comforting one, and well accredited in many respects."

Shelter for Grazing Pigs.

The same sun that laps up the pools of water in the fields and causes the corn to shoot forth in a pleasing manner, burns the backs of unprotected swine most relentlessly, and causes them much discomfort. White pigs will suffer more than the black breeds but they all require some cheap improvised shelter at least. A considerable saving can be made by getting the pigs out on grass, and it is without a doubt the proper thing to do with breeding stock. However, some protection should be afforded the grazing porcines or part of the cheapened gains will be dissipated through discomfort. Protection does not necessitate expensive buildings. If a clump of bushes is near and accessible the swine will look after themselves. In a great many cases a rudely constructed shelter in a fence corner answers the purpose. This can be covered with brush or straw. Building or tar paper properly laid on a framework of boards or poles is slightly better, as it provides dryer quarters. No doubt the best equipment is the colony house which can be used at other seasons of the year for practically any kind of swine. A rectangular house, 8 feet by 10 feet on the ground is a convenient design. If it is 3½ feet high at the back and 7 feet high in front it can be used in many ways. Brood sows, a litter of growing pigs or feeding hogs can be housed conveniently and comfortably in such a building. Before the prices of lumber began to advance so rapidly it could be constructed for \$20, including labor. On many farms there is sufficient rough lumber to make such a building and the only expense would be for sash, glass, hinges and perhaps shingles, or some form of roofing. The A-shaped colony house is not so convenient but the cost of same is less. Any type of house moderately well put

up and erected on two stout runners, so it can be moved from place to place, is a useful thing in connection with the swine end of farming.

Small Weights For Cheap Gains.

It frequently occurs when hogs are scarce and high in price that drovers will take heavy hogs in this country at the same price they are paying for the good bacon type, weighing around 200 pounds or less. Frequently sellers boast of their achievements in this regard, but if they would analyze their expenses in respect to the rearing and feeding of these heavy hogs they would appreciate the fact that their gains were not so handsome as at first sight appeared. Experimental results are quite unanimous in showing that as pigs increase in size and age more feed is required to produce 100 pounds of gain.

While making certain tests at Guelph with thirty-six pure-bred hogs, Prof. Geo. E. Day arrived at the following statement regarding feed consumed for one pound of gain by hogs of different weights:

"While increasing in live weight from 54 pounds to 82 pounds, hogs require 3.10 pounds of meal per pound of gain.

"While increasing in live weight from 82 pounds to 115 pounds hogs required 3.75 pounds meal per pound of gain.

"While increasing in live weight from 115 pounds to 148 pounds hogs required 4.38 pounds meal per pound of gain.

"While increasing in live weight from 148 pounds to 170 pounds hogs required 4.55 pounds meal per pound of gain.

"This statement shows that there is a steady increase in the amount of meal required to produce a pound of gain as the hogs increase in weight, and is a strong argument in favor of marketing hogs by the time, or a little before they reach 200 pounds in weight."

Professor Henry in his book "Feeds and Feeding"

of treating tuberculous animals is to isolate the reactors and have an extra attendant and additional utensils for the reacting herd. The calves are taken from the dam immediately after birth, placed in the tubercular-free herd and reared by a healthy cow or on the pail.

A modification of the Bang system, which has given good results under some circumstances, consists in establishing a reacting herd, but the calves dropped in quarantine are allowed to remain with their dams until nine to eleven months of age when they are weaned and tested. At the Iowa State College where this method was adopted, 23 calves were dropped in quarantine from 1908 to 1914; 21 out of the 23 were tested; only 3 reacted while the remaining 18 passed the test successfully and were placed with the healthy herd. The herd in question is reputed to have been free from tuberculosis since 1912, and it contains daughters, granddaughters and great granddaughters of tuberculous ancestors.

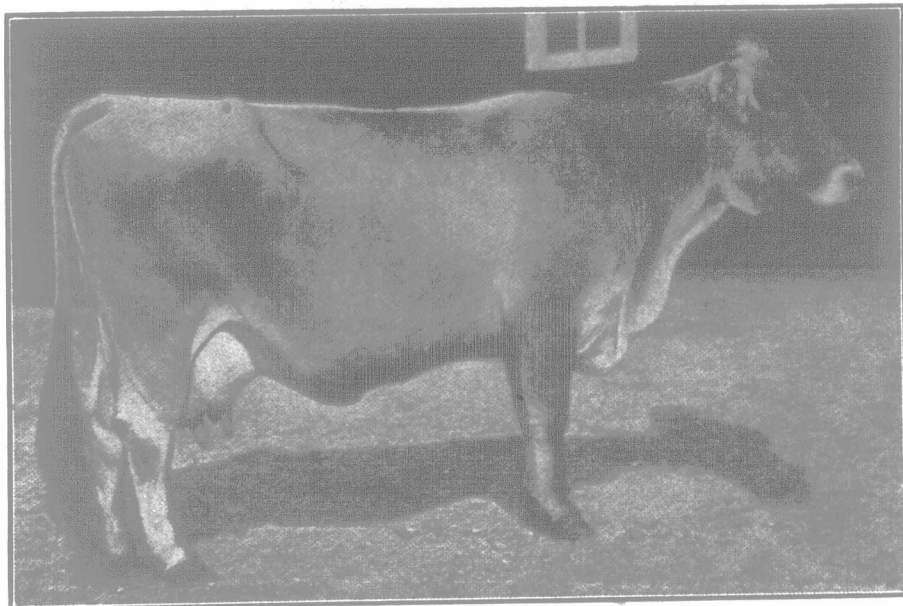
There have been instances in this country in the initial stages of the campaign against tuberculosis where cattle were ruthlessly and unnecessarily destroyed. The same thing is true in Britain. In one instance which came to our attention a whole herd was wiped out because the majority of them reacted. These mistakes only occur when people are unacquainted with the disease and how it should be combatted. Tuberculosis is causing a great loss in the cattle and swine herds of this country, but it can be controlled without any severe hardship on the part of stockmen if they will give their support to some reasonable and efficient system of eradication.

Canadian Store Cattle in England.

EDITOR "THE FARMER'S ADVOCATE":

On Friday, May 25th, in the House of Commons, Sir Hamar Greenwood asked the President of the Board of Agriculture whether representations were made to him by the Canadian Ministers during their recent visit to this country on the subject of the prohibition of the landing of Canadian cattle except for slaughter at the port of debarkation, and whether he could make any statement on the subject.

Mr. Prothero's reply ran as follows: "Up to October, 1892, Canadian cattle could be landed in this country without being subject to slaughter at the port of landing. During 1892 foot-and-mouth disease and pleuro-pneumonia scourged the continent of Europe, and the landing of foreign cattle from these European countries, which has been previously treated on the same footing as Canada, was successively prohibited. In October, 1891, cases of pleuro-pneumonia were suspected



College Bravura 2nd.

Brown Swiss cow with a record of 19,460 lbs. milk and 798.16 lbs. fat.

gives similar data compiled from the results of over four hundred feeding trials. It is embodied in the following table:

Weight of pigs in pounds.	Feed for 100 pounds gain.
15 to 50	293
50 to 100	400
100 to 150	437
150 to 200	482
200 to 250	498
250 to 300	511
300 to 350	535

All actual and careful trials go to prove that pigs kept under average conditions make the cheapest gains up to 200 pounds, and, since the trade in Canada calls for hogs around this mark, it appears like good business practice to sell when they have acquired that weight.

Reactors Need Not be Destroyed.

Very often remarks in respect to the testing of cattle for tuberculosis cause some confusion for there are those who believe that a reactor must be destroyed regardless of value. If it became desirable or expedient to try eradication in the cattle stocks of a municipality, or certain well defined district, possibly the best method would be to destroy reacting grades and ordinary cattle, allowing their owners a liberal compensation. However, in the case of pure-bred herds the situation is different. There is no need of doing away with pure-bred cattle that react to the test, for they can be isolated under the Bang, or a modification of the Bang system, with very good results. This isolation of course necessitates extra stables and additional labor, but the ability of one to cater to the demand for tubercular-free cattle would be good remuneration.

The general principle embodied in the Bang system

in two cargoes of cattle imported from Canada. Acting on expert advice, the landing of Canadian cattle, except for slaughter at the port, was, therefore, prohibited by the Board. Under the Diseases of Animals Act, 1896, the prohibition received statutory permanence. Strong representations on the subject of the prohibition, but more particularly as to the stigma which its form casts on Canadian live stock, were made to me by the Canadian Ministers during their recent visit to England. Canada disputes the genuineness of the cases on which prohibition was originally founded, and without doubt has always been exceptionally, if not entirely, free from foot-and-mouth disease and pleuro-pneumonia. Canadian feeling, therefore, resents the imputation of infection as unjust. The prohibition cannot, as I am advised by the Chief Veterinary Officer of the Board, be justified on the ground of health, and cattle bred and reared in Canada and leaving that country for the first time by direct shipment to a British port ought not to be excluded under the Diseases of Animals Act, 1896. I cannot say whether or under what conditions Canadian cattle, as defined above, might hereafter be permitted to enter this country except for slaughter at the ports. At present, when farmers at home are being asked to reduce their live stock, permission is plainly impossible. But the prohibition rests rather on the agricultural policy of the United Kingdom than on the risk of diseases, from which for many years Canada herself has been most remarkably, if not entirely, free."

Commenting on the above the London Meat Trade's Journal says: "After suffering for five-and-twenty years the unjust stigma of being a disease-infected country, Canada has received a more or less grudging apology from the President of the Board of Agriculture who, in replying to Sir Hamar Greenwood, M.P., said: 'The prohibition of Canadian cattle cannot be justified on the ground of health. . . . This admission was just as true twenty-five years ago as it is to-day, only it did not suit the Board of Agriculture to say so.'"

Another view on the subject is that held by the London Live Stock Journal, which says: "That re-

ply leaves the matter exactly where it was, but it will be the immediate cause of two things—a campaign in Canada to attempt to convince the English official mind that this country is in no danger of infection from cattle crossing the border line of the States, a thing it is impossible to prevent, and the launching of some "agricultural policy" which will land us in Britain with decreased cattle stocks of our own, a crippled pedigree stock trade, and the ever-haunting risk of danger from disease. Every Journal reader knows our opinion upon this subject, and there is no further necessity to labor the question, but it is necessary for our cattle breed societies to counter-check any organized move that is sure to be made to alter the conditions under which Canadian cattle might hereafter be permitted to enter this country. Mr. Prothero's statement was very guarded, but it conveys the distinct impression to us that there are strong influences at work trying to ultimately secure the free admission of Canadian store cattle, and, of course, the lifting of the bar as to slaughter."

ALBION.

THE FARM.

East Middlesex Notes.

EDITOR "THE FARMER'S ADVOCATE":

The weather has warmed up considerably the past ten days, and it looks as if spring had come at last. Vegetation is coming on nicely now. The spring grains are looking particularly fine and healthy and there are some excellent fields of clover, but timothy will likely be a little short. Fall wheat is doing well, too, but many fields will be patchy because of the adverse conditions under which it was sown and the frosts of early spring. The showery weather still continues and the corn and potatoes on undrained land will have a hard time of it, but corn in general is coming up nicely, especially where sown on sod. Alfalfa on high, well-drained land is a magnificent crop, almost ready for the first cutting. All kinds of farm work are fairly well advanced though late, but the haying and harvest will also likely be late. The one fly in the ointment from the standpoint of production is the almost total failure of the apple crop, that is if the percentage of bloom has anything to do with it. We never remember a season when the bloom was so meagre and so late. Small fruits, however, seem to be all right, and there has been no frost hard enough to injure vegetables except beans and tomatoes to a slight extent. In spite of the backward spring bees have built up fairly well, and some strong colonies reached the swarming point in dandelion bloom which this year was exceptionally plentiful. Although generally considered a weed the lowly dandelion is a valuable plant for milk and honey. We don't mean dandelion honey as a marketable commodity, because it is seldom extracted. It may be the pollen, but there is something about the dandelion crop which gives the bees a "lift" which puts them in good condition to harvest the crop. May beetles are also a good crop and so late that they are "June bugs." And although the June bug hath a gaudy wing we never could see that they were either useful or ornamental, but their larvæ (the white grub) provides a dainty morsel for crows, blackbirds, and robins. For this reason we think that blackbirds should have a partial protection at least. They do not appear to make war on other birds unless they happen to invade their domain. Most of the birds are back again, including swallows, king birds, canaries, humming birds, orioles, wrens, etc., but we haven't been as fortunate as "Junia" in seeing any scarlet tanagers, although they usually frequent this locality.

Middlesex Co., Ont.

J. H. BURNS.

What Rules the Earth--Logic or Lead?

EDITOR "THE FARMER'S ADVOCATE":

Will someone kindly tell us what rules the earth—logic or lead—constructive or destructive energy, mind or matter, brains or bullets, plow-shares or swords? Peace has ever been the hope of the world, and prayed for always, yet bloodshed and war have prevailed since first brother rose against brother. Is it not an appalling and tragic fact, yet unexplained by sage or saint, that man's worst despoiler and foe has ever been—Man? The blind agencies of nature—with rare exceptions—are kind; man, the intelligent ruler, is foolish and cruel; he builds a home, a nation, a world, and then despoils the work of his hands. He rears valiant and noble sons to be maimed or blown to pieces in the trenches by his brother (?) man; he produces food to be sunk by submarines or otherwise wantonly destroyed. This doesn't look much like "peace on earth and good-will," or "gathering up the fragments that nothing be lost." Yet, in face of the most awful engines and agencies of destruction and devastation ever devised or employed by man or demon, we are looking for the early dawn of the "Golden Age," just as our ancestors have looked for thousands of years. Truly, "Hope springs eternal in the human breast." Prior to the christian era, the Latin poet Virgil announced the actual dawn of the better day:

"The last great age, foretold by sacred rhymes,
Its course propitious now begins,
The base degenerate iron offspring ends;
A golden progeny from heaven descends.

"The son shall lead the life of gods, and be
By gods and heroes seen, and gods and heroes see.
The jarring nations he in peace shall bind,
And with paternal virtues rule mankind."

After the lapse of two thousand years, the nations are not bound in peace, and the hour seems darker than ever; but since the darkest hour precedes the light, we shall confidently work and wait, for the dawn will come when the darkness and the tribulation shall have passed away. Man shall not always employ his wonderful powers in dealing out misery and death. He will realize his better nature, mission and destiny.

Kent Co., Ont.

W. J. WAY.

A New Weed in Some Places.

EDITOR "THE FARMER'S ADVOCATE":

The writer was called up over a long-distance 'phone to come out, if possible, and tell a farmer who had seeded down 45 acres in the spring of 1916, what weed he had growing all over his meadows, and what he had better do about it.

Next day a visit was paid to this farm, and sure enough a small, yellow blossom was greatly in evidence, possibly a plant for every 6 square feet. It was easy to see that it belonged to that family of plants called cruciferae or the mustard family, where so many of the noxious weeds belong. On further examination it proved to be the winter cress, also called Barbara Herb, St. Barbara's Cress, yellow rocket and rocket cress. It is something of the nature of the Rocket which was found in alfalfa seed some years ago and a number of farmers got it. This plant is greatly relished by cattle and sheep. It was thought to cultivate it for feeding stock like rape, but it soon became an uncontrollable weed and had to be abandoned as a fodder plant.

Unfortunately this farmer who had it all over 45 acres wasn't alone. Several farmers had obtained the same seed, and all had the weed in about the same proportions.

The seed was evidently sold by a merchant at Osgoode Station in No. 2 timothy seed. The seed was doubtless within the meaning of the law, as 200 of such seeds are allowed per ounce of timothy seed, or 3,200 seeds per pound. It is a non-noxious weed as yet. Had it been of a noxious character there might have been 20 seeds per ounce of timothy or 320 seeds per pound, and probably there wasn't more than 50 of these seeds per ounce to give such a showing.

The stems of this plant are hard when matured and would make very poor hay. It was out in full bloom by the 10th of June. One farmer had already spent five days pulling this weed and was only half done. Our advice was to get all the plants out this year if possible as it would make a clean job of it, and to pull it while it was in bloom. It is well it has a yellow blossom. It can easily be seen long distances. Had it been some other color it might not have been noticed. This is what happens when some very bad weeds get located, as bladder campion and field bindweed.

A few days later another plant came to the office from another county, showing that its distribution is common wherever this timothy seed came from. It looks as though it came through a jobber in Montreal.

When labor is so expensive and hard to get, see what a loss it means to these farmers to rid themselves of this weed. How important then it is to learn what is in the clover and grass seed we sow before it goes into the ground. There seems to be very little excuse when the Dominion Government, through the Seed Branch, offers to do this kind of work free of charge, and the ounce of seed that is needed is carried free by the mail. The lesson to be learned is obvious. Shall we heed it?

T. G. RAYNOR.

The Farmer in Politics.

EDITOR "THE FARMER'S ADVOCATE":

A short time ago I noticed among your first column condensed editorials something to this effect: "Farmers are always complaining that they are not represented as they should be in Parliament, and then proceed to elect lawyers, doctors, business men, etc. Stop complaining and elect your fellow farmers, etc."

Evidently the writer has had very little experience in the wonderful "inner circle" in politics in a Province like Nova Scotia. This is the way it is done in Annapolis County, Nova Scotia. In every little ward or polling district exists a self-appointed "bunch" of faithful Liberals, and another bunch of equally faithful Conservatives—a sort of secret society thoroughly organized, unorganized and well-understood body. Sometimes it is called a ward committee, but is never heralded or advertised.

The duties of the committee are various, primarily, to nominate a candidate for municipal councils every three years. It also sends a "faithful" to the larger caucus which chooses a candidate for provincial or federal honors. Besides this it, the Committee, keeps in line all those doubtful "floaters", or fluids who may be willing for some consideration to desert their party or who may become disgruntled or disaffected because the supply of "pap" has failed. With this committee the public questions at issue never count. They are party heeled, either bought and paid for, or living in hope of some Government job in the gift of their party. A few are solid partisans because of blind ignorance or prejudice and fed and fostered by the sharper ones of the bunch or by the continual reading of their unreliable, yet much worshipped party paper.

At election time, for the week before the election, these faithful party retainers spend much time in keeping the fluids or doubtful ones from voting on the side of the enemy and in using all their influence in the effort to bring to their party the fluids which the enemy claims. If the election is a provincial or federal affair, the promi-

nent "solids" of the county on each side assemble in a more ostentatious manner and "bring down" a candidate or candidates for the next election campaign. After they, in more or less secret sessions, decide who shall represent them, a public meeting is called to nominate the candidates. Now the "solids" in each ward very informally appoint two ratepayers to attend this meeting and often the appointees are "fluids" or young voters, who will, because of honor, be more likely to become "solids."

When the time comes for the meeting to open, the chief heeler for the county comes out on the platform and takes the chair, followed by the candidate or candidates and several smaller party fleas or "solids." "In a few well-chosen words" the party parasite who occupies the chair opens the meeting and calls upon the puppet representatives in the audience to nominate a candidate. One of the lesser fleas proposes the name of the candidate already brought out by the secret convention of parasites, the string is pulled, and the puppet representatives in the audience appoint him unanimously. He is expected to make a speech, which is filled with bombast, mud slinging, or unfulfillable promises, according to his mental attainments or degree of fishiness or unreliability. The party parasites all go home filled with political hash and go eagerly to work to elect their men regardless of the welfare of the country or the law of right, caring only to put their party in power and thus provide a chance of obtaining an easy Government job or some party reward. Now what kind of a man gets nominated? He must have several qualifications. He must be successful in reputation at least and have some money, no matter how he got it. No matter what his character, he must have a good general reputation and attend church regularly. His wealth is of course necessary to buy the "fluid" voter, while his assumed piety "gets" the goody, goody voter. Incidentally, he should be a born party man, but this is not absolutely necessary if he can show the other qualifications and especially if it can be shown that he has left the other party in apparent disgust at its unholly rottenness, (but in real hope of a job in this).

He must be to a certain extent popular, of pleasing personality, and ready to side step at anytime or in any place for the sake of political advancement. In short, regardless of decency, honor, integrity, national welfare, etc., he must have the personality, shrewdness, power and influence to "get in", and it is useless to enumerate the tricks used to get him in. Some years ago a wealthy retired business man and shipowner was elected and the party had his ballots printed "Farmer", to catch the "easy" agriculturist. That finished me as a politician.

Now to answer your statement that the farmers should stop complaining and elect farmers. I do not believe there is another Province in the Dominion where the farmer is more completely at the beck and call of the party heeler, or lower in the scale of independent thought and action in regard to his representation in Parliament than in Nova Scotia. This is due to two reasons: While in Ontario and the Western Provinces the rural occupation is farming and farming alone, and the men of the country only meet and converse with and are influenced by men of interests similar to their own, the resources of Nova Scotia are so numerous and diversified that a community may be made up of fishermen, farmers, lumbermen, miners, etc., all with different interests and viewpoints. This makes it more difficult for the farmers to organize themselves or gain any strong influence because of these differing opinions.

The other reason is dependent on the first. The more intelligent voters hold Government positions, petty or otherwise, sufficient to keep them faithful and make them workers among the lesser parasites who are not investigators or thinkers, but blindly and ignorantly follow the teachings of the pap-fed heeled and party newspapers, and more than this, it is wonderful how many really intelligent voters find it almost impossible to see any wrong with their own party, or right with the other.

So in Nova Scotia where the farmers are in the decided minority in almost every County, it is easily seen why they have no representatives in Parliament. They are too busy scratching for the small portion left by the interests which keep them down to a bare living to organize, even if they had a voice through members. In my annual address, as President of the Provincial Farmers' Association, I made the statement—and fondly believed it true—that we had one farmer in the local Parliament, but I have found since that he is only a dealer in farm implements.

Suppose a number of farmers desired to select a representative. They would at first step find themselves up against the party machine, which is controlled by doctors, lawyers and business men. "Oh," they would say, "your nominee does not possess the necessary qualifications." If hard pressed they would perhaps confess that he may not stand as good a chance of "getting in" as some doctor or lawyer who had more money, influence and eloquence.

If the farmers persisted in nominating their farmer, then the machine would pull the party string and all the parasites would pile on the farmer candidate and kill him practically. Then, there is always the danger that if a farmer were sent to Parliament, he would be a nonentity or back-bencher—a tool of party without influence, because his educated professional fellow Parliamentarian could out-talk and argue him in a place where gift of tongue rules.

To sum up the matter, because of the widely diversified interests of the voters, the large numbers of unthinking and easily influenced employees and the large number of the more intelligent farmers who are eating

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Government pap at the hands of the non-agricultural heeled, it will be a long day before Nova Scotia will send many bona fide farmers to Parliament.
Annapolis Co., N. S. R. J. MESSENGER.

Get Ready for Wheat Early.

Conditions point to the need of putting forth every effort to grow food products in this country during the next few years, and particularly in 1918. As is always the case when dealing with the subject, wheat is thought of first. The acreage this year in Canada and the United States and the prospect of crop returns are not such as would lead us to believe that any great surplus will be derived from the crop. It might be well, then, for the farmer in Eastern Canada to seriously consider

the advisability of sowing a little larger acreage of fall wheat this fall and the application of a little more fertilizer and cultivation to ensure the best chance of a fairly high yield. In this connection we might mention the summer-fallow, which should be thoroughly worked and kept clean during the summer and should, if possible, receive at least a fair coating of barnyard manure. Those who have not left a bare field for fallow might do well to cut a field of red clover early in the season and plow it as soon as the hay is off, applying a top dressing of manure to be cultivated in throughout the season. A clover sod or even a two-year sod or older, manured early and worked once a week from the time of plowing immediately after the hay is harvested, until the last week of August or up to September 15, may be made into a very satisfactory bottom for wheat. Under special conditions where a field is in a high state

of fertility, wheat will follow a barley crop to good advantage, but the barley must be harvested early and the land prepared in good season. One of the nicest bottoms for fall wheat is a pea stubble. If the land is rich wheat will follow early peas very successfully. The point to emphasize is that the land must be thoroughly cultivated, in good tilth and kept clean for some time before the wheat goes in, and the wheat should be sown early. In observations made of crops this year we note that those fields which were put in early last fall on well-prepared land and which got a fair amount of top before the winter set in came through in much better condition than wheat later sown on roughly prepared soil, not in good tilth. These are a few facts well known to the practical farmer and which should be remembered in preparing for winter wheat.

Making and Storing First-Quality Hay.

The hay season is drawing near and judging from the present appearance of the meadows there will be a considerable tonnage of hay to harvest on most farms. While growth was slow during early spring, the frequent showers of late May and the first part of June have greatly accelerated it, with the result that many fields will yield a bumper crop of clover, alfalfa or sweet clover. A good deal now depends on the weather as there are few crops grown on the farm in which the quality is so influenced by the elements during the time of curing and harvesting. If the weather is favorable to the curing of the crop there will be a liberal supply of excellent fodder for the stock next winter, and with abundance of good hay and silage the stockman can bring the herd through the winter in fair condition on a minimum of grain. There are a number of things which influence the quality, which are partly under the control of man; for instance, over-ripe hay has not the palatability, digestibility or nutritive value as when cut at the right stage. Then, too, if the grass or clover is left in the swath or windrow exposed to the hot sun for too long a period, it becomes brittle and there is a loss of leaves, especially with the legumes. When the hay is put in the mow a little damp, or before the moisture has evaporated from the stems and leaves, it may heat, become musty and will have a lower feeding value than if it had been stored with the proper percentage of moisture. The hay-maker has no control over the weather, therefore even though he takes every precaution to ensure the highest-quality hay the natural aroma and palatability may be lessened by rain or dew.

Harvesting this crop necessitates considerable hard work unless the most modern machinery is brought into use. Even then the load must be built and the

hay levelled in the mow by hand. Labor is none too plentiful this year, which naturally increases the difficulty of harvesting the hay crop at the proper stage. Hay machinery will go a long way to offset the deficiency in man power, and by neighbors co-operating, especially in hauling the hay from fields to barn, it is possible to store away many tons of good hay with the minimum amount of help.

Time to Cut.

There is a right and a wrong time to cut the clovers and grasses in order to make the best fodder. The accompanying tables taken from Henry's "Feeds and Feeding" shows the chemical composition of cured grasses and clovers cut at different stages, and also shows the digestible nutrients of the same. At a glance it will be noticed that timothy cut before coming into bloom is higher in ash and protein, two valuable constituents from the feeder's standpoint, than is timothy cut when nearly ripe. Alfalfa can be cut when too immature. According to the table the first cutting which took place quite early in the season shows considerably less ash and protein and more fibre than that cut just before coming into bloom. Similar conditions are presented with red clover. While hardly as high in ash it contains more protein and less fibre when cut before coming into bloom than when in full bloom. When feeding either roughage or concentrates it is what is digested that counts, and it will be noticed by the table that the early-cut timothy has higher feeding value, than that nearing maturity, and that clover and alfalfa cut before coming into bloom are more digestible than if cut at either an earlier or later period.

However, it is not always possible to cut these crops at the time analysis shows them to have the highest feeding value. What is lost in digestibility by later cutting is sometimes made up by the extra bulk. Shortage of help and weather conditions interfere with the best made plans. However, the aim should be to cut the crop at as near the right stage as possible. In practice it is generally found that red clover cut when almost in full bloom cures readily and makes excellent quality hay, while mixed hay can be cut when the clover is in the stage previously mentioned. Many growers aim at cutting the alfalfa when about one-tenth in bloom. With sweet clover the practice is to cut when the first blossoms are ready to appear.

When cutting sweet clover care must be taken not to run the cutting-bar too low. If the new growth is clipped the plant may not produce any second growth. The plants should be carefully examined and the mower set to cut a couple of inches above the young shoots or buds that are appearing. There should be at least one healthy bud or branch left on each stub. If there are none the plant is likely to die. Failure to take this precaution has resulted in several growers harvesting only one crop of sweet clover in a season. In order to secure palatable hay the plant must be cut before it gets too woody and should be handled so as to conserve the leaves. The weather is very often unfavorable for hay making at the time sweet clover must be harvested. This necessitates coiling a considerable amount of it. However, the coils should not be left in one place too long as there is danger of the plants underneath killing out. Timothy hay is generally cut after the second bloom, care being taken not to cut when in bloom, so as to avoid dusty hay. As plants mature there is generally an increase in fibre which makes them less palatable when cured, but there are other arguments in favor of early cutting of grasses and clovers. Many weeds are prevented from maturing seed and the after-growth will be considerably better on the early-cut field than it will on the field where the crop nears maturity before being harvested. This is an important consideration, as pastures usually become bare by August and a good second growth of clover materially helps out the feeding problem.

Factors Influencing the Quality of Hay.

Favorable weather is an important factor in making hay. The effect of excessive rain on partly-cured clover is well known, but some fail to realize that the sun will bleach hay and lower its feeding value. Therefore, while it is advisable to "make hay while the sun shines", it should be cured with the leaves in the shade as far as possible. If the leaves become dried out before the moisture is pumped out of the stems the latter do not become properly cured as the moisture from the entire plant evaporates through the breathing pores of the leaves. This is one reason why higher quality hay is generally made in the coil than in the swath or windrow. The natural aroma and freshness is maintained by slow curing, while these qualities are more or less lost by too rapid drying in the scorching sun. Where only a small acreage of hay is grown the crop is frequently put in coils the same day it is cut and then left to sweat and cure before being stored. However, where a large acreage of this crop is to be handled with shortage of labor this practice is not altogether feasible. Hay cured in swath and windrow, if judiciously handled, will be of good quality. Care must be taken to conserve as many of the leaves as possible as they are the best part of the plant from the feeder's standpoint. This necessitates tedding and raking when the leaves are a little tough.

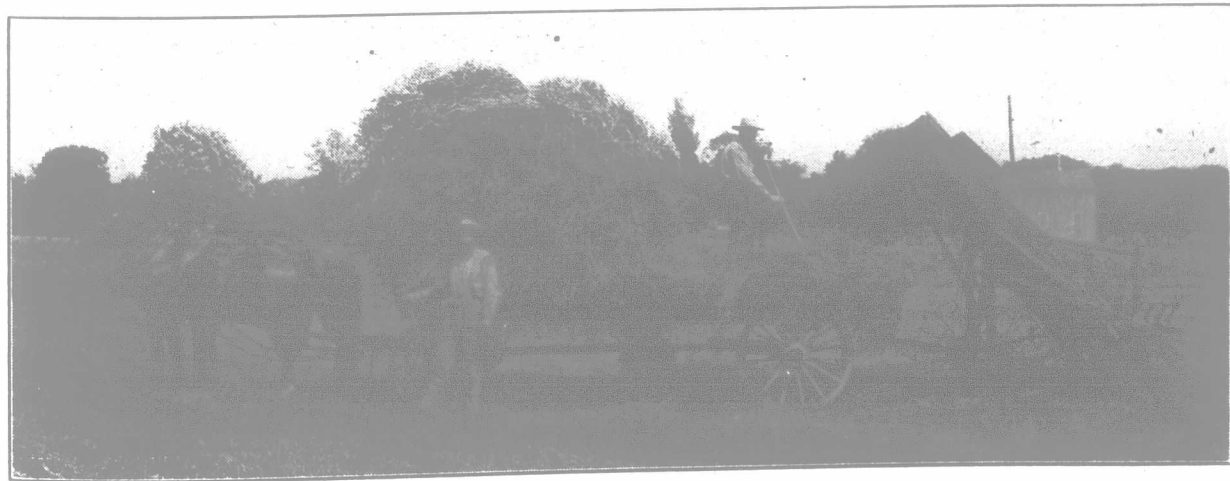
The general practice is to put the mower in the field the first thing in the morning and cut as much as can be handled in a day. While this practice may regulate labor yet the dew on the grass and clover will dry off much quicker when the crop is standing than when it is lying in the swath; therefore, those who do not commence cutting until the plants are dry may be farther ahead in the long run, as wilting will commence immediately. With a heavy crop of clover a tedder is a necessary implement, as it is essential that the swath be loosened up to allow the air to circulate through. Tedding should be done before the leaves have begun to get brittle; in fact, the raking should also be done while the stems and leaves are quite tough. The side-delivery rake leaves the windrow more open than does the ordinary dump rake. This is an advantage in curing the hay as it will then be more uniformly dried. Cutting grass in the morning and leaving it in the swath until

Composition of Cured Clovers and Grasses.

	Water Per cent.	Ash Per cent.	Crude Protein Per cent.	Carbohydrates		Fat Per cent.
				Fibre Per cent.	Nitrogen free extract Per cent.	
Mixed grasses.....	12.8	5.6	7.6	28.8	42.7	2.5
Timothy cut before bloom.....	7.2	6.6	9.8	28.1	45.1	3.2
Timothy cut nearly ripe.....	12.5	4.3	5.2	30.7	45.1	2.2
Alfalfa first cutting.....	8.5	8.8	13.9	30.9	36.2	1.7
Alfalfa before bloom.....	6.2	10.0	22.0	20.5	37.1	4.2
Alsike in bloom.....	12.6	7.7	13.2	26.4	37.0	3.1
Red clover before bloom.....	10.4	7.2	18.2	18.3	41.8	3.6
Red clover in bloom.....	13.9	7.4	13.1	23.1	39.1	3.4

Digestible Nutrients in 100 lbs. of Cured Clovers and Grasses.

	Total dry matter in 100 lbs. lbs.	Protein lbs.	Carbo-Hydrates lbs.	Fat lbs.	Nutritive Ratio
Mixed grasses.....	87.2	4.3	44.3	1.2	10.9
Timothy before bloom.....	92.8	4.7	42.0	1.6	9.7
Timothy nearly ripe.....	87.5	2.2	40.7	1.1	19.6
Alfalfa first cutting.....	91.5	9.3	39.0	.6	4.3
Alfalfa before bloom.....	93.8	15.4	35.5	1.6	2.5
Alsike in bloom.....	87.4	8.2	36.4	1.3	4.8
Red Clover before bloom.....	89.6	11.6	38.1	1.9	3.7
Red Clover in bloom.....	86.1	8.1	38.8	1.8	5.3



The Sliding Rack and Hay Loader Lightens the Work.

the next noon is not conducive to making the best quality hay, especially if the sun is shining brightly. Curing hay in the windrow or coil is preferable as the leaves will then be largely in the shade and curing will take place by action of the wind. With good hay-making weather clovers can be cut one morning and cured and stored the next afternoon. Towards the end of the season the grasses can sometimes be cut in the morning and stored the same evening.

Save the Leaves.

The leaves of the clover and alfalfa plants contain almost twice as much protein as the stems and are the most palatable part of the hay. Tedding and raking when the leaves are dry and brittle may break off fifty per cent. of them, which may reduce the feeding value fully 40 per cent. For this reason curing in the windrow and coil will ensure higher quality hay than curing it entirely in the swath. Cut only what can be handled in a day as dew or rain on cured hay is much more destructive than on freshly-cut hay. If there is a shower when the hay is in windrows little harm will be done to it if the tedder is run over as soon as the weather clears. It is the water drying on it that causes discoloration. In some alfalfa districts hay-caps are used but they necessitate a considerable amount of time and it is doubtful if they will ever come into general use in this country. Hay-caps are made by tearing forty-inch common cotton sheeting into squares. A six or eight-ounce weight is fastened in each corner to hold the cotton in place. By observation and handling the practical man can judge when hay is fit to store. One man's test is to twist a sample of the hay in the hands until the stems begin to break and if no moisture exudes the hay is ready to store.

Storing the Crop.

Moisture on the hay is more likely to injure it than moisture in it, therefore it should not be stored until the dew or rain is completely dried off. The hay loader has taken the place of pitching by hand on many farms. This implement saves a lot of hard work and a man and a boy can now harvest the hay crop quite rapidly where it required two strong men under the old system. Some teams will follow the windrow quite readily, but as a rule it is necessary to have a man or boy drive the horses in order to make them go steadily. While one man can build a load, there should be two men if the windrow is at all heavy. Whether unloading is to be done with the hay fork or slings it will be found convenient to build the load in sections. The hind quarter can be built first and the hay forked down to the front. Some are using a sliding hay rack, which they find works satisfactorily, and by its use one man can build the load as easily as two with the ordinary rack. The entire front half of the load is first built and is drawn forward and then the rear part of the load is put on. The sliding part of the rack is so arranged that it is quite easily drawn forward when loaded. There are a number of styles of ordinary racks; the kind with sloping sides being the most common in many sections. However, this style makes a little higher pitching and is not so convenient to stand on as is the flat rack. The following are the dimensions of a flat rack 16 feet long and 7 feet wide. The bed pieces are 2 by 10 inch plank set on edge. Five cross pieces 2 by 4 inches are laid on this and then a tight board of inch material is put on. The front and rear ladders can be made any height desired. About five feet high in front and four behind will be found quite convenient when a hay-loader is used. To save bolstering up the rack, holes are cut in the floor for the hind wheels and covered with old wagon tires bent in a circle to prevent the wheels rubbing on the hay. Low-wheeled wagons are very often used, but the lower the wagon the harder it is to draw.

Very little hay is now pitched off by hand as the hay fork or slings can be used in almost any part of the barn. In most barns there is a track by means of which the hay and grain is conveyed to the mow. It requires a considerable pull to bring the car back to the stop-block, especially if the draw is long and heavy. This heavy pull can be largely eliminated by having an extra rope attached to the car and run through a pulley fastened on the track. A weight on the end of this rope will return the car as soon as the bundle is tripped and the horses turned around. Care must be taken that the weight is securely attached to the rope so as to avoid accidents. Where the hay is dropped in the mow is the place it is most likely to heat. To avoid this as far as possible each bundle should be spread over the mow. This requires considerable work and some run the risk of the hay heating and allow it to fill up in the centre so that the entire bundle can be rolled down to the far end of the mow. Others use a pole to throw the bundle to either end of the mow. When hay is fresh it is advisable to sprinkle a little salt over it as this tends to prevent the growth of bacteria which would later cause fire-fanging in the mow.

Before haying commences the various implements brought into use should be gone over and all repairs made. This will save time when the rush is on. Possibly a new board is needed in the rack, the ropes or slats in the hay-loader may have become broken, a strand in the hay-fork rope may have broken with the last load the previous season, which would greatly weaken it and perhaps cause it to break at the most inopportune time. Have the rope spliced, or, if it is not worth splicing, have a new one on hand. See that the car, hay fork and pulleys are all in good working order. These things may be looked after on a wet day.

Causes of Spontaneous Combustion.

Hay has been stored when quite fresh and came out of the mow with the color of the bloom showing in mid-winter. This class of hay is of the finest quality and there is very little waste in feeding it. A large percentage of the moisture must be evaporated from stem and leaves so as to prevent heating and moulding in the mow. Hay that is a little fresh will keep much better than cured hay that is damp from dew or rain. Every year a certain number of barns are burned and the origin of the blaze with many is a mystery. Some claim these fires are due to spontaneous combustion caused by storing the crops before they are properly cured or dried. Hay never went in the barn in better condition than it did last year, and yet there was an unprecedented number of mysterious fires. It is possible that on account of the rapid growth hay was more sappy than usual and while it appeared dry and handled dry, the stems still contained a considerable amount of moisture. Fires from spontaneous combustion may take place months after the crop is stored. Dr. F. T. Shutt, Dominion Chemist, explains in the following paragraphs how combustion takes place: "Combustion as it is ordinarily known and recognized results from the union or chemical combustion of combustible matter with the oxygen of the air; the union being accompanied by the giving out of heat and frequently light. When the union takes place rapidly the heat evolved is intense and the organic combustible matter may burst into flame, but when slowly there is no flame. Spontaneous combustion or the ignition of inflammable material without contact with flame occurs when the union with the oxygen is sufficiently rapid to raise the temperature of the gases produced to the point of ignition. The spontaneous fires which break out in barns, or more particularly in mows or compartments where hay or sheaf grain is stored, are due primarily to fermentation which chemically considered is a form or process of oxidation. Fermentation is due to the growth and rapid multiplication of bacteria, which feed upon the organic matter of the hay, etc., and rapidly develop when moisture is present and the material and enclosed air is not too cold. If the process proceeds slowly (conditions of moisture, air and temperature not being favorable to rapid development of bacteria) the process is one of slow combustion and there is no flame or fire. Such is the process that causes the blackened and charred masses occasionally found in the interior of hay stacks, manure heaps, etc. There has been no outward burning of the material, but it has nevertheless been carbonized by this process of fermentation. With the right degree of moisture present and sufficiency of air to provide the bacteria with necessary oxygen the growth of the bacteria is rapid and more and more heat is generated until if the hay is in a confined and poorly-ventilated space the temperature is reached at which the gases produced take fire and the material and the building in which it is stored are burned. It may be weeks or even months after the hay is put in before this firing of the material takes place.

"The initial and essential cause therefore in these cases of spontaneous combustion is the storage of the hay in a damp, or moist condition. Hay containing a preponderating proportion of clover appears to heat or ferment more readily than that which is largely composed of timothy. If circumstances necessitate the putting away of the hay in a moist condition, salt it well. Salt is a preventative of fermentation and retards bacterial development; and hence has the effect of checking and preventing the rapid rise in temperature. Thorough ventilation of the barn is another preventive of fires from this cause. The current of air carries off the heat as it is evolved, or, at all events does not allow it to become so intense as to raise the hay to burning temperature."

It is advisable to have clover hay in particular properly cured before storing and to keep it spread over the mow rather than leaving it where the hay fork dropped it. Even when apparently dry and well cured a certain amount of gases is likely to form which may cause damage if not permitted to escape from the building. The temperature in a closed barn full of hay or grain rises fairly high on a warm day. By having ventilators in the roof or by keeping doors and windows in the ends of the barn open these gases will escape, the temperature be lowered and risk from fire minimized. Care should be taken to cut, cure and store the hay properly, not only to ensure higher feeding quality but to lessen the risk of hay spoiling in the mow or of it firing.

Britain Adjusted to War Conditions.

A writer in "The Scottish Farmer" gives some idea of the efficiency of Britain's war organization in the following paragraph:

"All the time the Food Controller has been making these artificial adjustments with relation to food, and long before that, other marvelous and more natural ones have taken place in our national life and work. Since the outbreak of war, and the real need for energetic action was manifest, there have been adaptations for the purposes of the hour which could hardly have been in the contemplation of anyone. It soon became evident that a huge number of men were to be required for war service, and our mills were turned on to weave khaki cloth, we had plenty mills. We required sand bags—the Dundee jute men were asked to provide them. We wanted ammunition and all kinds of explosives—well, being a manufacturing country full of factories, we soon got them into the game, and carried it on till

we had time to add to their strength. We are a maritime people, and we had the shipping which was an essential of our insular position. For a nation living in peace, and in the main expecting to continue to live in peace, we could hardly have been better prepared for war. Expecting it of course we could, but after the lapse of a comparatively short time our war organization is really wonderful—it is stupendous, pervading almost every sphere of life and work. That holds good not only on the material side of the great struggle, but also on the moral side. The eagerness with which agencies connected with the latter have sprung to do their duty is what might be expected of them in a war for righteousness. An outstanding example, and it may be taken as a type of the national adjustment of a moral agency adapted to war needs, is the pre-existing Y. M. C. A.'s. They are on every front abroad doing their particular kind of work, as well as at home, ministering in many ways to soldiers in camps and other places."

Different Points of View.

EDITOR "THE FARMER'S ADVOCATE":

Some years ago a number of scholars, professors and others met in the city of Munich to discuss matters of scientific importance to themselves and, let us hope, others. One subject was the different aspects in which the same event could be seen and how the opinions and temperament of each observer can color each record kept, so that ultimately it is difficult to find out what actually had taken place. Among this crowd there must have been one with some sense of humor, which we must say appears to be rare among keen scientific observers, and he proposed that the assembled company should experiment upon themselves. Some startling episode should suddenly be caused to take place in their midst, and that twenty-five of the company should write a short and concise account of the proceeding. This was agreed to. Now, each man of these twenty-five was evidently in pursuit of knowledge, and we should, therefore, infer that they would concentrate their trained powers of observation and go about the business thoroughly.

The episode presented to them was that of a man clothed in scarlet suddenly appearing in their midst and behaving in the most grotesque manner he was capable of for a few seconds. We sincerely hope none of these serious-minded professors would descend to such frivolous behavior, so probably this scarlet-clothed individual was an outsider engaged for the occasion. Of these twenty-five resulting papers no two were agreed even on the question of time. Some said the performance lasted five minutes, while in reality it occupied less than a minute. In their opinions of the color of the raiment, surely striking enough, most were mistaken, and the opinions as to what took place were so varied as to be entirely irreconcilable.

When trained observers in serious conclave make fools of themselves, can it be wondered that we common folk cannot agree on various matters, though in one thing we do agree, namely, that we ourselves are right and others only right in so far as their opinions coincide with our own. We, too, see life under such varying aspects that it is no wonder our views are colored by our circumstances, our temperament, our education and our environment. In some cases we are too prejudiced to observe intelligently, in others too intellectually lazy to take the trouble to form an opinion of our own and take up the first one that comes handy and best suits our own idiosyncrasy. Perhaps like the scientists of Munich many of us take ourselves and our opinions too seriously. We do not see where the laugh comes in. Next to a religious spirit a saving sense of humor is the best possession a man can have. Subjects for humorous treatment will always crop up, and even the loneliest has always one good subject on hand—namely, himself.

Illustrating different points of view are two letters written on the same day by people within a few hours journey of each other. One is from a Canadian at present in England, the other from an officer in the Imperial service, and both touch on the same subject—the American declaration of war. The Canadian is much surprised at the jubilation of the English press and people over the entrance of America into the war, which he thinks should have taken place long ago. The English officer says: "President Wilson's speech and appeal are very fine. He has chosen the psychological moment to come in. The States have done mighty good service in the way of munitions, etc."

Other points of view there are in England, and the whole of the English press has not been so effusive judging from the message, presumably inspired by Lord Northcliffe, who controls a part of it. If not absolutely true, as it certainly is not, it contains some truth. It says: "Great Britain, Canada, Australia and India do not require the help of America in bringing the war to the desired end, but the British Empire will welcome the moral support of even a small army of 10,000 or so." It points out, however, that America may now have the opportunity of returning the many kindnesses shown her by France. We might add also of fulfilling some of the obligations which she equally with England incurred in signing that now historical little "scrap of paper."

We think that our attitude to our latest and greatest Ally should be one of warmest welcome. Truly the British Empire has borne the burden and heat of the day, and therefore for all time, as from the earliest time, the British Empire has fought and suffered for freedom, and ours, therefore, should be the highest honor. We have poured out money like water which is a small matter beside the loss of the best and dearest of our sons. In particular Canada and Australia must ever

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hold a place of highest honor, as these countries took up arms in defence of an idea which is ever greater than to fight in self defence. When the old, old question was asked, "Am I my brother's keeper?" they proudly answered, "Yes". The British Empire was as unprepared to go to war as it is possible for America to be but we rose as one man to defend the weaker peoples and to fight for the freedom of the world. The consequence of our chivalric action has cost us much and will yet cost us more but we are willing and able to pay the price.

This point of view is so general that we may assume it is right "vox populi is as a rule vox Dei." We need not, however, become arrogant or object too much to the length of time America held neutral. Did not Great Britain, before the people had the power so entirely in their own hands as they now have, set just such an example? Had our statesmen made a stand for the right when Prussia in the face of all Europe stole Schleswig-Holstein in 1866, the world would not now be enduring horrors which are a disgrace to civilization. Lord Beaconsfield, then W. Disraeli wished to intervene, as he could see the injustice of the action and what it involved. Another statesman cynically agreed with him but said the Hohenzollerns were upstairs and had very little to go on with, and if they got a little more it might "content them and make them less troublesome." Is this the proper attitude for a great nation to assume on a question of ethics? Again in the Franco-Prussian war we had a chance to intervene, and again we gave way to the then favorite doctrine of *laissez faire* and allowed Germany to devastate France and obtain from her a large indemnity, and on this foundation was raised the United Germany now tottering to her fall. Perhaps some feeling still existed in England in respect to having been lured into the Crimean War, which by many was considered unjust, by Louis Napoleon, and so were blinded to the real reason of France's invasion of Germany. After the event we naturally see things in a truer perspective, a different point of view.

We should have been glad if the great American people had seen their way to join all the rest of the English-speaking race in August, 1914, and in so doing it would have prevented greater brutalities than have ever been chronicled or can be, but we rejoice that once

again we are united in aim as if we were still one people. The Allies have done much, but it is foolish to deny that there is still much to do. The President in one sense did choose a psychological moment for entering the war, for in the unsettled state of feeling that is inevitable after such an upheaval as Russia has experienced the lack of confidence we may feel for the safety of our eastern front is more than balanced by the confidence which the support of our great new ally in the West has inspired. The Kaiser's predecessor, Frederic the Great, was almost in a state of collapse when his enemy, the Russian Empress Elizabeth, died, and her successor, being of German sympathies, withdrew from the fight. Might not history repeat itself? We must also remember that in our fight for the freedom of the world we have behind us the tradition of a great nation. All oppressed people of every class have ever found a home and a refuge on English soil, from kings and emperors downward. Some of our best citizens were Flemish and Huguenot refugees, and Jewish people from various countries early came to England to a land where, comparatively speaking, they could live in peace. In a few generations these peoples become the most English of English. The late Lord Rothschild, for instance, and the present proprietor of the Daily Telegraph might for physique be taken as types of English country gentlemen. This change has happened in a few generations.

As might be expected, our point of view is entirely different from the American, in that America's existence as a nation dates only from the Civil War. America was a collection of states till amid that great upheaval a nation was born. When American politicians cut themselves loose, not without great provocation, from the English Government, they made for themselves a brand new constitution founded on the philosophical ideas of the time which we have now outgrown. The British constitution was not produced by any set of men or philosophers. It grew as one of our great forest trees grow. In it there are, we know, many faults, many anomalies, dead branches which must be topped off, others which are living are not as they should be, but we love it and as it has sheltered our fathers it still shelters us. In this connection there is another fact

which must present itself to us all. That is the stability of the English monarchy, and of that alone among all the monarchies of Europe. King Edward said: "it is time for us (kings and emperors) to shut up shop." This is, perhaps, not a very dignified remark for a king to make but was true at the time, a very suitable style for the ruler of a "nation of shop-keepers" who was proud of the position. The only voice of any importance that has been raised in favor of a republic for Britain is that of H. G. Wells. Mr. Wells is a man of great genius and has a right to speak with authority, but he is no more a typical Englishman than his Mr. Britling's menage, we might almost say menagerie, is a typical English home. The opinion of most practical people is that the English monarchy, alone of all other monarchies, is now settled on a firmer basis than it has been for some time. Evidently it suits the genius of the English democracy. The people have the wish and the power to speak their mind, but the wish also to have some visible symbol of government, and the monarchy is as convenient as any. At bottom the British is a conservative race and loves its old institutions while it laughs at some of them. To be able to do so is surely great wisdom either for a man or for a nation a point of view we should recommend.

Lincoln Co., Ont.

MARGARET RAIN.

Another Anchor-Post Brace.

A correspondent commenting on the special article dealing with types and construction of fences, which appeared in our issue of June 7, mentioned another form of bracing end posts which has given good satisfaction on his place. This system, which is practicable with the exception of where gates are hung on these end posts, is simply to run a wire from the top of the post back a few feet and fasten it to a small stick of timber buried in the ground, much as a telephone or telegraph pole is braced. He says this works well and we have no doubt that it would, as the wire on the fence would be pulling against the brace wire on the end posts.

Automobiles, Farm Machinery and Farm Motors.

All About Oiling.

Instruction books are printed by manufacturers and given free to each purchaser of an automobile but, strange to say, a large proportion of this informative literature is not taken advantage of. Thousands and thousands of motorists have never taken the trouble to read their manuals and to get a thorough understanding of what the automobile daily, weekly, monthly and yearly requires. Let us take the question of oiling for instance. It is a common occurrence to have an owner or driver make the statement that he wants his car "gone over". If he is in a mood to go into details and is at all frank and candid, you will soon learn that he knows nothing at all about the location of the grease cups, oiling holes, etc. He is so much in doubt and so much in fear that he wants to leave the entire matter in the hands of an expert. This should not be the case, for you can get from the manufacturer of your machine, an oiling and grease chart that will give accurate information, regarding every outlet and inlet for lubrication. Perhaps it would be well to run over the points of an automobile so that you may check up the parts that require maximum attention.

Going from the front of the machine to the back, let us say that you will usually find grease cups on the steering knuckles and on the tie rods. When properly lubricated, these make for easy steering and noiseless operation. There is also a grease cup on the speedometer pinion shaft, and it is very essential that it should

not be overlooked. In cars that have rocker arms and push rods, it is imperative that they should receive oil before every trip. There is a ball on the top of the push rod that rests upon a piece of felt and when this felt is kept well oiled, the operation of the push rod should be noiseless, but if the felt is allowed to dry out and become stiff, the ball at the end of the push rod rattles and squeaks in a most unpleasant fashion. Coal oil is the best thing for the valve springs because ordinary cylinder oil has a tendency to make the valves sticky. At the front of the machine you should make sure that the steering gear housing is properly oiled, and, of course, the most vital part of the power plant, viz.—the crank case, should always be filled with oil to the proper level your indicator points out. The presence of too much lubricant in the crank case results in the development of carbon throughout the motor, and also forces the exhaust to belch out great volumes of disagreeable smoke. If your machine has a self-starter, it will certainly have a grease cup on the starting motor and this must be attended to without fail. Going farther back on the car you will find greasing arrangements at the universal joints, and you will also realize that the transmission case should be kept filled with oil. The clutch shaft bearing demands service as well. The grease cups at the rear are located on the spring bolts and brake levers, and of course, there are oiling inlets for the wheel bearings, the driver shaft bearings and rear axle housing.

In a general way, we have given you an analysis of a chassis of a power plant in order that you may not be fumbling around your car a needless amount of time. If you follow our instructions, you will be able to determine rapidly the points of the machine that require grease and oil.

Most machines use three different grades of lubricant, cylinder oil, heavy oil and cup grease. In your purchase of these supplies, do not hesitate to buy the best,—false economy can be very easily exercised with great resulting damage. All oil should be free from grit and foreign substances, and you must remember that it must be of a high viscosity, i. e. having a high flash point, to give the best service. We must insist, in your interests, that you never use cheap or inferior oils in your automobile as they will sooner or later cause infinite worry and regret. It is also advisable to bear in mind only mineral oils must be utilized, and that those of vegetable manufacture contain acids which work harmful effects upon metal. When a grease cup has been turned down as far as it will go, immediately remove it and put in a new filling of lubricant. While it is tremendously essential that every part of the machine should be oiled at all times, it is folly to use too much oil, because the over-plus only has a tendency to collect foreign matter. Make it a point, after working over your machine, to thoroughly wipe it with waste in order that dirt and flying dust may not be collected to the detriment of your car's general appearance. AUTO.

Canada's Young Farmers and Future Leaders.

Mixing the Breeds.

When driving through the country it will be noticed that on many farms there is evidence of different breeds of cattle having been crossed. Perhaps that practice has been followed on your own farm, but have you ever compared the quality of the animals with those on farms where one breed has been kept for many years and a well-bred sire always used? The latter usually have a much better appearance and show every indication of being better feeders or milkers than the nondescripts resulting from crossing. Well-bred grades also command a higher price on the market than many of the cross-breeds. Some cross-breeds give a good account of themselves either in the feeder's stable or at the pail. However, they are usually the result of mating two well-bred animals although they are of a different breed. But what will be the result of crossing again? Mediocre stock, as seen in many fields, is the answer.

This second or third-grade stuff consumes as much feed as the well-bred stock, but it will not bring the price. When in conversation with a young man, pure-bred stock was mentioned and while he recognized the advantages of good breeding, the custom on the home farm was to breed to the bull that was handiest. For instance, a Holstein bull had been used on grade Shorthorn cows and their progeny bred to a Hereford bull. He claimed that they were able to feed the steers to weigh from ten to twelve hundred pounds at two years of age, but yet

they lacked the quality and finish so noticeable in better bred stock.

It is generally observed that the most progressive farmers keep fairly well-bred stock of all kinds. As live stock is the backbone of agriculture, it is reasonable to suppose that the quality of stock had something to do with their prosperity. The use of a well-bred sire of the same breed for a number of years tends to grade up the herd. If a bull of another breed is then used, no matter how good he may be, the result of the grading up is, to a large extent, lost as new breed characteristics are introduced. The offspring may make profitable feeders, but again they may not. All breeding should be towards improvement of quality, form and finish. A stock man who has been breeding along a certain line a number of years has an idea of the quality of stock he is likely to get by certain matings; when the breeds are mixed it is more of a lottery.

The young man starting farming for himself should decide on the breed of animals he purposes keeping, then breed, select and feed to improve the quality. Comparatively few are in a position to start with a herd of pure-breeds, but this should deter no one from having as good grades as possible. Registered stock may be added to the herd as time goes on.

With pedigreed stock the line of breeding can be followed. This is important as inherent qualities are transmitted. The deficiencies of a sire or dam may

crop out in the progeny after several generations; consequently, when selecting breeding stock it is well to make a study of the character and quality of the ancestors. The best individuals of every breed are the result of a definite breeding policy, which aimed at mating to strengthen good qualities and to eliminate any weakness that might exist.

The temptation to discard a certain breed, after years of breeding, for another breed is strong at times. There may be a big demand for milk, and a neighbor is possibly making more money out of his dairy cows than you are out of beef animals at present. Many have thought that by using the neighbor's dairy-bred sire on females of a beef breed the progeny will inherit the milking qualities of one parent and the beef tendencies of the other. In some cases it works out that way, but a certain percentage will inherit the good qualities of both parents, while an equal percentage will show all the weak points. On the whole the progeny is not as good as grades for breeding purposes. Mating pure-bred animals of different breeds oftentimes gives progeny with excellent feeding qualities. Cross-bred animals have won in beef classes in strong competition. However, to ultimately own pure-bred stock might well be the aim of every young man. By starting early in life and adhering to certain breeding principles it is possible to build up a high-quality herd. All breeds have their place. Decide on the breed which suits your conditions

and stick to it. No matter how low in price ordinary stock goes, there will always be a demand for the top-notchers, and you may as well breed and raise them as anyone else.

A Saved Litter and an Interested Boy.

EDITOR "THE FARMER'S ADVOCATE":

To-day was the first time in my eighteen years of life to drive a load of hogs to town, get a cheque in my own name and cash that cheque all for myself.

You will ask "Where did you get the hogs from?" Last October one of father's sows, after having given birth to a litter of eleven pigs, died suddenly twelve hours later. Father, who had lost a sow in the same way two years ago had tried to raise that litter but was unsuccessful so he had no desire to try this one. After having buried the sow we took a look at the young pigs. "My goodness it's a shame to have such a nice litter of pigs die at the present high prices of pork" said father.

After dinner he looked at the pigs again and then he said, "You have always wanted pigs of your own to feed and care for so you can have this whole bunch now."

I did not say anything but I thought if dad could not raise young orphan pigs, how could I? The first thing I did was to catch them separately and pour a little warm milk down their throats. The next feed I gave them in a dish. The feed consisted of three parts milk and one part water, sweetened slightly with a little brown sugar. For the first week I fed them every two hours night and day and only once did I wish the litter had died with their mother, and that was one night when one little pig had died and the others were looking as if they might follow any time, and I wanted to go to a party but couldn't on their account. The other ten did not die so the next week I added a little cooked porridge made from corn meal and rolled oats in equal parts, and lengthened the interval between feeds from two hours to four. After a while I left off feeding at nights but fed them the last thing before going to bed.

A finer bunch of pigs never lived. They knew me and would come at the slightest call and follow me everywhere if allowed. At five months my porkers averaged 135 pounds and to-day when I sold them they averaged 210 pounds at 16 1/4 cents a pound. After giving my father one hundred dollars for feed, etc., I still have quite a neat sum over, and by feeding the pigs I learned a great deal, and so did father. He says he never saw me take so much pleasure out of my work as I do now, and before I close I wish to say that a father who has not given his son a calf or a pig to care for and feed and when it's sold allowed him the money all for himself I would advise to do so and see the pleasure the boy will take out of his farm work.

Perth Co., Ont. A FARMER'S SON.

THE DAIRY.

Cut a little grass for the bull and calves confined in the stable.

Giftie Gat, an Ayrshire cow, has a five year cumulative advanced registry average of 12,056 lbs. of milk and 500.86 lbs. butter-fat.

If the main revenue comes from the cows do not let other work interfere with regularity in milking. There is ample proof that irregular milking reduces the milk yield.

Can the corn crop in a silo and provide summer pasture conditions in the winter. The silo also provides a means of keeping corn over for summer use if pastures are short.

Don't leave the cows in one pasture field until they pick it bare if there is another field to turn them into. Short grass will not pick up as readily as where there is a fairly good growth left.

How about those spring calves? Is their pen kept clean? Do they get a sufficient quantity of the right kinds of feed to keep them thrifty? Remember that the calf stage is an important period in the development of the cow.

Plan to get the most feed possible from the pastures as concentrates are high in price, but, even at that it doesn't pay to allow the milk yield to drop owing to scarcity of feed. Better to feed a little hay or grain to tide over until second-growth clover will furnish feed.

Believes Oleo Would Injure Dairying and Bacon Production.

EDITOR "THE FARMER'S ADVOCATE":

Following closely on the heels of your warning in "The Farmer's Advocate," re the oleo situation, of a couple of weeks ago, comes the announcement from Ottawa that the Government is seriously considering the free admission of oleo into Canada. This is very disturbing to a dairy farmer and presents a situation that demands immediate action. Surely the farmers have had enough to contend with the past year without this slap in the face. It seems like sarcasm for the Government to plead with the farmers for greater production one minute and turn around and cut their

throats, figuratively speaking, the next. It is not only the effect it will have on the dairy industry, but on its sister industry, bacon production, which is just now assuming such healthy proportions. Of course, the past year farming conditions have been abnormal but any fair-minded person cannot, at the present time, take exception to the price of butter. It isn't out of proportion to the price of sugar, flour and other things I might mention.

You have been the farmer's "Advocate" in the past; surely you won't fail us in this critical moment. Another good, vigorous editorial (and you can write them) might have a good effect.

Leeds Co., Ont.

C. H. McNISH.

[Note.—We have stated the case against oleo several times during the past eight months, and are prepared to hold the ground taken. Would suggest that all farmers interested write their member of parliament expressing their views and asking him to give the matter his best consideration if it comes up for further discussion. You can count on the help of "The Farmer's Advocate." —Editor.]

Loss of Fat in the Whey When Using Pepsin.

EDITOR "THE FARMER'S ADVOCATE":

Owing to the scarcity of rennet extract in Canada in 1916, many of the cheesemakers were obliged to use pepsin as a substitute. It was generally admitted at the end of the season that there was a greater loss of fat in the whey when pepsin was used than there was when using rennet extract.

Considerable work was done at the Finch Dairy Station between February 23 and May 10, 1917, endeavoring to eliminate this extra loss of fat. Tests were made with different quantities of pepsin, setting the milk at different temperatures and developing a higher acidity in the milk before setting than is commonly practiced. In preparing the pepsin solutions, one pound of pepsin was dissolved in one gallon of water.

The following results will, no doubt, be of interest to cheesemakers:

Summary of all the Vats from February 23 to May 10 at the Finch Dairy Station.

Coagulant used.	No. vats in whey	Time		Set- ting per 1,000 lbs. milk in whey	Coagulant	% fat
		hr.	min.			
Pepsin Ordinary temp.....	40	2	57	85.3	4.55	218
Pepsin, high temp.....	16	2	47	88.2	4.29	249
Rennet, ordinary temp.....	12	2	50	85.5	4.80	209
Rennet, high temp.....	4	2	47	88.5	5.37	252
Pepsin, high acidity, low temp.....	12	2	05	85.7	3.94	268
Pepsin, high acidity, high temp.....	6	1	55	87.8	4.50	306
*Vats set high temp.	4	2	29	90.5	4.31	228
*Vats set low temp.	4	2	29	85.0	4.25	196
*Extra pepsin.....	4	3	08	85.0	5.75	171
*Normal pepsin.....	4	3	08	85.0	4.00	194

Summing up all the tests made between February 23 and May 10, we would say that in using pepsin, the best results were secured by setting at a temperature of 85 degrees and using enough pepsin to coagulate the milk ready to cut in from 25 to 30 minutes. Setting the milk at temperatures over 86 degrees increased the loss of fat in the whey in nearly every case.

The loss of fat in the whey was lessened by increasing the quantity of pepsin per 1,000 pounds of milk from 4 ounces to 5.5 and 6 ounces. Developing the acidity in the milk so that the curds dipped in less than 2 hours and 15 minutes from time of setting, increased the loss of fat in the whey to a marked extent.

It was found advisable to allow the coagulation to get fairly firm before cutting, but there was no advantage in letting it get over firm.

In some cases the whey from milk set with pepsin tested lower in fat than the whey from milk set with rennet extract. It seems, however, that varying conditions in the milk from day to day as found in every-day factory work affect the loss of fat in the whey to a greater extent when pepsin is used than when rennet extract is used. Therefore, the greatest care must be exercised in cutting the curd and stirring it while cooking when making cheese with pepsin.

GEO. H. BARR.

Keep Up the Milk Flow During Mid-Summer.

It is doubtful if any substitute has been found for June pastures for dairy cows. The grass at this time of the year is fresh, succulent and palatable; the days are balmy and the flies are not troublesome. Cows respond to these ideal conditions by giving a heavy flow of milk without the use of concentrates, clover hay or silage. The quality of dairy products produced in the month of June is considered superior to the quality of products produced at other seasons of the year. June butter, in particular, is in demand to put in storage. June conditions do not last through the entire summer; the milk flow falls off in July and reaches a low ebb by the middle of August, unless pastures are substituted. Once the production drops below normal at this season it cannot be brought back by any system of feeding. Prevention is the only course. It is essential to keep up production

every year, but it is doubly so this year with the high prices and demand for dairy products. A milk cow is an animal that responds to good treatment.

The main point to consider is the feed supply. Many dairymen are confronted year after year with parched pastures during mid-summer, and yet they fail to do anything to relieve the situation. They apparently live in hopes that each succeeding season will not be as bad as the last. This is certainly a poor policy and points to lack of efficient management. There are different crops which can be grown that will supply the herd with feed that will permit it to keep up the milk flow. Many dairymen have erected a second silo, as experience has proven that silage is an excellent substitute for pasture. No crop grown on the farm returns as large a yield as does corn, which, if properly ensiled, can be kept in excellent condition for feeding the year around. As soon as grass becomes a little short and before there is any appreciable decrease in the milk flow, a small amount of silage is fed night and morning. As the season advances the amount is increased, until fresh pasture is available from the second growth of clover. Some dairymen rely on a spring-sown crop to furnish feed from July to the end of the summer season. A mixture of oats, barley and wheat sown at the rate of three bushels to the acre will furnish excellent pasture from last of June, and as it is eaten off will continue growing up, thus furnishing fresh feed. This crop has supplied ample feed to keep more than one cow to the acre from July until fall. Others rely on having a plot of oats and peas, or a field of alfalfa, near the buildings to be cut and fed in the stable during the latter part of June and July. Good results are obtained from these crops, but handling them in the way mentioned necessitates a considerable amount of work.

Silage and spring-sown pasture crops must be arranged for months before they are to be used. The man who has not made provision for this class of feed may possibly have alfalfa or green oats which he can cut, and later in the season green corn will be found an excellent substitute for the pasture. It is possible to greatly relieve the situation by not allowing the stock to crop the grass too closely. If there are two or more pasture fields, allow the cows on one this week and on another the next. Considerably more feed will be obtained under this method than by confining stock to one field for several weeks. As the grass becomes short, cured clover hay fed in the stable will readily be eaten. Concentrates are also found valuable in keeping up the milk flow. A mixture of three parts bran and one part cotton seed, or equal parts bran and ground oats have proven to be especially valuable for cows on pasture. Three or four pounds of this mixture, depending on the milk flow, can be fed to advantage night and morning.

It is generally considered that pasturing is the most expensive way of supplying feed for stock. However, it greatly relieves the labor situation and is beneficial to the stock. A number of successful dairymen find that it pays them to stable the cows during the day and turn them on pasture at night. The stables are kept well ventilated and partially darkened, consequently the cows are not tormented by flies. Hay and grain are fed in the stable, and it is generally found that once the pastures begin to dry up that the cows take readily to stable feeding. Of course this system entails extra work, but it is believed that the increased milk flow gives ample remuneration. A smaller acreage is required for pasture, thus leaving a larger area for hay, grain or corn.

It is generally noticed that the cows seek out a shady place in which to rest during mid-day, if they are on pasture. On many farms such places are far too few. It is true that trees prevent cultivated crops from growing near them, but what is lost in crops is usually made up by the extra comfort these trees afford the stock. Think twice before cutting down large shade trees along the lane or in fields used for pasture. By slight changing of fences it is sometimes possible to give the stock access to a clump of trees throughout the entire summer.

A constant supply of water should be furnished. A cow in full milk consumes a large amount of water every day, and if this is not available it is unreasonable to expect the milk flow to be high. While watering twice a day may be sufficient during cold weather, it is not enough during the heat of summer. The stock will frequently go to the watering place three or four times during a day to quench their thirst. Consequently, the pasture-field gate should be left open to permit the cows going to the yard for water whenever they feel like it. However, if it is a considerable distance from pasture to barn energy is used up in walking, which will necessarily lower the milk yield. Where large records are aimed at water is piped to the pasture field. This can frequently be done at very little expense, especially where the fall is sufficient to permit water to flow by gravity from the main supply tank to the field.

Salt is necessary to the health of animals, especially those which consume large quantities of vegetable foods. If deprived of this substance for a considerable length of time the vitality of the system is lowered. It is claimed that a dry cow requires slightly over one-half ounce of salt per day, while a cow in milk requires an extra half ounce per day for each twenty pounds of milk produced. Salt should be kept in a box which is accessible to the stock. Salting at irregular intervals is not good practice. Rock salt placed in the pasture field proves satisfactory, although some stockmen object to using it. Too frequently the cows are hurried on the way from pasture field to barn. If the best results are to be obtained this practice must be avoided. Undue excitement frequently results in a reduced milk flow and may affect the quality of the milk. When scattered over the field it is no easy task rounding the

cows up without the services of a dog. As a rule cows will head for the barn the moment they see the dog, but when they do not see him they slowly pick their way homeward. This is aggravating, especially when a person is in a hurry or the grass is wet in the morning, consequently there is a strong temptation to dog the cows. A good dog is valuable on every stock farm, but he should be trained to round the cows up quietly and not run them. Some dairymen who keep daily records claim that when cows are driven rapidly the milk yield is decreased by several pounds. The average production of many herds is low, due to failure to cater to the cow's comfort and to provide sufficient feed at certain seasons of the year. It pays to keep up the milk flow during mid-summer. If it drops then, the best of feed and care later will not bring it back to normal.

POULTRY.

Mites.

Red mites frequently become a serious pest of the poultry house in warm weather. They hide in cracks and crevices of the perches and nests and attach themselves to the birds' bodies at night and lower their vitality by sucking the blood. As a rule the mites leave the birds in the morning, consequently dusting is not so effective as for the hen louse. These tiny, red insects can be controlled by spraying the pen, roosts and nests in particular once a month during the summer with kerosene to which has been added sufficient carbolic acid to make a five per cent. solution. The work should be done thoroughly, as a small place escaping the oil may become a breeding place. Keeping the pen clean will go a long way towards preventing it becoming infested with mites or lice. Poultry cannot do well if bothered with vermin.

More Than a Maintenance Ration Required.

Some claim that there is money in keeping poultry on the farm while others are positive there is not. Feed was exceptionally high in price last winter, but so were eggs, however, more than one farmer has admitted that he fed a limited ration to the hens and could hardly expect to get eggs. It is a question whether this system was altogether justifiable. It requires so much feed to maintain a hen whether she is laying or not. In many cases a trifle more feed or a little more attention would have resulted in eggs being produced. On the small ration there was no production and the hens will have to do extra well this summer to make up for the idleness during the winter. But, feed is still high, consequently there is considerable complaint that the production is low for this season of the year. Under these conditions poultry is kept at a loss, but is it entirely the fault of the fowl? An extra dollar's worth of feed might have given a dollar-and-fifty-cents' worth of eggs.

Regularity in feeding is also essential. On one farm that came to our notice the birds refused to lay and were considered a bill of expense. After hearing an address on poultry raising one member of the family took entire charge of the poultry. The pen was cleaned and fresh litter placed on the floor. The ration was not increased in quantity but the grain was buried in straw and the hens were forced to work for it. A mash was fed at noon and a supply of water always kept in the pen. Grit and shell were supplied and green feed of some kind was fed every day. By a little extra attention and rearranging of the system of feeding, but with little extra expense for feed a few birds commenced laying within a week, and by the end of a month there was a fifty per cent. production, which increased to seventy-five per cent. early in April. This goes to show that there is something more to feeding poultry than just throwing in a little grain.

It is a well known fact that a pullet must reach a certain stage of development before she will commence laying, and that if this stage is not reached before cold weather sets in production is not likely to start until late in the winter. Feed for growing chicks is even higher than it was for the hens during the past winter, and we know of cases where the chicks are not being fed enough to develop them rapidly. If eggs are to

be gathered next winter it is essential that the pullets be well fed, especially as many were hatched rather late in the season. Wheat and cracked corn make a good grain ration while shorts can be used for the mash. If skim-milk or buttermilk is available use it in mixing the mash. If it cannot be secured mix a little beef-meal or beef scrap in the mash. If you cannot see your way clear to feed more than a maintenance ration to the fowl you had better dispose of them. However, on some city-lots, farms, and commercial poultry plants where all feed is purchased hens have made a substantial profit over and above cost of feed labor, etc., thus proving that it is possible to make money out of poultry which is properly looked after.

The Canadian Egg Market.

The egg and poultry markets report issued by the Live Stock Branch, Dominion Department of Agriculture, for the week ending June 19, gives the ruling price for extra quality eggs in Western Ontario as 31 to 35 cents; Eastern Ontario 31 to 36 cents; Quebec, 31 to 34 cents; Manitoba, 28 to 30 cents; Prince Edward Island, 29 to 32 cents; Saskatchewan, 28 to 30 cents, and Alberta 25 to 27 cents. During the same week the wholesale price to retailers in Toronto, for the same quality eggs, was 37 to 38 cents; Montreal 36 to 37 cents; Vancouver, 35 to 39 cents; Chicago, 29 to 30½ cents. The retail price to consumers in Toronto and Montreal was 40 cents; in Charlottetown, 30 cents, and in Vancouver 45 cents. Toronto reports that weakness has developed during the past week in the egg market; in fact, all markets from the Pacific to the Atlantic show a tendency towards lower prices. While prices to producers ranged from 30 to 35 cents during the second week in June, they were as low as 28 cents at some points on June 19. Storages are reported to be filling up rapidly and in some all space has been contracted for. Receipts vary, a falling-off being reported in parts of Western Ontario while in other parts they are holding about normal. The quality is reported to be good. The receipts of live broilers have increased during the past week, resulting in a marked falling-off in price. Egg receipts in Chicago show a decline. The large storages there are reported to be filling up rapidly. Production in the country continues quite heavy, but the situation at country points is not reassuring. While good prices were received for eggs during the month of May, the production was not such as to

remunerative. Towards fall when the bulk of the flock is marketed the price drops. For this reason it is advisable to feed for the early market, and thus save feed. If properly looked after a duck will weigh about five pounds when ten weeks old. Up to this age it does not cost any more to produce a pound of duck than it does a pound of chicken, and the price per pound is generally a little higher. Cornmeal, low-grade flour and shorts with ten per cent. of beef scrap added makes a satisfactory mash. To increase the bulk, clover leaves or finely-cut green stuff can profitably be added. Like other classes of poultry, ducks must be properly looked after if a reasonable profit is to be made.

The following directions for fattening ducks were published in circular No. 29 of the Dominion Experimental Farms. "Fattening may be started as soon as the ducks are eight weeks old. They are fattened in a yard or pen. They should be isolated as much as possible in a dark building, well ventilated, and provided with a good litter, always kept clean. The feed should consist of mash mixed with milk, rather thin, composed of cornmeal, barley meal, shorts, beets, cooked carrots and green feed. Ducks are ready to kill when they move around lazily and when they refuse their feed. As a rule it will take about two weeks to finish them.

It is recommended to let the ducks take a bath so that they may clean themselves, and to starve them at least twenty-four hours before killing. Ducks are killed in two ways. By disjuncting the vertebrae of the neck, or by bleeding, which is done by cutting the veins in the roof of the mouth. They should be chilled before packing.

HORTICULTURE.

Arsenate of Lime for Spraying.

The advantages of arsenate of lime over arsenate of lead for use with sulphide solutions are now being realized after two years of experimental work on this material, carried on by G. E. Sanders at the Dominion Entomological Laboratory, Annapolis Royal, Nova Scotia.

When arsenate of lead is added to lime and sulphur it causes the loss of 35 per cent. of the sulphur from solution, and also 5 per cent. of the arsenic so added becomes soluble. Consequently when the lime-sulphur-lead-arsenate combination is sprayed on the trees, most of the poison is in the form of a very poorly made arsenate of lime, most of the lead is in the form of lead sulphide (the black insoluble precipitate found in the bottom of the cask) which is worse than useless as it prevents proper agitation, the lime-sulphur is 35 per cent. weaker, the sulphur that is lost going to form the lead-sulphide sludge mentioned.

When arsenate of lime is added to lime and sulphur it causes no chemical change. The commercial arsenate of lime comes in the form of insoluble powdered arsenate of lime containing less than one per cent. of soluble arsenic, and reaches the trees as such without affecting in any way the lime-sulphur solution.

Comparing the two combinations from the chemical standpoint it would seem that the lime-sulphur-arsenate-of-lime combination should be much less injurious to foliage than the lime-sulphur-arsenate-of-lead combination. In actual practice this proved to be the case on experimental plots in Nova Scotia in 1915 and 1916. It not only caused less foliage injury, but it caused less dropping of the fruit on the fourth spray than the lime-sulphur-lead-arsenate combination. In commercial apple orchards in Nova Scotia four tons of arsenate of lime were used in 1916, and for 1917 twenty-one tons have been ordered by the members of the United Fruit Companies alone, while only seven tons of arsenate of lead are being ordered by the members of the same organization. This is the best proof of the satisfaction that has been derived from a two years' test of the new material.

Fungicidal Value.

In using the arsenate of lime and arsenate of lead alone for spraying apples in 1916, it was found in a small way that the arsenate of lime was practically as valuable as arsenate of lead as a fungicide. While the arsenate of lime gave very severe burning when used alone it gave practically as good control of apple scab and pit as arsenate of lead.

When the arsenate of lime is added to lime and sulphur no loss of sulphur from the solution results, but when arsenate of lead is added, 35 per cent. of the sulphur is precipitated from the solution as lead-sulphide sludge. From this it would appear that the lime-sulphur-arsenate-of-lime combination should be a better fungicide than the lime-sulphur-arsenate-of-lead combination.

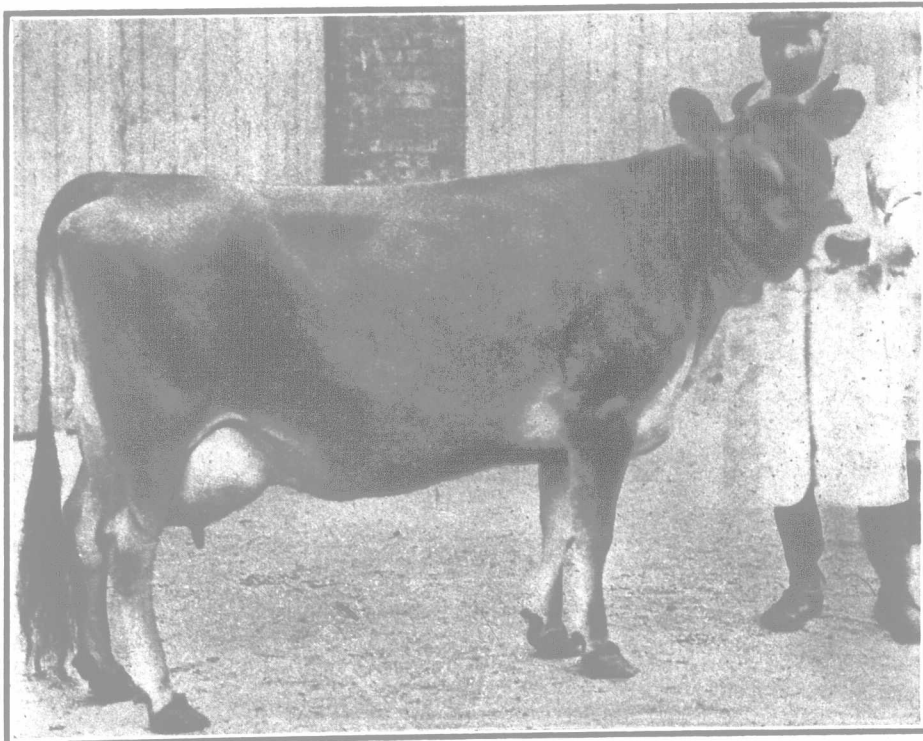
In experiments extending over two years in the Annapolis Valley the lime-sulphur-arsenate-of-lime combination has given better control of apple scab than the lime-sulphur-arsenate-of-lead combination.

Comparative Cost.

The cost according to arsenic content of arsenate of lime is little more than half that of arsenate of lead. Arsenate of lime in powder form contains from 43 to 44 per cent. of arsenic oxide, and is, therefore, about three times stronger in arsenic than paste arsenate of lead, therefore, only one-third as much is required.

Physical Properties.

The arsenate of lime now being used in Nova Scotia is in the form of a very fine powder, one pound of which occupies 80 cubic inches. This degree of fineness in-



Mammet.

Champion butter cow at Dairy Show, London, Eng.

fully offset the unusually heavy expense of carrying the poultry over the winter. Poultry feed is scarce and high in price, and a decline in the price of eggs will no doubt lead many poultrymen and farmers to commence disposing of their hens. The export of eggs produced in Canada for the year ending March 1917 totalled 5,167,343 dozen; not the produce of Canada 5,416,475 dozen, making a total export of 10,583,818 dozen. Imports entered for consumption in Canada were 3,038,838 dozen.

Green Ducks.

There is a time in a duck's life when it can be marketed at a profit to the poultryman; allow that particular time to pass and in all probability the duck will eat up any profit it might have made. As a rule ducks are full feathered at ten or twelve weeks of age and are in condition to market. After that age the appearance of pin-feathers makes plucking more difficult. The food consumed from then on largely goes to produce feathers in place of producing meat, consequently in a few weeks any profit that might have been made is eaten up. At the age mentioned they are marketed as "green ducks." There is usually a fair demand for them and the price is

sure good agitation and even distribution of the poison. The ease and accuracy of measuring out a powder as compared with a paste only needs to be mentioned to be appreciated by the practical grower.

Agitation.

The black sludge or lead-sulphide precipitate has always been a great detriment to the proper agitation of the lime-sulphur-arsenate-of-lead combination. Where arsenate of lime is used no lead-sulphide sludge is precipitated, and so better agitation results even when inferior types of agitators are used.

Insecticidal Value.

On the whole, it is found that arsenate of lead acts a little more rapidly than arsenate of lime, but the difference is scarcely worth considering. The reduction in injury and the lower cost resulting from the use of arsenate of lime more than overbalances the very slightly reduced insecticidal value resulting from a combination containing less soluble arsenic than the lime-sulphur-lead-arsenate combination.

Formula for Using.

With lime-sulphur solutions the following amounts are advised to vary with the specific gravity of the lime-sulphur:

Lime sulphur.	Arsenate of Lime.
1 to 33 or 1.069 sp. gr.	2 lbs. per 100 gals.
1 to 37½ or 1.008 "	2 lbs. per 100 gals.
1 to 43 or 1.007 "	2 lbs. per 100 gals.
1 to 50 or 1.006 "	1½ lbs. per 100 gals.
1 to 60 or 1.005 "	1½ lbs. per 100 gals.

When used alone or with excessively dilute sulphide solutions, arsenate of lime in excessive quantities will cause some leaf injury, but with excessively dilute-sulphide solutions there is not so much injury as with a corresponding quantity of arsenate of lead.

Arsenate of lime when properly used is undoubtedly the best poison on the market to-day to use with lime-sulphur and all other sulphide sprays. With Bordeaux mixture arsenate of lime is safe, but so far as is known at the present time it has no advantages, excepting in cost, over arsenate of lead for use with that fungicide.

The First Fruit Crop Report.

The first Canadian Fruit Crop Report, which is a welcome precursor of the series which follows monthly throughout the season, and issued by Donald Johnson, Dominion Fruit Commissioner, has been distributed. Apple growers have been anxiously watching for a summary of conditions, remembering that the British embargo is liable to interfere with marketing. The Fruit Commissioner points out that while trade may be somewhat perturbed on account of existing regulations nevertheless, judging by past records the growers who have clean good-quality apples to market will not experience so much difficulty as they anticipate.

The June Fruit Crop Report is based largely upon bloom but in some localities the set of fruit can be judged to a limited extent. Unfavorable climatic conditions may, of course, cause a considerable drop after the estimation is made. Weather conditions generally have not been favorable. In Ontario spring was very cold and wet and encouraged the development of apple scab, which in many sections is now showing on the foliage. Nova Scotia had a particularly wet spring and spraying was impossible in some sections on account of wet land. No adverse reports have been received from British Columbia.

Apples.

Norfolk County reports a 25 per cent. crop of fall apples and 10 per cent. of winter apples. In Elgin County the most promising are Kings and Greenings. Fall and winter varieties showed about 10 per cent. of a normal bloom. The bloom is also light in Essex, particularly on Baldwins which is the principal variety, but Kings, Spys and Snows were fair. Lambton County reports 5 per cent. of an average bloom on winter apples, and 15 per cent. on fall varieties, except along the Lake shore where there is a prospect of a fair crop. All varieties are very light in Wentworth, Halton and Lincoln, except Greenings and early fall apples.

In Middlesex County only about 5 per cent. is showing on winter varieties and 10 per cent. on fall apples. Oxford County reports both fall and winter varieties at 25 per cent. The crop will be light in Huron and Bruce Counties and the same may be said of Brant and Peel, excepting Greenings which are fairly good.

More favorable reports come from fruit-growing areas east of Toronto. Around Newcastle and Whitby the total crop has been estimated at about half an average yield. Baldwins and Spys, however, are very light. In and around Bowmanville early varieties are fair; Spys are very light and so are Ben Davis and Baldwins. Kings and Starks are fair to good. In the Port Hope area early varieties are fair to good; winter varieties had a good bloom with the exception of Russets. Starks were above medium. Near Colborne and Cobourg there was a fair to good bloom on winter varieties, with the exception of Baldwins which were light, and Spys which were very light. Snows are showing up well in the Brighton area, but other kinds were light. Early varieties have an average bloom in the Trenton area. Greenings are fair in some places, but on the whole are very light. Kings and Snows in some orchards showed a full bloom. Fairly optimistic reports come from Prince Edward County. Along the shore of Lake Ontario, in the vicinity of Wellington, there was about 65 per

cent. of a full bloom, while in some sections the blossom was almost full.

In some areas of the St. Lawrence and Ottawa Valleys the bloom on early varieties was light, yet for the whole district very good. McIntosh Red and Fameuse were very light. There was a full bloom in the Georgian Bay district and the prospects are for half a crop. In Quebec early varieties will be very light; winter varieties, which are the main crop, are also light. Fameuse and McIntosh Reds give good promise.

Apple trees were only coming into bloom in New Brunswick (June 17 and 18) being about two weeks later than usual. Buds were plentiful on early and fall varieties, with winter varieties somewhat less.

The latest reports received by the Commissioner before his estimate was published stated that the bloom in Nova Scotia was very heavy and that spraying was more general than usual. The continued wet weather which delayed the bloom about two weeks was the only drawback that might prevent the crop from being considerably above the average.

Reports from all sections in British Columbia have been very favorable. Estimates placed the crop about 25 per cent. larger than in 1916.

Peaches.

The Niagara peach crop, the report says, has set well and promises a medium crop. This applies more particularly to orchards in Lincoln County, east of Beamsville. Later telegrams from St. Catharines state that the weather conditions there were causing a heavy drop and the indications were for a medium crop with some orchards very light. Some peaches are expected along the Lake Huron shore in Lambton County. Essex County reports a very light crop. In British Columbia trees blossomed heavily and the fruit was setting well. Leaf-curl was quite common in Ontario.

Cherries.

In the Niagara Peninsula sour varieties were setting well and promised a fairly heavy crop. Sweet varieties were not doing so well. Essex County reported a full crop. In the Clarkson district all varieties were setting well. Elgin and Norfolk Counties reported a 50 per cent. crop and the Georgian Bay district about 75 per cent. Favorable reports come from British Columbia.

Pears.

In the Burlington district the prospects were fair for Keiffers, Anjou, etc., but other varieties, especially Bartletts, were setting light. The same report will apply to Wentworth County. Optimistic reports came from the Niagara District, as well as from Essex County, while the Georgian Bay district should produce a medium crop. East of Toronto, Bartletts were light, but Flemish Beauty and Clapp's Favorite showed a good bloom.

Plums.

All varieties of plums were setting well in Niagara and promised a good crop if the drop is not too heavy. In some sections Japanese varieties were reported light. In Western Ontario there was a full bloom and the set was favorable.

Strawberries and Raspberries.

In the commercial small-fruit district, between Toronto and Hamilton, strawberries were in excellent condition, having blossomed heavily. The acreage is about the same as last year, and there should be practically a full crop. In the Niagara Peninsula the prospects were for about 25 per cent. less than in 1916. Strawberries were recorded at about 75 per cent. of a normal crop in Norfolk, and 60 per cent. in Middlesex. British Columbia reports a full crop of both strawberries and raspberries. As a general thing raspberries were looking well, although some winter-killing was reported.

United States Prospects.

Indications are that Greenings and Baldwins will be light in New York State. Bartlett pears are practically a failure, while Duchess, Clairgeau and Seckle promised a fair crop. Sweet cherries are very light and sour cherries fair to good. In Oregon the blossom on apples was uniformly heavy and the pear crop is expected to be extremely large. Prospects for all kinds of fruit in Idaho were never better. Apples promise better than normal in Montana, while in Washington the prospects are exceedingly good for all kinds of fruit. Growers in Yakima Valley expect nearly a fifty per cent. increase over last year's crop. A later report received from the afore-mentioned States indicates that unfavorable weather in some of the districts will seriously interfere with the set. In Michigan early apples promise a good crop and winter varieties, with the exception of Baldwins, fair to good. Peaches, although having a good bloom, will not much exceed 25 per cent. of a normal crop; Elbertas especially are light. Bartlett pears are light, while "Clapp's", Clairgeau and Duchess are normal. Keiffers had a very heavy bloom.

Be Fair With the Trade.

It will be to the advantage of all producers to watch carefully the standard for quality which their name or brand implies. The Dominion Fruit Commissioner has issued the following advice in this regard:

"Instruct your pickers not to put into any package berries which are immature, decayed or in any way defective.

"Have all your packages well filled.

"Do not overface crates by putting the finest looking berries or the best filled boxes on the top layer;

see that the boxes in the lower layers are just as well filled and contain as good fruit.

"Do not ship crates without seeing that these conditions are observed. Early last season we received a great many complaints regarding the overfacing of crates shipped into the larger markets, and several prosecutions followed. It will, therefore, be in the interests of growers to see that every effort is made this year to maintain a high standard, not only of the fruit itself but of the manner in which it is packed. When consumers pay a high price for strawberries which are half green and practically tasteless they are discouraged from buying that fruit even when the properly-matured berries reach the market at reasonable prices. Our inspectors have been instructed to give special attention to this matter and to report all cases of overfacing to this office."

A Few Insects Worth Watching.

After one has spent time and labor in preparing the land, sowing the seed and bringing the young crop along, it is discouraging to have it mutilated by insects or destroyed by disease. The spring has been unfavorable for the rapid reproduction of some insects and consequently their depredations have not been so extensive and serious as usual, but the season is not yet over and no doubt we shall hear from many of them ere the harvest begins.

The first point to bear in mind is that some insects actually bite or chew the foliage, while others suck the juices by means of special equipment with which they are armed. Those in the first-mentioned category can be controlled with arsenicals or poisons, while the latter class must be combated with some preparation that will kill by contact. Aphids or plant lice come in this latter classification and since they are sometimes exceedingly troublesome and attack a great variety of foliage, it is well to discuss them here.

APHIDS OR PLANT LICE.—Almost anyone, having anything to do with agriculture in any form, has made the acquaintance of these little insects known as "plant lice", "Aphis", or "green fly". Fruit trees, berry bushes, vegetable and field crops are all likely to suffer from these little criminals. They reproduce in an alarming manner and congregate in great numbers. In the forms most commonly seen the body is pear-shaped and they have long legs and antennae. Sometimes they are winged, but frequently they are not, especially early in the season. They are sucking insects pure and simple. The leaves of plants infested by them will begin to curl or fold up, and inside of the closed-up leaf will usually be found a small army of these lice. Since they do not chew the leaves they must be killed by a contact poison, the most effective being Black Leaf 40, kerosene emulsion or whale-oil soap. The first-mentioned material, which is a nicotine preparation, is perhaps the most efficient. The directions for use of this insecticide are on the cans. A little soap with it helps. If whale-oil soap, which can be obtained at almost any drug store, is used, follow these recommendations: For brown or black aphids, 1 lb. in 4 gallons rain water; for green aphids, thrip or leaf hopper, 1 lb. in 6 gallons rain water. To make kerosene emulsion take:

Kerosene (coal oil)	2 gallons
Rain water	1 gallon
Soap	½ pound

Dissolve the soap in water by slicing and boiling; take from fire, and while hot pour in kerosene and churn vigorously for five minutes. For use dilute with 9 parts of water, so the 3 gallons of stock emulsion will make 30 gallons of spray mixture. Spray for aphids before the leaves are too much curled. When enclosed in the leaves the insecticide will not strike them and the operation is ineffective.

CABBAGE WORM.—There are few who do not know the cabbage worm, which chews the leaves of the plant and mutilates the head. When plants are young spray with Paris green and water at the rate of one ounce Paris Green to 2 or 2½ gallons of water. An effective remedy is pyrethrum powder—1 pound thoroughly mixed with 4 pounds of flour and placed in an air-tight jar for 24 hours so that the poison may become thoroughly incorporated with the flour. Dust the plants lightly with this mixture from a cheese cloth bag. Pyrethrum powder is perfectly harmless to humans but it will kill insects. Pyrethrum can also be applied with a liquid as follows: Dissolve 2 ounces of the powder in 3 gallons of luke-warm water and spray at once. Pyrethrum powder exposed to the air becomes worthless.

FLEA BEETLES.—Potatoes, cabbage, tomatoes, turnips and other crops both farm and garden, are often infested with these minute dark insects. They are great leapers and in consequence are known as the "potato flea" or "cabbage flea," according to the plant attacked. They are particularly common this year, owing no doubt to the moist weather which is favorable to their reproduction. Dry, hot weather is inimical to the flea beetle. This particular insect punctures the leaves, making numerous small holes. The surface of the leaves frequently presents a yellowish, spotted appearance indicative of their work. The best remedies are Bordeaux mixture and arsenicals, such as Paris green or arsenate of lead. Dust the plants with Paris green mixed with a little flour, or spray with Paris green and water, as mentioned under cabbage worm. On potatoes or tomatoes Bordeaux mixture with Paris green or arsenate of lead will prove effective.

THE CURRANT WORM.—The foliage of the currant and gooseberry is often riddled and frequently destroyed entirely by a small, greenish worm known as the currant

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worm or currant sawfly. While it does much damage when not combatted it is easily controlled with arsenicals. If they are noticed at work any time up to just after the fruit has set, except when in bloom, spray with arsenate of lead, 2 pounds to 40 gallons of water, or Paris green 1 pound to 40 gallons. It will not be safe to use arsenicals after the fruit begins to grow. If necessary spray then with hellebore, 1 ounce to 1 gallon of water. The hellebore should be fresh as it loses strength when exposed to the air. Lime-sulphur or Bordeaux mixture, with the earlier poison sprays will help to control disease.

THE THEORY OF INSECT CONTROL.—We have not begun to mention the numerous insect pests which attack farm crops, orchards and gardens. Their numbers are legion, but the theory of combatting insect life is easily understood. Those that injure the leaves and foliage and yet do not cause holes or punctures are usually sucking insects which can be destroyed with contact poisons, such as kerosene emulsion, Black Leaf 40, whale-oil soap, or pyrethrum powder. Biting insects fall ready victims to arsenicals, such as Paris green or arsenate of lead. Two pounds of arsenate of lead to 40 gallons of water is a common strength at which to use this poison. One pound of Paris green to 40 gallons of water is also sufficiently strong under almost any circumstances. On fruit nearing maturity, or vegetables which will soon be eaten, it is not well to use Paris green or arsenate of lead indiscriminately. Pyrethrum powder, which is harmless to humans yet poisonous to insect life, is a much safer remedy to employ. Bearing these few points in mind, farmers, gardeners and fruit growers should have little difficulty in combatting any serious insect infestation with which they may be confronted. We have mentioned these few types of insects in the preceding paragraphs because they are exceedingly common and yet seldom dealt with in an effective manner. The treatment recommended for them is in a general way, applicable to sucking and biting insects that are liable to be destructive later in the season.

FARM BULLETIN.

Successful Ayrshire Sale At Springfield.

The greatest public sale of Ayrshires ever held on the American continent was that put on at Springfield, Mass., on June 14, under the auspices of the New England Ayrshire Club, and held in the Coliseum where the 1916 Dairy Show was held. The sale committee under the Chairmanship of Arthur H. Sagendorph, of Spencer, Mass., had very complete arrangements, which tended to the success of the sale. Andrew Philips, M.L.A., of Huntingdon, Que., wielded the hammer, and in a short time sold fifty-four head, which realized nearly \$35,000, an average of nearly \$650.00. The following was the make-up of the sale: Two bulls over three years of age, one two-year-old bull, three yearling bulls and two bull calves under one year. Seventeen cows four years and over, eight three-year-old cows, twelve two-year-old heifers, six yearlings, and two calves under one year, also three young calves.

The principal consignment was made by Wm. Hunter, of Grimsby, Ontario, associated with Adam W. Montgomerie, Lessnessock, Ochiltree, Scotland, who had thirty-five head lately imported and released from quarantine at Levis. Hugh J. Chisholm, of Strathglass Farm, Port Chester, N.Y., consigned eight head; John Sherwin, of South Farm, Willoughby, Ohio, seven head; Percival Roberts, Penehurst Farms, Narberth, Pa., two head; Etna J. Fletcher, Greenfield, N.S., two head, and Gilbert McMillan, Huntingdon, Que., also contributed two head imported by Wm. Hunter.

The highest price realized was \$2,500, paid by H. J. Chisholm for the imported cow Douglas Hall Violet, bred by W. & M. Sloan, Castlemains, New Cummock, Scotland. This is a very choice cow, and doubtless will be heard from later. R. R. Ness paid \$2,100 for the six-year-old cow, Harletholm White Rosie 5th, also \$1,300 for the cow Townfoot Sunbeam. Mr. Ness also purchased the noted three-year-old bull Lessnessock Sir Robert (imp.). This is one of Scotland's noted bulls. His dam, Morton Mains Emathla, has a milk record of 9,170 lbs. of milk in 40 weeks, testing 4.05 per cent. After the sale Mr. Ness re-sold this animal to H. A. Moses, Woronoco, Mass. He also purchased for \$425 the yearling heifer Netherton Nancy 4th, which comes from good milking ancestry, and another yearling, Drumsuie Primrose (imp.), for \$250 whose grandsire is Brae Rising Star. This heifer is a combination of Netherhall, Drumsuie and Auchenbrain breeding. One hundred and fifty dollars were paid for a young heifer calf Auchenbrain Favorite Beauty 18th, sired by Lessnessock Good Gift.

Gilbert McMillan, of Huntingdon, Que., was the purchaser of the four-year-old bull Lessnessock Golden Love, bred by A. W. Montgomerie, Lessnessock, Ochiltree, Scotland, which is by Bargower Bright Diamond, out of Lessnessock Gem, and is a half-brother of Lessnessock Forest King, already noted in Canada as a Toronto champion. His dam has a record of 8,930 lbs. of milk, testing 4.05 per cent, in 36 weeks. The dam of milk, testing 4.05 per cent, in 36 weeks. The dam of milk, testing 4.05 per cent, in 36 weeks. This animal was stock bull at Lessnessock for three years and has proved to be a good stock getter. Mr. McMillan also purchased the three-year-old heifer Millerston Cherry, out of Millerston Sir James. She was bred on October 24 last to Chapmanton Wild Rose, a grandson of May Mischief.

Jas. Davidson, of Waterloo, brought to Quebec the

noted yearling bull Auchenbrain Timekeeper by South Craig Rentpayer out of Torrs Madge 2nd. This cow has a record of 10,230 lbs. of milk, testing 3.79 per cent, in 40 weeks. The dam of the sire is South Craig Nellie. Her record is 12,290 lbs. milk, testing 3.87 per cent, in 44 weeks. This is a blending of the Bargenoch and Torrs' strains, two of the best in Scotland. The sale price was \$1,000.

J. H. Black, of Lachute, was the successful purchaser at \$1,200 of the three-year-old heifer Blackbyres Ellen. This heifer was bred by Andrew Marr, Blackbyres, Maybole, Scotland. The sire of this cow was Drumdow Bonar Law, and her dam is Blackbyres Queenie, and has a record of 9,940 lbs. of milk, testing 3.65 per cent, in 44 weeks. Her grandam has a record of 9,750 lbs. of milk, testing 3.89 per cent, in 40 weeks. The sire of the sire is Craighbrae Buccleuch, and is out of the same dam as the well-known Peter Pan.

The Canadian breeders secured a lot of splendid stock in keen competition with United States buyers. Several animals that went to United States buyers realized prices running from \$1,000 to \$1,600.

Crops in York County.

EDITOR "THE FARMER'S ADVOCATE":

The grain crops throughout this county (York) were put in with the land in first-class condition, and good weather for seeding, but after the seed had been put in there was a prolonged cold spell and the grain was at a standstill for three weeks or a month. But since the cold spell has left us and the real spring sun and spring rain have come the crops are looking well.

The oats, barley and spring grain are looking extra well; it is a good height and an excellent color. Peas are doing fine and will certainly be a good crop if favorable weather conditions continue. The fall wheat and new seeds are very patchy, many fields having been totally destroyed by the late and hard frosts. The hay and wheat that stood the frost without being killed is short and backward for the time of the season. Alfalfa has stood the frost well, but growth has been very slow. There were very few farmers who had turned their stock out before the first of June. But the pasture is growing very well now.

There has been a very small acreage of hoed crop put in on account of the scarcity of farm labor. Most farmers have put in a few mangolds and they have come up well and there are very few poor catches. The corn is up well, is a good color and growing fast. Most farmers have their turnips in and those that have been in long enough have come up well. There has been plenty of moisture with warm weather for a couple of weeks.

Most farmers who have been fortunate enough to have help of their own or to get a hired man have put in a larger acreage of vegetables. Very few who have found it at all possible have not put in a few beans, but there have been fewer potatoes planted than is usually done on account of the scarcity of seed and the prices those who had them were asking. Two weeks ago several who had potatoes on Stouffville market refused \$4.50 per bag.

The increased production campaign has had a good effect both on the farmers and the towns' people. The farmers' wives and girls are growing a larger quantity of vegetables than ever before—and what other years were disgraceful backyards in the towns are well-cultivated gardens. Many of the women in our towns who have been in the habit of holding gatherings and idling their time away, have made themselves sunbonnets or purchased straw hats and are now on the hoe handle every spare moment.

YORK CO., ONT. FARMER'S SON.

Late Season in Temiskaming.

EDITOR "THE FARMER'S ADVOCATE":

The spring of 1917 has been very late. The snow was slow in leaving, due to the late storms and lack of rain. North winds prevailed with heavy frosts up to May 16, since then it has been warm with continued heavy rains, and much of the low lands remain unseeded, (June 14) with poor prospects of being seeded this year.

Although growth was late in starting, grass and spring grains are looking fine. Clover wintered well except in wet places where it killed out, due, no doubt, to the heavy ice which covered the meadows last autumn. Seed grain and potatoes are very dear this spring. Stock, especially pigs and cattle, are very high in price as was evident at recent auction sales where grade cows sold from \$100 to \$140. The high price of mill-feeds takes the cream off feeding hogs and more than counterbalances present prices of pork.

Our farmers seem fully alive to the needs of the Empire, and "greater production" seems to be the order of the day. This is curtailed to a great extent by a lack of skilled help. Many farmers' sons are overseas, and they are working along as best they can alone. Boards of trade, school boards and other like organizations are all doing their "bit," and as a result many a piece of land has been planted with potatoes that would otherwise have grown only weeds. Altogether, 1917 promises an average crop, but it is yet too early to prophesy. So much depends on the weather.

Temiskaming District, Ont. W. R. PETERS.

The Oakville Sale of Holsteins.

The first public sale of Holsteins under the management of the Ontario Sale and Pedigree Company, was held at the Fair Grounds, Oakville, Ontario, on Wednesday, June 20. The weather, despite a small shower in the afternoon, was ideal for an open sale-ring. A large number of breeders from different parts of Ontario and as far East as Montreal, Que., were in attendance. On some of the animals bidding was not very brisk, but those that were brought into the ring in good bloom quickly found a buyer at prices which compared favorably with previous sales this year. Those not in condition went, in several cases, considerably below their value. Of the 37 head catalogued two were still to be sold when our representative was forced to leave for his train. The 35 which had gone under the hammer brought a total of \$6,465, which was an average of \$195.75 for the 27 females, and \$149.50 for the 8 males. Eighteen cows, three years old and over, averaged \$210.25, while three yearling heifers averaged \$240. Hengerveld Jewel Posch, a heifer just one year old, from the Gordon S. Gooderham consignment, brought \$335. Lakeview Colantha Sir Wayne, from Lakeview Stock Farm, topped the sale at \$485. He went to the bid of A. Gies. The highest price received for a female was \$410. The consignors were: Messrs. Gordon S. Gooderham, of Oakville; J. A. Wallace, of Simcoe; R. M. Holtby, Port Perry; A. Gies, Waterloo, and Major E. F. Osler, Lakeview Farms, Bronte. Colonel Long was the auctioneer. The following is a list of the animals selling for \$100 and over, together with the names and addresses of the purchasers:

Lakeview Count, Biggar Bros., Oakville.....	\$225
Lakeview Colantha Sir Wayne, A. Gies, Waterloo....	485
Midnight Korndyke, A. J. Camplin, Unionville.....	100
Frances May Springbrook, M. J. McKay, Cornwall....	165
Jewel Rozinante Tensen, J. C. Brown, Stamford....	200
Netherland Johanna Mercedes 2nd, F. I. Mason, Unionville.....	170
Nanuet Korndyke, G. H. King, Oakville.....	155
Snow Ball Segis, J. Pearson, Toronto.....	155
Lyndenwood Comet Ormsby, R. M. Holtby, Port Perry.....	100
Francy Daisy Posch, W. H. Cherry, Hagersville.....	250
Viola DeKol 2nd, F. I. Mason.....	140
Clear View Aaggie Abbekerk, A. Peterson, Waterloo.....	135
Favorit Bell Hartog, G. H. King.....	135
Josephine Alexandria Lady, M. J. McKay.....	175
Snowball Pride, G. Watts, Soperton.....	135
Segis Pontiac Clara, C. R. Dyke, Unionville.....	180
Fairmount Netherland Cornucopia, A. Peterson.....	150
Jewel Fayne, J. S. Logan, Hamilton.....	200
Edgemont Toitilla, E. Dyson, Guelph.....	300
Hengerveld Jewel Posch, P. J. Salley, Lachine Rapids, Que.....	335
Lady Mercena Schuiling, M. J. McKay.....	400
Manor P. H. DeKol, Douglas Boyd, Fruitland.....	210
Manor P. H. Canary, J. Pearson.....	180
Manor P. H. Gem, M. J. McKay.....	410
Lady Ann Floss DeKol, J. Pearson.....	140
Sylvia Beets Calamity, G. Watts.....	240
Irene DeKol Aaggie, J. S. Logan, Hamilton.....	125
King Segis Pontiac Gamma, G. Thompson, Selkirk, Man.....	250
Emma Pauline DeKol, A. Gies.....	350

A Big Price for Wool at Guelph.

Those Ontario farmers who consigned their wool to the Ontario Sheep Breeders' Association, to be sold co-operatively at Guelph, Ontario, will be pleased to read that the 260,000 lbs. of the Ontario clip collected at Guelph has been sold for an average price of 63 cents per lb., considerably in advance of prices quoted by dealers up to the present. Some wool is yet coming in, and all that is consigned will be handled. Secretary R. W. Wade is greatly pleased with results. Following are the grades:

Grade	Weight	Price per lb.
Fine medium combing.....	3,500	67c.
Medium combing.....	80,000	66c.
Medium clothing.....	7,000	67c.
Low medium combing.....	62,000	63½c.
Coarse.....	90,000	57c.
Lustre.....	4,300	57c.
Rejects.....	8,200	50c.
Gray and black.....	1,200	46c.
Locks and pieces.....	600	34c.
Tags.....	4,500	26c.
Washed wool (a small lot).....		78c.

Food Controller Appointed.

The Hon. W. J. Hanna, a former provincial secretary in Ontario has been appointed Food Controller in Canada with wide powers. We understand that he will first consult with Hoover the recently appointed Food Controller in the United States.

Good Enough For Him.

EDITOR "THE FARMER'S ADVOCATE":

My father has been a constant subscriber as long as I can remember, but I am located here, and what was good enough for dad is good enough for me.

Nipissing District, Ont. W. J. McLEAN.

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending June 21.

Receipts and Market Tops.

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

CATTLE						CALVES						
Receipts			Top Price Good Steers (1,000-1,200)			Receipts			Top Price Good Calves			
Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending		
June 21	1916	June 14	June 21	1916	June 14	June 21	1916	June 14	1916	June 14		
Toronto (Union Stock Yards)	3,792	4,479	4,560	\$11.95	\$10.50	\$11.75	739	1,238	1,359	\$15.50	\$12.50	\$14.50
Montreal (Pt. St. Charles)	449	782	474	11.15	9.85	11.50	1,430	1,390	2,280	13.00	11.00	13.00
Montreal (East End)	253	612	619	11.15	10.25	11.50	994	1,029	1,625	13.00	11.00	13.00
Winnipeg	2,566	2,652	2,296	11.60	9.50	11.40	179		155	13.00	10.50	13.00
Calgary		1,478	1,036		8.00	9.75	15					

HOGS						SHEEP						
Receipts			Top Price Selects			Receipts			Top Price Good Lambs			
Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending		
June 21	1916	June 14	June 21	1916	June 14	June 21	1916	June 14	1916	June 14		
Toronto (Union Stock Yards)	6,625	6,679	7,281	\$15.50	\$11.35	\$16.00	537	1,875	457	\$18.00	\$16.00	\$18.00
Montreal (Pt. St. Charles)	935	1,116	1,301	16.00	11.90	16.10	130	794	209	* 9.00	* 8.00	* 9.00
Montreal (East End)	514	735	650	16.00	11.60	16.10	188	595	320	* 9.00	* 8.00	* 9.00
Winnipeg	5,451	8,265	6,523	15.00	11.00	14.50	46	86	39	13.00	11.00	13.00
Calgary		4,066	1,356		9.40	13.40	685		54		10.00	12.50

*Quotations per head.

Market Comments.

Toronto (Union Stock Yards).

Twenty-three hundred cattle, including a few loads of direct shipments to packing plants, comprised the total receipts at the Union Stock Yards over the week end. With a good demand prevailing, trading after the first hour on Monday morning was exceptionally brisk and everything was bought up by one o'clock at an advance in price of 10 to 15 cents per hundred on all grades of butcher cattle, with the possible exception of bulls and cows. Light receipts followed on Tuesday and Wednesday and a further advance of 10 to 15 cents was made. Trading closed on Thursday with a fairly strong undertone at the advance. A few loads of heavy steers were on sale and one extra good load averaging 1,360 pounds per head sold on Monday at \$12.10 per hundred. This was followed by other sales of odd lots at \$12.25 and \$12.35 per hundred, with the bulk selling from \$11.60 to \$12.10. Heavy butcher steers sold at similar levels. An extra well-finished load reached \$12.25, and odd lots brought \$12.40 per hundred, with the bulk of the best loads going between \$11.25 and \$11.85. A few head of choice light steers and heifers or baby beef, sold at \$12.00 and \$12.25 per hundred, but most of the sales of good loads were made between \$10.75 and \$11.50, with common and medium selling one dollar less per hundred. Bulls and cows barely held at the previous week's quotations but were high in comparison with other grades of cattle. A few odd bulls reached \$10.50 and one sold at \$11.00 per hundred, but the bulk of the best sold between \$9.50 and \$10.25. Good and choice cows sold from \$9.25 to \$10.00. Stockers and feeders were about steady at last week's quotations with only a limited demand prevailing. Reviewing the past three months' prices, those of last week are about 50 cents per hundred lower on all grades of butcher cattle than the top prices during part of April and the month of May. Calves were on hand in moderate numbers and sold at \$13.50 to \$14.50 for the bulk of the best veal, with a few extra choice ones reaching \$15.50 per hundred.

Lambs and sheep sold at prices steady with the previous week's quotations. Spring lambs sold at \$17.00 to \$18.00 per hundred for the best lots, with light lambs at \$15.00 to \$16.50 per hundred. Light sheep sold at \$8.00 to \$9.50 per hundred and heavy at \$7.00 to \$8.00, with the latter in slow demand.

The bulk of the hogs on the Monday market was contracted for at the previous week's quotations of \$15.50 per hundred for selects but on Tuesday prices were reduced to \$15.00, the bulk of the receipts being sold at this level. On Wednesday shippers held out and were successful in gaining an advance of 25 cents. Many lots of good hogs sold at \$15.25 on Thursday and practically all the transactions were made at that figure.

During last week shipments of hogs were made from counties in Southern Ontario direct to the Buffalo market, where the present hog quotations are from \$1.00 to \$1.50 per hundred higher than at Toronto. Should this difference increase, it is more than likely that

TORONTO (Union Stock Yards)					MONTREAL (Pt. St. Charles)				
CLASSIFICATION	No.	Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price	
STEERS heavy finished	116	\$11.60	\$11.40-\$12.00	\$12.10					
STEERS good 1,000-1,200	514	11.36	10.75-11.75	11.95	46	10.65	10.50-10.85	11.15	
STEERS common 700-1,000	36	10.33	9.75-10.75	11.00	19	9.75	9.50-10.20	10.20	
STEERS good 450-800	692	10.96	10.50-11.50	11.75	31	10.25	10.00-10.50	10.75	
STEERS common 800-1,100	214	9.80	9.26-10.40	10.50	48	9.15	8.75-9.50	9.70	
HEIFERS good	478	11.03	10.60-11.60	11.90	12	10.25	10.00-10.50	10.75	
HEIFERS fair	117	9.80	9.50-10.25	10.25	21	9.40	9.25-9.60	9.70	
HEIFERS common	27	8.81	8.00-9.25	9.25	19	8.50	8.25-8.75	8.90	
COWS good	488	9.70	9.25-10.25	10.25	24	9.25	9.00-9.50	9.85	
COWS fair	507	7.55	7.00-8.25	8.75	113	8.02	7.50-8.75	8.75	
BULLS good	84	9.94	9.50-10.25	11.00	8	9.85	9.50-10.25	10.25	
BULLS common	53	8.63	7.00-9.50	9.75	34	8.18	6.00-9.50	9.50	
CANNERS & CUTTERS	54	6.00	5.75-6.25	6.25	30	6.15	5.75-6.50	7.00	
OXEN	16	9.50	8.25-9.75	9.75	6	8.75	8.75-	8.75	
CALVES	739	13.22	12.50-14.50	15.50	1,430	10.65	7.50-13.00	13.00	
STOCKERS good 450-800	192	8.75	8.50-9.00	9.25					
STOCKERS fair	75	7.92	7.50-8.50	8.75					
FEEDERS good 800-1,100	116	9.75	9.50-10.00	10.00					
FEEDERS fair	13	9.25	9.00-9.50	9.50					
HOGS selects	5,704	15.23	15.00-15.50	15.50	841	15.65	15.50-15.75	16.00	
HOGS heavies	10	15.50	15.00-15.50	15.50	1	15.50	15.50-	15.50	
HOGS lights	715	14.19	14.00-14.50	14.50	36	15.50	15.50-	15.50	
HOGS (fed and watered) stags	179	12.23	12.00-12.50	12.50	57	12.58	12.00-13.00	13.00	
HOGS sows	17	10.25	10.00-10.50	10.50					
SHEEP heavy	10	7.90	7.00-8.50	8.50	25	9.73	9.25-10.00	10.00	
SHEEP light	211	8.85	8.00-9.50	9.50	33	10.25	10.00-10.50	10.50	
SHEEP common	98	6.35	5.50-7.00	7.00	47	8.99	8.50-9.50	9.50	
LAMBS good	202	17.14	16.50-18.00	18.00	7		8.00-9.00	* 9.00	
LAMBS common	16	16.00	15.00-17.00	17.00	18		6.20-7.00	* 7.00	

*Quotations per head.

heavier shipments will follow. Therefore it would appear that for the present, Ontario prices will depend largely on Buffalo quotations, and if Buffalo prices hold steady a further decline on the Toronto market can scarcely be expected.

Of the disposition of live stock from the Union Stock Yards for the week ending June 14th, Canadian packing houses purchased 750 calves, 96 bulls, 48 heavy steers, 3,155 butcher cattle, 7,596 hogs and 315 sheep. Local butchers purchased 310 calves, 336 butcher cattle, 337 hogs, and 133 sheep. Shipments back to country points were made up of 145 stocker calves, 59 milch cows, 1 bull, 250 stockers, 40 feeders and 145 hogs. United States' shipments were 77 calves, 203 heavy steers and 49 stockers.

The total receipts at the Union Stock Yards from January 1st to June 14th inclusive, were 103,166 cattle, 23,346 calves, 13,413 sheep and 230,653 hogs; compared with 109,298 cattle, 22,726 calves, 15,959 sheep and 214,760 hogs, received during the corresponding period of 1916.

Montreal.

A light run of cattle which were on the whole poor in quality, sold during the week at prices slightly below those of the last week. The demand showed some improvement over the close of the

previous week, and as drovers were unwilling to hold on to their stock after their experience of the past two weeks, offerings were quickly bought up. The bulk of the heavy butcher steers sold from \$10.50 to \$11.00 per hundred, with a few small lots slightly higher. Butcher cows of the poorer grades were plentiful, but choice cows closed the week fairly strong. Cannery and cutters held about steady. Calves were in good demand at last week's figures. Grass calves are beginning to reach the market in considerable numbers and sell from \$6.00 to \$8.00.

Sheep took another drop of about \$1.00 per hundred. Spring lambs were not in much demand although very few are arriving at the Yards.

Hogs opened the week at \$15.50 to \$16.00 per hundred for selects, fed and watered, and held about steady all week. Only a few small lots sold at the top figures, most long-run hogs going at \$15.75, and those from nearby points at \$15.50. Sows sold at from \$12.50 to \$13.00 during the week.

PT. ST. CHARLES.—Of the disposition from the Pt. St. Charles' Yards for the week ending June 14th, Canadian packers and local butchers purchased 1,874 calves, 58 cannery and cutters, 55 bulls, 8 heavy steers, 289 butcher cattle, 1,301

hogs, 161 sheep, and 48 lambs. Shipments to United States' points totalled 406 calves.

The total receipts at the Pt. St. Charles' Yards from January 1st to June 14th inclusive, were 16,374 cattle, 33,668 calves, 5,895 sheep and 31,643 hogs; compared with 18,322 cattle, 24,057 calves, 5,125 sheep, and 45,146 hogs, received during the corresponding period of 1916.

EAST END.—Of the disposition of live stock from the East End Yards for the week ending June 14th, Canadian packing houses and local butchers purchased 1,467 calves, 598 butcher cattle, 609 hogs, and 320 sheep. Shipments to outside points totalled 21 butcher cattle, and 41 hogs. United States' shipments amounted to 158 hogs.

The total receipts at the East End Yards from January 1st to June 14th inclusive, were 16,060 cattle, 27,363 calves, 6,075 sheep, and 20,356 hogs; compared with 14,273 cattle, 25,445 calves, 7,505 sheep, and 26,391 hogs, received during the corresponding period of 1916.

Winnipeg.

The receipts of butcher cattle although not heavy, were sufficient to meet the requirements of the trade last week. The total run of cattle was six hundred

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head in excess of the previous week. Trading held steady for choice butcher cattle but those of medium quality moved slowly. On Monday the market was fairly active at an advance of 10 cents per hundred in the price of butcher cattle. The market during the remainder of the week was steady, closing on Thursday at unchanged prices. The bulk of the receipts consisted of grass-fed animals some of which showed very little fat. One hundred and nineteen head of grass-fed butcher cattle, showing grain feeding, and averaging eleven hundred and fifty pounds in weight sold at \$10.00 per hundred; twenty stall-fed cattle averaging eleven hundred and thirty pounds in weight brought \$11.60 per hundred; two head averaging twelve hundred and seventy pounds sold at \$12.50 per hundred thirty butcher heifers sold at \$11.50, but these were of choice quality. Very few stall-fed cattle are expected during the next few months, and the presence on the market of many grass cattle may have a tendency to reduce prices. Demand was good for choice butcher cattle throughout the week, but medium cattle found a slow market. The bulk of the butcher steers sold from \$8.00 to \$9.50 per hundred.

The hog market was unsettled during the week in sympathy with conditions in the East. On Friday, select hogs sold at \$14.50 per hundred, fed and watered, and advanced 10 cents per hundred on Monday; followed by a decline to \$14.50 per hundred on Tuesday. On the following day the market recovered and prices were advanced 25 cents, followed by a further increase of 35 to 50 cents on Thursday, on which day they closed at \$15.00 per hundred. Few light hogs are being received and those on the market sell at strong prices. Other grades are steady.

Of the disposition from the St. Boniface Yards for the week ending June 14th, Canadian packing houses purchased 20 calves, 531 butcher cattle, 6,877 hogs and 4 sheep. Local butchers bought 124 calves, 356 butcher cattle, 170 hogs, and 48 sheep. Shipments back to country points were, 20 stocker calves, 802 stockers, 70 feeders, and 82 hogs. A shipment of 156 hogs was made to Hamilton, Ontario. Shipments to United States points totalled 674 butcher cattle, 116 stockers, 80 feeders, and 317 hogs.

The total receipts at the St. Boniface Yards from January 1st to June 14th inclusive, were: 46,023 cattle, 2,626 calves, 686 sheep, and 131,294 hogs; compared with 23,736 cattle, 3,375 calves, 1,146 sheep, and 164,142 hogs, received during the corresponding period of 1916.

Buffalo.

Cattle.—Prices were pounded good and strong at Buffalo last week, the result of a very heavy delivery of grass cattle and the fact that there was a large number of shipping cattle, Canada supplying around fifteen loads and the States a plentiful run. Best steers sold at \$13 to \$13.50, with yearlings selling up to \$13.00 and while some steers sold from 15 cents to 25 cents lower, on some sales of the medium, weight, in-between kinds trade looked fully a quarter to half dollar under the preceding week. Grassers sold all the way from a half dollar to a full dollar lower. Only milk cows and springers sold at steady prices, bulls taking a heavy tumble and

stockers and feeders being a very hard commodity to move. Indications are for a continued low market on grassers, but sellers are expecting improvement on the strictly dryfeds and opinion generally is that they will be selling higher the last of this month and July, where there is every reason to conclude they will be scarce. Offerings for the week totaled 5,825 head, as against 3,900 for the previous week and 4,600 head for the corresponding week last year. Quotations:

Shipping Steers.—Choice to prime natives, \$13.00 to \$13.50; fair to good, \$11.75 to \$12.50; plain, \$11.00 to \$11.50; very coarse and common, \$10.50 to \$10.75; best heavy Canadians, \$12.00 to \$12.75; fair to good, \$11.25 to \$11.75; common and plain, \$10.00 to \$10.50.

Butchering Steers.—Choice heavy, \$11.50 to \$12.00; fair to good, \$10.50 to \$11.25; best handy, \$11.00 to \$12.00; fair to good, \$9.75 to \$10.50; light and common, \$9.25 to \$9.50; yearlings, prime, \$12.00 to \$13.00; fair to good, \$11.00 to \$11.75.

Cows and Heifers.—Best heavy heifers, \$10.00 to \$11.00; best butchering heifers, \$9.00 to \$10.00; fair butchering heifers, \$8.00 to \$8.75; light and common, \$7.25 to \$7.75; very fancy fat cows, \$10.00 to \$10.50; best heavy fat cows, \$9.00 to \$9.50; good butchering cows, \$8.00 to \$8.50; medium to fair, \$6.75 to \$7.50; Cutters, \$6.25 to \$6.50; canners, \$5.50 to \$6.00.

Bulls.—Best heavy, \$9.50 to \$10.00; good butchering, \$8.50 to \$9.25.

Stockers and Feeders.—Best feeders, \$8.50 to \$9.25; common to fair, \$7.75 to \$8.25; best stockers, \$8.00 to \$8.75; common to good, \$6.00 to \$7.75.

Milchers and Springers.—Good to best, in small lots, \$90.00 to \$115.00; in car loads, \$75.00 to \$85.00.

Hogs.—While the first half of last week showed an advance in prices, and while Thursday's trade was held steady with Wednesday, Friday values showed a big decline. On the opening day top was \$16.50, however few sales were made above \$16.35, and while the latter figure along with \$16.30 took several decks, bulk sold at \$16.25. Tuesday prices were up ten to fifteen cents, Wednesday values showed a further gain of ten to twenty cents and Thursday, when prices were steady with Wednesday, the range was from \$16.50 to \$16.65. Friday, under a 35-car supply, no sales could be made above \$16.35 and buyers got the bulk at \$16.25. Thursday's receipts included a deck of Canadian hogs that sold at \$16.25 and Friday two decks from across the river moved at \$16.00 and \$16.10. The week started with pigs selling at \$15.00, Tuesday bulk sold at \$15.25, the next two days the majority landed at \$15.50 and Friday they were a quarter lower, selling mostly at \$15.25. Roughs \$14.25 to \$14.50 and stags \$13.00 down. Last week receipts were 20,000 head, as against 21,351 head for the week before, and 31,700 head for the same week a year ago.

Sheep and Lambs.—Not over two thousand head were marketed. Last week, as against 4,289 head for the week before and 3,050 head for the same week a year ago. Prices were higher as the week advanced. Friday, which was the high day spring lambs sold up to \$19.00, and while no winter lambs sold above \$15.75, had the right kind been here they would have brought \$16.00, if not more. Wether sheep showed a \$11.50 top and ewe offerings went from \$10.50 down.

Calves.—Last week started with top veals selling at \$15.50. Tuesday the trade was steady, Wednesday and Thursday bulk sold at \$15.75, and Friday the general price for choice lots was \$16.00. Handy cull grades sold within \$1.00 per cwt., of the tops and weighty fat calves that were rough were not worth as much as the desirable culls. For the week receipts were 3,300 head, the week previous there were 3,310 head and for the same week a year ago there were 3,450 head.

Chicago.

Beeves, \$8.50 to \$13.80; stockers and feeders, \$6.90 to \$10; cows and heifers, \$5.75 to \$11.70; calves, \$11.50 to \$15.75.

Hogs.—Market slow and 10c. to 15c. lower. Light, \$14.50 to \$15.50; mixed, \$14.65 to \$15.90; heavy, \$14.70 to \$16.05; rough, \$14.70 to \$15; pigs, \$11 to \$14.35; bulk of sales, \$15 to \$15.70.

Sheep.—Market steady. Lambs, native, \$11 to \$16.75.

Toronto Produce.

Receipts of live stock at the Union Stock Yards, West Toronto, Monday, June 25 were 141 cars, 2,697 cattle, 251 calves, 928 hogs, 400 sheep and lambs. Active market; butcher cattle and good cows steady to 25 cents higher; common cows and bulls slow, prices steady to 15 cents lower; milkers and springers and stockers and feeders slow, prices steady. Sheep steady; spring lambs 75 cents lower. Calves strong. Hogs \$15.50 fed and watered.

Breadstuffs.

Wheat.—Ontario, according to freights, No. 2 winter, per car lot, \$2.55 to \$2.60; No. 3 winter, per car lot, \$2.53 to \$2.58. Manitoba wheat (track, bay ports)—No. 1 northern, \$2.63; No. 2 northern, \$2.60.

Oats.—Manitoba, (track, bay ports), No. 2 C. W., 77½c. Ontario oats, according to freights outside, no official quotations.

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

Barley.—(According to freights outside), malting, nominal.

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

American Corn.—(Track, Toronto), No. 3 yellow, \$1.80½, nominal.

Flour.—Ontario, winter, \$11.25 to \$11.35, in bags, track, Toronto. Manitoba flour—first patents, in jute bags, \$13.80; second patents, \$13.30; strong bakers', \$12.90.

Hay and Millfeed.

Hay, extra No. 2, per ton, \$13 to \$13.50; mixed, per ton, \$9 to \$11.50.

Straw.—Car lots, per ton, \$9.

Bran.—Per ton, \$32; shorts, \$39; middlings, per ton, \$43; feed flour, per bag, \$2.80 to \$2.90.

Hides and Skins.

City hides, flat, 22c.; country hides, cured, 22c.; country hides, part cured, 18c.; country hides, green, 17½c.; calf skins, 30c. to 35c.; kip skins, 25c. to 30c.; sheep skins, city, \$2.50 to \$4.50; sheep skins, country, \$2 to \$4; lamb skins, spring, per lb., 60c. to 90c. Horse hair, per lb., 36c. to 37c.; horse hides, No. 1, \$7.50 to \$8.50; No. 2, \$6.50 to \$7.50.

Wool, washed, 63c. to 68c.; wool, unwashed, 51c. to 53c. Tallow, No. 1 cake, per lb., 15c. to 17c.; tallow, solids, 13c. to 16c.

Country Produce.

Butter.—Butter remained practically stationary on the wholesales during the past week, selling as follows: Creamery, fresh-made pound squares, 40c. to 41c. per lb.; dairy, 33c. to 34c. per lb.; separator dairy, 35c. to 37c. per lb.

Eggs.—Eggs declined materially in price on the wholesales, and there are large numbers of very poor quality being shipped. They are now selling at 36c. per dozen.

Beans.—The dried bean market is extremely high, prime whites now selling at \$9.50 per bushel, while hand-picked bring \$10.50 per bushel. Lima beans having advanced to 18c. to 19c. per lb.

Poultry.—All classes declined as the demand has decidedly fallen off. Live-weight prices: spring chickens, 25c. per lb.; spring ducks, 25c. per lb.; roosters, 14c. per lb.; fowl under 4 lbs., 18c.; fowl 4 to 5 lbs., 23c. per lb.; fowl 5 lbs. and over, 25c. per lb.; turkeys, 18c. per lb.; squabs, dressed, \$3.50 to \$4 per dozen.

Cheese.—Old, 30c. per lb.; new, 23c. to 24c. per lb.; new twins, 24c. per lb.

Honey.—Honey is practically off the market.

Wholesale Fruits and Vegetables.

A few more imported box apples arrived on the market during the past week, consisting mostly of Winesaps, which sold at \$3.25 to \$3.50 per box.

California fruits arrived in car lots and were slightly easier in price. Apricots selling at \$2.75 to \$3 per case; cherries at \$2.50 to \$2.75 per case; peaches and plums at \$2.75 per case, while cantaloupes sold at \$10 per case.

The banana market kept extremely firm owing to transportation difficulties, and sold at \$3.25 to \$4.50 per bunch.

Lemons remained practically stationary with light receipts but not a very active demand. Cauliflowers and Verdillias both selling at \$5 per case.

Oranges.—Navels are becoming scarce at \$3.75 to \$4.25 per case. Late Valencias increasing in quality and selling at \$4 to \$4.50 per case.

Pineapples kept firm at \$4 per case

for 24's and 18's, and \$3.50 per case for 36's.

Strawberries.—The strawberry market advanced owing to the southern crops being just about cleaned up and the lateness of our own; the American berries sold at 18c. to 25c. per box.

There have been three shipments of home-grown berries, some of them being exceptionally choice; they sold at 19c. to 25c. per box.

Tomatoes.—Tomatoes were also firm; the imported, four-basket carriers selling at \$1.60 to \$1.75 each. Home-grown, hot-house selling at 25c. per lb. for No. 1's, and 20c. per lb. for No. 2's.

Watermelons arrived freely and sold at 60c. to 75c. each.

Asparagus firmed at the beginning of the week and became easier towards the end, closing at \$1 to \$1.75 per 11-qt. basket.

Cabbage came in in large quantities, selling at \$3 per crate.

Canadian cauliflower declined, selling at 50c. per 11-qt. basket.

Cucumbers kept quite firm with an active demand; the No. 1 home-grown, hot-house selling at \$2 per 11-qt. basket, and No. 2's at \$1.25 to \$1.50; while imported, outside-grown brought \$4 per hamper.

Lettuce, with the exception of the real Boston Head variety (Canadian grown), was a glut on the market; the Leaf being difficult to sell at 15c. to 20c. per dozen; the Boston Head bringing 75c. to \$1 per dozen.

Onions declined, Texas Bermudas selling at \$2 to \$2.50 per crate; green onions bringing 20c. per dozen bunches.

Parsley has been a fairly good sale at 75c. to \$1 per 11-qt. basket.

Potatoes kept about stationary—New Brunswick Delawares selling at \$4.75 per bag; Ontarios, \$4.50 per bag, and Westerns at \$4.25 per bag.

New potatoes kept high in price at \$12.5 New potatoes kept high in price at \$12.50 per bbl.

Montreal Produce.

Horses.—Dealers report that they are experiencing very little demand from regular trade sources. Farmers apparently require no further supplies and carters are now fairly well supplied. Apparently however, quite a number of horses continue to change hands for military purposes, and the concentration fields in the vicinity of the city give evidence that the supply of this class of animal is by no means exhausted in Canada. Prices are steady as follows: Heavy draft, weighing from 1,500 to 1,700 lbs., \$200 to \$250 each; light draft, weighing from 1,400 to 1,500 lbs., \$150 to \$200 each; small horses, \$100 to \$125 each; culls, \$50 to \$75 each, and choice carriage and saddle horses, \$200 to \$225 each.

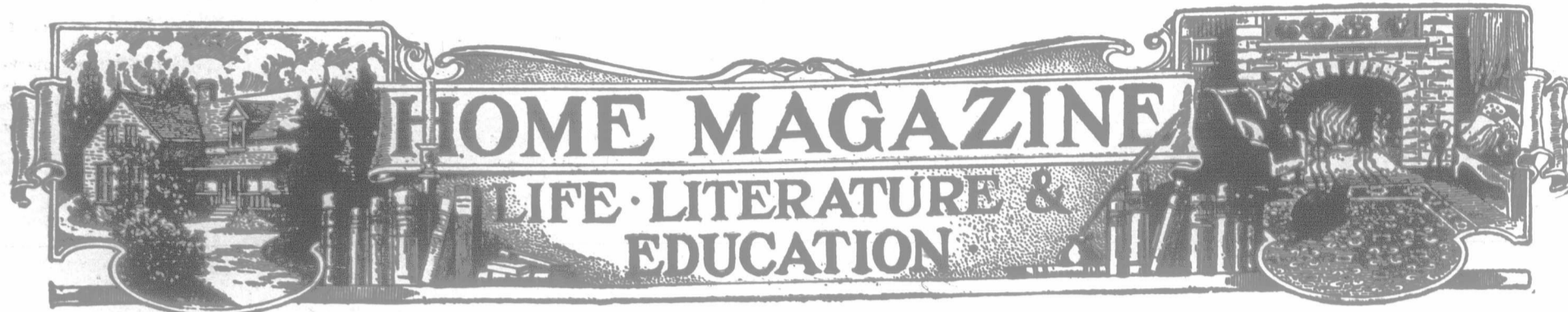
Dressed Hogs.—The price of dressed hogs showed very little change last week, but the extreme range of the previous week was no longer obtainable and it looked as though a further decline might develop in the near future. Meantime, fresh-killed, abattoir hogs were quoted at 23c. per lb.

Potatoes.—Owing to the scarcity of Canadian potatoes and to their undesirable quality, there have been considerable importations of new stock from the U. S. These sold at \$11 to \$13 per barrel, and were in fairly active demand for the reason that they were not greatly more than old crop Canadian. The latter was quoted at \$4.25 to \$4.40 per bag of 80 lbs.

Maple Syrup and Honey.—Demand for maple syrup was active all way round, but prices showed no change. 13-lb. gallon tins of extra syrup were quoted as high as \$2 each, although fine quality may be had at about 25c. under this figure. Lower grades ranged all the way down to \$1.50. Maple sugar was 15c. per lb. Honey showed very little change and new crop is being looked forward to. Prices of old were 16c. per lb. for white clover comb; 14c. for white extracted; 13½c. for brown clover comb; 13c. for brown extracted and 11c. for buckwheat honey, per lb.

Eggs.—The warm weather is having an effect upon the price of eggs. It is said that purchases took place at country points at about 30c. per dozen, although some dealers reported higher prices than these. Moist, warm weather is apparently affecting the quality, and consumption is possibly less eager at re-

Continued on page 1066.



Alexander Kerensky.

June Song.

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

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

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

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

Russia's Main Hope.

In the midst of the confusion into which Russia has fallen, a confusion perhaps inevitable to the transition stage between an absolute monarchy and a republic, Alexander Kerensky is looked upon as the one strong man of the Provisional Government, the Lloyd-George of Russia, foremost of the men who are working to save Russia for herself and for the cause of liberty against the militarism of Prussia.

Although only 35 years of age, Kerensky has been for years identified with notable events in his country, always taking the part of the "underdog." Five years ago he represented the workmen of the River Lena strike, in which 60 workmen were shot by the police. Later he championed the Jew, Mendel Beiliss, wrongly charged for murdering a child in a ritual ceremony, and was one of a group of lawyers sentenced to imprisonment at that time for

protesting against the methods of the prosecution.

The next year, however, the people of Russia elected him to represent Socialist Labor in the Duma, and the Imperial Government did not dare to block further, at that time, the way of a man so beloved by the peasants, the Jews, and Labor in general. An excuse for this seemed to be afforded shortly before the Revolution because of a daring speech against the Czar's Government made by the young Socialist in the Duma, and an order was issued for his arrest, but the outbreak of the Revolution prevented its being carried out.

Upon the eventful day upon which the first bolt was really fired—the day upon which the Czar ordered the dissolution of the Duma—Kerensky, rising in his place, said: "We will not go. We will stay here."—And the Duma stood behind him to a man.

When the Provisional Government was formed, he was made Minister of Justice, and his first act was to free the political prisoners in Siberia. Later he was made Minister of War.

Kerensky was born in Tashkend, a Russian town in Middle Asia. He is said to be one of the clearest thinkers and one of the most forceful and eloquent orators in Russia, but of late much anxiety is felt in the big new Republic because of his health, which is said to be threatened at present by a serious disease.

The First Dominion Cabinet.

Fifty years ago the first Dominion Cabinet was formed under the leadership of Sir John A. Macdonald. It was, at least in name, a coalition cabinet, and consisted, in defiance of all tradition in regard to "bad" luck, of thirteen men; five from Ontario, four from Quebec, two each from New Brunswick and Nova Scotia. Of these six were Conservatives—Sir John A. Macdonald, Cartier, Campbell, Galt, Chapais, and Langevin. The Liberals were: Ferguson-Blair, Howland, McDougall, Tilley, Mitchell and Archibald. The seventh member should have been Sir Charles Tupper or D'Arcy McGee, but as Nova Scotia needed one more representative and the Irish Catholics were without recognition, Tupper and McGee stood aside, and Hon. Edward Kenny, an Irish Roman Catholic from Nova Scotia, received the appointment.

The two leaders in the Cabinet were Sir John A. Macdonald and Sir George E. Cartier.

Ferguson-Blair was a Scotsman who came to Canada in 1833, and had represented the County of Waterloo in the Canadian Assembly for some years. He was a prominent lawyer, and was made President of the Council in the new Cabinet, but lived for but a few months.

Mr. (afterwards "Sir") Alexander Galt, was the youngest son of John Galt, the Scotch novelist. Although a moderate Liberal he introduced the first really Protective Tariff, that of 1859.

Mr. (afterwards "Sir") Samuel Leonard Tilley was of New Brunswick, and succeeded Galt as Finance Minister, holding the same position when Sir John Macdonald was once more returned to power in 1878.

Mr. A. G. Archibald was a Nova Scotian, who in 1870 was appointed Lieut.-Governor of Manitoba.

Mr. (afterwards "Sir") Alexander Campbell, was a law partner with Sir John Macdonald. He was the Dominion's first postmaster-general, and was afterwards lieutenant-governor of Ontario.

Mr. William McDougall was a journalist, and became lieutenant-governor of Manitoba. Mr. (afterwards "Sir") W. P. Howland had been, like McDougall, a Liberal, but both merged into the Conservative ranks, although Howland again

returned, to some extent, to the Liberal Party. He died in 1907, the last survivor of this historical administration.

Hon. Peter Mitchell, was one of the Fathers of Confederation, and had been a member of the Assembly of New Brunswick. He owned and conducted the Montreal "Herald" for some years.

Mr. Jean Charles Chapais was Canada's first Minister of Agriculture. He had been a merchant of St. Denis, Que. Mr. (afterwards "Sir") Hector L. Langevin, was also a French Canadian, a lawyer, also editor of the *Courrier du Canada*. He had been Mayor of Quebec and later in life became postmaster-general.

Mr. Edward Kenny became receiver-general in the Cabinet. He was appointed a senator and later became President of the Council. In 1870 he became administrator of Nova Scotia, and thus left a vacancy for Sir Charles Tupper to enter the Cabinet.

A Rose Festival.

Just about this time each year is held the now famous Rose Carnival of Portland, Oregon, which, from a small beginning, largely an experiment at first, has become an event to which the whole Pacific Northwest looks forward with interest.

During the week great crowds of people come to see the show, and the whole city is on its best behavior, treating the in-coming pilgrims as personal guests. Upon alighting from the train each passenger is handed a rose, and until they leave the city visitors get the impression that they are in the hands of friends who want to give them the best time possible. And they are protected. Fakirs are not allowed on the streets, board prices are not permitted to run up exorbitantly, and business goes on normally, much the same as usual. Every evening, however, is made a veritable *mardi gras*, with roses to the fore everywhere.

So now we have come to the roses. Not only is every garden ablaze with them, but there is a vast exhibition of them, held usually in the Armory, which becomes transformed into a vast hall of beauty and sweet odors, bringing exclamations of delight from the spectators. Another feature, and the most spectacular, are two parades of rose-decked floats, one an "electrical parade" of motor cars along the main streets, the other of illuminated launches and canoes on the Willamette River. Everywhere music mingles with the decorations.

As may be imagined the Rose Festival has greatly stimulated the planting of rose bushes, and a single firm has been known to have 10,000 bushes planted in one year. All of the schools have entered into the work with zeal, and the Portland Rose Society is always available to give information and assume direction when necessary, especially in connection with the competitive rose show.

Thus it is that Portland has become known as the "Rose City." The idea is a pretty one, and there is nothing to prevent every village and farm community from following it, to some small but interesting extent. St. Thomas, Ont., under the energetic direction of Dr. Bennett, who is this year President of the Ontario Horticultural Association, has already done this in its specialty of tulips, which is rapidly making a name for the place as the "Tulip City." Every May a tulip show is held, and the whole city is gay with tulips. As the years go on attractions will, no doubt, be contingally added.

It would be very pleasant to see many communities in Canada so distinguished, one for pansies, another for gladioli (perhaps Simcoe, Ont., already holds this distinction), another for sweet peas, another for vines, another for dahlias or poppies or phlox, and so on. There is great interest in any such hobby. If you haven't found that out, try it.

Flies and Other Pests.

Flies.

In preceding paragraphs in this paper emphasis was laid on the great importance of preventing flies (filth and disease carriers) by not permitting manure to be uncovered or filth of any kind left lying about. Flies lay their eggs—in great numbers—in these, the eggs hatch into maggots, and presently the maggots are changed into flies. When, therefore, manure and garbage are regularly removed, as they have to be in any well-managed city, the flies are comparatively few in number; their breeding-places have been removed. In the country, however, it is often impossible to have the manure taken away every week during the summer, hence an alternative must be sought. One plan is to keep it in a tight shed or cement vault—which preserves the manure, prevents leaching by rains, and so pays in the end by conserving the fertility producing properties as well as preventing flies. Another plan is to treat the manure with some chemical which will sterilize it against flies without spoiling the value of the manure. In an article entitled "Birth-control for Flies", which appeared in *Literary Digest*, we find a short account of experiments to this end carried out by the United States Department of Agriculture. The substances recommended are the common fertilizer ingredients calcium cyanamid, acid phosphate, and kainite. We quote:

"The valuable feature of the discovery is that by the new treatment the fertilizing value is increased at the same time that the menace to health is lessened. Under treatments for preventing fly-breeding heretofore in use, the fertilizing value of the substance has been decreased or not affected.

"The fertilizer ingredient indicated by the experiments to be most effective is calcium cyanamid, a compound in which nitrogen from the air is fixed by electricity. The investigations showed the value, however, of adding other ingredients to balance properly the chemical effects and to prevent waste of fertilizing elements. Acid phosphate was found to be the supplemental ingredient most needed, but a still better fertilizer was obtained when kainite was used also. The three substances, cyanamid, acid phosphate, and kainite, give a fertilizer complete in itself, containing nitrogen, phosphorus, and potash, as well as lime.

"As a result of the experiments, the Department's specialists advocate the use of mixtures of one pound of cyanamid and two to four pounds of acid phosphate per four square feet of surface exposed, when the manure is in boxes or pits. When in open piles the rate of application should be four pounds of cyanamid and four or more pounds of acid phosphate per eight bushels. To be sure of retaining all the fertilizing elements, more than four pounds of acid phosphate are recommended. When kainite is used it may replace a portion of phosphate."

Earlier experiments made by the Department show that both borax and hellebore are effective, but that borax may lessen the value of the fertilizer, while the hellebore neither lessens nor increases this value. In the new treatment with fertilizer ingredients not only is the value increased, but also the waste of certain valuable elements, usually lost, is prevented. To quote again:

"In their most recent experiments the Department's specialists tried numerous other substances, including sulphur and various plant infusions. From none of these, however, were the results as satisfactory as those

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obtained with the use of borax, hellebore, and the fertilizer mixtures."

In the country, however, no matter how carefully the barnyard is kept, there will always be some flies about, because, unfortunately, there are always some of them in the fields, and so during the whole summer means must be taken to keep them out of the house, and to kill those that gain entrance. Put on screen doors and windows, use the fly-swatter, and drop carbolic acid on a hot-pan. Sticky fly-paper also helps, and the best kind is the kind that hangs from the ceiling; it is less likely to give trouble by sticking to things. Fly poison is not advisable in any house where there are small children, as there is always danger that one of them may drink it and so be poisoned by the arsenic which many fly mixtures contain. If there are no children about, poison may be used, and probably the most effective is a 2 per cent. solution of formalin, about 8 teaspoons to the quart. If plenty of it is kept about stables it is death to the stable fly. It may be kept in saucers.

Cockroaches.

If cockroaches appear make a mixture of hot water and borax, so strong that it refuses to dissolve any more, add an equal quantity of turpentine and with a brush go over every spot the roaches infest.

Ants.

Scientific American gives the following methods: (1) Grease a plate with lard or moisten a sponge with sweetened water. When filled with ants plunge into boiling water. Repeat until the ants are all gone. (2) Drop quicklime on the mouth of the nest, if it can be found, and pour on boiling water. (3) Sprinkle powdered borax around infested places. (4) Put a bit of carbon disulphide in the ant-hill, pressing it in with the foot. (5) Feed the ants on borax and sugar.

Bed bugs.

Cover all mattresses with white cotton slips sewn over so that the bugs cannot conceal themselves or their eggs, and scald the slips frequently. Apply coal-oil to bedsteads and all crevices very frequently, working it in with a brush or feathers, and use plenty of hot water frequently on walls and floors. It may be necessary to remove the paper and scald the walls, if the paper is at all broken so that it affords crevices. If liquid applications are impossible, as in a library, put 4 oz. brimstone in a vessel set in a larger vessel to prevent fire in case of overflowing. Set fire to the brimstone and shut up the room tightly, even stuffing the key hole. Leave 4 or 5 hours, then air thoroughly. . . Filling up all cracks with hard soap helps to keep these bugs from gaining lurking places.

Buffalo Bugs and Moths.

Common salt scattered freely on the floor underneath the edges of the carpet will help to reduce the number of buffalo beetles in an infested room. Pouring gasoline on the carpets and in cracks is very effective, but as it is very inflammable it must only be applied in the entire absence of fire or light, and when the doors and windows are wide open. Neglect of this may cause a very serious explosion. Indeed people have been burned to death because of just a little carelessness when using benzine or gasoline

Noted Women.

Dr. Jean Dawson and Her Flyless City.

At first thought it may seem almost ridiculous to place a woman who has distinguished herself only by making a city flyless in this list of Noted Women. But when one considers what it means to a city to be flyless, when one remembers that flies are one of the worst carriers of disease, including typhoid fever and tuberculosis, when one takes into account, moreover, that the city which this woman undertook to make clean from the pest was the very first so managed and that the propaganda is one that is sure to spread, the reason for Dr. Dawson's inclusion here may be more evident. The city referred to was Cleveland, Ohio, and Dr. Dawson's campaign began about the first of May, 1914. "Swatting" the fly was encouraged, but was known to be inadequate, therefore the warfare aimed primarily at removing

the breeding-places—without which flies cannot exist.

The help of the Boy Scouts was enlisted, and 2,000 of them volunteered to help in removing manure and other refuse piles, wherever found. The Girl Guides also helped by working in pairs, going into stores, restaurants, etc., and counting and marking down the number of flies in each. As may be imagined it was soon found by the proprietors to be to their own interest that few flies should be found, and before long some of them were advertising "flyless stores." Later Dr. Dawson, with several city officials, made an inspection of the market places



Dr. Jean Dawson.

and other food depots, and but two flies were found, one in a bakery at Central Market, and one on a lunch counter at the Sheriff Street market. Toward the close of the season Mayor Baker issued a statement in which he said that Dr. Dawson had made Cleveland a practically flyless city. The next year Dr. Dawson succeeded in getting a new sanitary code enacted, providing that manure and all refuse and garbage must be removed within a short time, and that it must be stored pending removal in tight receptacles, with a water-tight bottom and insect-proof covers. A heavy fine is provided for each violation.

The fly season for 1917 has practically arrived. If the insects are bad in the city they are bad also in the country, therefore, by country people a leaf may be taken from Dr. Dawson's book. It

should never be forgotten that accumulated manure, left uncovered, is the most prolific source of flies, and that, therefore in summer it should be kept closely covered until such time as it can be removed to the fields. For this reason many thrifty folk provide a close building or cement vat in which it may be stored, a plan which does double duty—ensuring, besides scarcity of flies, that the strength of the manure shall be preserved, as it could not if left free to evaporate and open to leaching rains.

Every farm, also, should be provided with a large garbage can with a close cover, such as is compulsory in the homes of most cities, and the can should be scrubbed out with hot water at frequent intervals. Moreover food should never be left uncovered and exposed to flies, even for a few minutes.

Use screen doors and window-frames; use fly-poison, fly-paper, the swatter and all other destructive agencies, but do not lose sight of the fact that in this case as in all others, "prevention is better than cure." Remove the breeding-places and the food from flies and the flies themselves will soon disappear.

Hope's Quiet Hour

Good Courage.

The Lord spake unto Joshua, the son of Nun, Moses' minister, saying, As I was with Moses, so I will be with thee: I will not fail thee, nor forsake thee. Be strong and of a good courage.—Josh. 1: 1, 5, 6.

How often those words of good cheer were addressed to Joshua! Moses said unto him in the sight of all Israel, "Be strong and of a good courage." Then he gave Joshua a charge, and said, "Be strong and of good courage." Then God's command, to the same effect, followed, and it was reiterated by the people of Israel.—Deut. 31: 7-23; Joshua 1: 6, 18.

In these days of danger and sorrow we all have good reason to take that charge to heart. Life is never very easy, and even the bravest lose heart sometimes. There is a kind of brute courage possessed by a very low type of man, and there is another type of courage which well deserves the name of "good"—a courage which can endure pain with a smile, or face awful peril without a thought of personal danger.

If you read the official statements of the French regarding the men who have distinguished themselves as members of

"The American Ambulance," you will see words like these about many of these gallant volunteers: "He has given proof of a devotion deserving of the highest praise by safeguarding night and day, with utter contempt of danger, the removal of many wounded over a mountain road constantly swept by the enemy's fire."

Think of the courage shown by these young Americans! They volunteered for a dangerous and noble duty, though their country made no claim on their services; and they served loyally for years under French officers. Often they drove their Ford ambulances straight towards thickly falling shells—to pick up the wounded. They often struggled through the darkness, heedless of rain or snow, when they were not permitted to show a light or toot a horn. The roads were usually narrow and crowded with vehicles. Shell-holes yawned before them and precipices had to be avoided. Yet they never shirked danger, and considered it a high privilege to have the opportunity of rescuing helpless and suffering men.

Ambulance drivers have many hours of anxiety—but their fears seem to be far more for their wounded passengers than for their own safety.

If theirs is "good" courage, what can we think of the courage of the wounded? One of the American section leaders has testified his experience, in these marvellous words: "I must say that, though I have seen thousands of wounded, the groans I have heard could almost be counted upon the fingers of my hand." But he says there is an entire absence of "heroics." The men go forward to face the risk of death "as other men take the subway and go down town to business." They are not admiring themselves, nor thinking about personal glory. As the English set themselves unhesitatingly to "do their bit," so men and women of many nations are showing that they are of good courage.

"Good" courage is not the kind of daring that takes pleasure in foolhardy exhibitions of bravado or in risking one's life without sufficient reason. It is rather the quiet sticking to one's duty all the year round. It may sometimes be monotonous, and again it may be almost too exciting to be pleasant; but men of good courage are never trying to establish a reputation for heroism. They are simply doing their duty.

We can't help admiring the heroism shown by countless heroes at the front; but as great courage may be shown by those who go cheerily on with the commonplace work at home—the cooking, washing and sewing, the ploughing, reaping and threshing which are so necessary, yet win so little praise.

This morning I was talking to a woman who has for months endured the suspense of knowing that the man dearest to her is "missing." She has little expectation of seeing him again on earth, yet her voice is calm and cheerful. She is determined to do her best for the happiness of others, and she knows that she must not nurse and indulge her own sorrow. That is one woman—there are millions who are showing "good" courage.

When God charges us to "be strong and of a good courage" He gives us something to endure, even though our present business may be only to meet little vexations and difficulties cheerfully. We are sure to fail if we fight alone. We need the help of the Holy Spirit to uplift our spirits and strengthen our faith. Do we ask Him to take control of our lives?

Livingstone showed good courage when he plunged into the trackless African forests. It was courage born of faith, for he said: "If God has accepted my service, then my life is charmed till my work is done." It was faith that inspired one of our soldier readers at the Front to write to his mother: "I have a strong feeling I will be spared to come home again, but I am in God's hands and no one can pluck



"Dorothy Perkins" Rose Arch.

In garden of Mr. Wm. Hartry, Seaforth, Ont. Illustration from Horticultural Society's Report, 1916.

me out, this side of the river or the other."

It is faith that can uphold anxious hearts at home, so that they are not afraid of any evil tidings. Our Lord told His disciples to "fear not," as He pointed to the sparrows and declared that not one of them could fall to the ground without the Father's presence and care: "Fear ye not therefore, ye are of more value than many sparrows."

The cheerful counsel, "Fear not!" which rings out like a trumpet call through the Bible pages, from the Book Genesis to the Revelation of St. John, is founded on good and sufficient reason. "I am with thee," is the great reason for courage. God says to each trusting soul, as to Joshua, "I will not fail thee, nor forsake thee. Be strong and of a good courage."

The great message of the Bible and the Church is EMMANUEL—God with us. The future is veiled in darkness—but God knows what is coming and His hand controls the future as well as the present. We are passing through a time of stern testing—shall we be cowards when others are showing such marvellous courage? Let us try to face each day's duties and trials bravely, knowing that all things work together for the good of those who love God.

How ashamed we feel after we have made a fuss about some paltry pain—a headache, a toothache, a passing heartache—when we think of the unconquered souls in broken bodies across the sea! How ashamed we feel of our comfortable beds and luxurious meals, when we think of those cheery boys in the trenches and hospitals?

We are ashamed of the fact that we are so comfortable. Then, let us not grumble when God sees fit to shake us out of our selfish comforts. It we can't be inspired by the glorious courage of other men and women, at least we may be ashamed by it into keeping quiet about our own troubles. Self-pity is degrading. A real hero is too busy caring for others to have time to think of himself. He accepts danger and hardships as "opportunities" and "privileges." As one of those gallant American ambulance men wrote: "It has been good to be here in the presence of high courage and to have learned a little in our youth of the values of life and death."

We are pupils in the Master's school. Shall we argue with Him when He sets us our daily lesson?

DORA FARNCOMB.

A Gift From Alberta.

A friend in Alberta (Mrs. M.) has just dropped a dollar into the Quiet Hour purse, for someone in need. This will help a poor widow, who is finding it far from easy to make both ends meet. Thank you, my friend!—your gift will not be wasted. The verses which follow are from another friend. HOPE.

Knowing and Doing.

It isn't the things we approve, dear heart,
As we're facing the battles of life,
That cheer the souls of our fellowmen,
Or strengthen our own for the strife.

We may give to the best our hearty assent,
Yet never the best pursue;
For it isn't the things we approve that count,
But only the things that we do.

Our souls may respond to some other soul
By a noble purpose fired;
As we listen to burning words of truth,
That are uttered by lips inspired.
But unless, by faith we make them ours,
We are still to the best untrue;
For it isn't the things we believe that count,
But the things that we really do.

We may ponder well the power of prayer,
And clothe each glowing thought
In strongest words, as we seek to tell
Of the wonders prayer hath wrought.
But the blessings that come to the prayerful soul
Along life's strenuous way
It will never be ours to know, dear heart,
Unless we humbly pray.

There are loads to lift, there are burdens
to bear,
There are wrongs to be redressed;
There is much to achieve in the realm
of good
That demands our very best.

There are heights and depths in the love
of God,
Awaiting the seeker true,
Who is not content God's will to know,
But seeks God's will to do.

Oh, the victor's way is a blood-marked
way,
Of toil, and pain, and loss
And many who fain would wear the crown,
Shrink back at the sight of the Cross.
Oh, sad it would be at the end of the race,
To fail with the goal in view;
Not because the way we did not know,
But, knowing, failed to do!
Corinth, Ont. M. CARRIE HAYWARD.

The Beaver Circle

The Pedlar's Caravan.

This is a charming example of the poems written by William Brighty Rands for children:—

I wish I lived in a caravan,
With a horse to drive, like a pedlar-man!
Where he comes from nobody knows,
Or where he goes to, but on he goes!

His caravan has windows two,
And a chimney of tin that the smoke
comes through.
He has a wife, and a baby brown,
And they go riding from town to town.

Chairs to mend, and delf to sell;
He clashes the basin like a bell;
Tea-trays, baskets, ranged in order,
Plates, with the alphabet round the
border.



A New Competition.

Write a story about this picture. All stories must be received at this office not later than July 10th.

The roads are brown, and the sea is
green,
But his house is just like a bathing-
machine.
The world is round, and he can ride,
Rumble and splash, to the other side.

With the pedlar-man I should like to
roam,
And write a book when I come home;
All the people would read my book,
Just like the travels of Captain Cook!

Dandelions.

Golden disks and silvery spheres
Through the green fields growing,
Where bright dandelions spread
Silken seed is blowing.
One o'clock, two o'clock,
What's the time of day?
Three o'clock, four o'clock,
Time to come and play.

Glinting heads of children gay
Bending o'er the flowers—
Seek your fortune, lady fair?
Swiftly speed the hours.
Puff it once, puff it twice,
Is your lover true?
Puff it thrice and four times,
He's forgotten you.

In the sunlit meadow-land
Sweet-tuned voices ringing
Send adown the misted years

Wakened memory winging,
Two o'clock, three o'clock,
What's the time now, pray?
Four o'clock, five o'clock,
Time to run away.
—FLORENCE E. WESTCOTT, in the Globe.

Senior Beavers' Letter Box.

Dear Puck and Beavers.—This is my third letter to the Beaver Circle and thought I would try again. I enjoy reading the letters very much.

I am in the junior IV class, and expect to try for the Entrance class in June. Our teacher's name is Miss McKenzie, and we like her very much. There are twenty-seven going to our school. We have a mile and a quarter to go.

I have read quite a number of books such as "Darkness and Daylight", "Edith Lyle's Secret", "Daddy Long Legs", "Miss Billy", "Anne of Green Gables" and many others.

I will close with a few riddles:
Higher than an apple, higher than a tree, oh, whatever can it be? Ans.—A star.

What was the last of poor dog Tray?
Ans.—His bark.

Brick upon brick and a hole in the middle? Ans.—A chimney.

As round as an apple, as flat as a ship, has four little eyes, and can't see a bit. Ans.—A button.

Why does a cow look over a hill? Ans.—Because she cannot see through it.

What month do women talk the least in? Ans.—February; it has only twenty-eight days.

What three great poets would you think of if you saw a house burning down? Ans.—Dickens, Howit, Burns.

Dear Puck and Beavers.—This is my second letter to your charming circle. I did not see my letter in print, but I saw my name on the honor roll. I go to school every day and I have a good road to go. I am in the senior fourth class and I expect to try my entrance, this year. I like going to school and I like every subject but grammar. We have a school fair every year in North Dumfries.

How many of the Beavers have relatives at the war? I had four cousins, but one was killed in action. As my letter is getting long I will close wishing the Beavers every success. I wish Lavina Duffey of Grand Valley would write to me.

BESSIE BROWN,

R. R. No 3, Bright, Ont.

Dear Puck and Beavers.—My father has taken the Farmer's Advocate for a long time, and I have often read the letters in the Beaver Circle but I never wrote before. I passed my entrance last summer, but as I was too young for High School I went back to the public school for another year. I love to read, but I like better to play the piano. I have taken music lessons eight years. I am fond of pets and used to have three cats and a dog, but I have only one cat now and I call him Jerry. I must close now, wishing the Beavers every success, I remain,
MABEL C. MCFARLANE.
Otterville, Ont., Box 1.

(Age 13 years).

Dear Puck and Beavers.—This is my first letter to your charming Circle, but still I have read the letters and certainly enjoy them. I like going to school. The teacher's name is Miss Biggar. I like her fine. There are about 19 pupils in our room. As I notice in the paper that some of the Beavers described themselves so I will do so also. I have fair hair and blue eyes, and I am about 4 feet tall. I am very fond of reading; I have read some of the Elsie Books, all the Bessie Books and some of Alger's and many others. Now as my letter is getting long I must close. I wish some of the Beavers would write to me and I would answer them. I hope the w-p. b. is full. I will close.

MARY EDNA LAPP.

Lorneville, Ont. (Age 11 years.)

Dear Puck and Beavers.—This is my first letter to your charming Circle. My father has taken "The Farmer's Advocate" for a number of years, and he likes it best of all the farm papers. Like most of the Beavers I am very fond of reading. I have read Gulliver's Travels, The Cornet of Horse, With Wolfe in Canada, Martin Rattler. I like them all fine. As my letter is getting long I think I will close, with a riddle, hoping Puck's waste-paper basket is full.

What is the difference between a hill and a pill? Ans.—One is hard to go up, and the other is hard to get down.

Mitchell, Ont. JOHN RAWLEY.
(Age 13.)

Dear Puck and Beavers.—This is my second letter to your charming Circle. I was glad to see my other letter in it. So I thought I would write another one. I go to school every day. I like going. I am in the junior fourth class. There are forty on the roll. There were five tried the entrance at Easter. There are thirteen in my class. I took carrots for the school fair this year. I took potatoes last year, but I did not get any prize. We have a clock in our school and a furnace. Well, as my letter is getting long I will close.

WILLIE TRIMBLE.

R. R. No. 1, Laurel, Ont. (Age 11.)

Dear Puck and Beavers.—This is my first letter to your charming Circle. My father has taken the Farmer's Advocate for quite a few years, and we all like it fine. Our teacher's name is Miss Essie Sann. We all like her. I am going to try my entrance in June. We have made about sixty gallons of maple syrup. Isn't this war terrible? Do you think it will last much longer? Hoping the w-p. b. is out for a walk when my letter arrives. I will close with a riddle.

Two in a moment, one in a minute, and none in a thousand years. Ans.—The letter M.

Millgrove, Ont., R. R. No. 1.

ALMA SPARKS.

(Sr. Fourth Class.)

P.S.—I wish some of the Beavers would write to me, and I will answer all letters.

Juniors

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Junior Beavers' Letter Box.

Dear Puck and Beavers.—I have been wanting to write to the circle, but have never got started. I read nearly all the letters in the circle. I go to school nearly ever day. I was sick twice last winter.

At our school last winter we got a Club together and named it "The Cavell Auxiliary" we then started and knitted socks for the soldiers. The biggest lot was twenty pair of socks.

I am the oldest of four, two brothers and a baby sister. Her name is Betty. She is just starting to talk.

ISABELLE ARMOUR,
(Age 10.)

Dorchester, Ont.

Dear Puck and Beavers.—This is my first letter to your Circle. I enjoy reading the letters very much. I am 10 years old and have three sisters. My parents live on a farm. I am just getting over an attack of pneumonia. I had to have a trained nurse when I was sick. I find it very hard to have to stay in the house, so I thought I would write a letter to put in the time.

We are having a Red Cross concert in our school tonight, I would like to go but I am unable to. Mamma is going to stay with me and Daddy is going to take my two younger sisters.

I am very fond of motoring. Last summer I went for a week's vacation with my auntie and uncle in their car to visit our friends several miles from here.

Am going to close with a riddle.

Why does a lady look at the moon.
Ans.—Because there is a man in it.

Hoping to see this letter in print, with best wishes to all the members of the Circle.

IRENE DOWNING.

Alviniston, Ont.

Dear Puck and Beavers.—Here comes another leaf to hang upon your lovely tree. My father has taken The Farmer's Advocate for about fifteen years. I enjoy reading letters which the Beavers write. I go to school every day that I can and like to go very much. Our teacher's name is Miss Jarvis. We all like her very much. How many of you like reading? I do. I have read a number of books. Some of them are "Strong and Steady", "The Two Brothers", "The Odyssey", "The Christmas Carol", "The Cricket on the Hearth", and many others. I am going to read "The Deserted Village" next.

Well as my letter is getting rather long I will close. Hoping the w. p. b. has just had its dinner when this arrives. I remain your friend.

MARY McCURDY,
(Age 11 yrs.)

Stittsville, Ont.
Your parents know how to choose good books for you, Mary. You have given a very good selection.—Puck.

Dear Puck and Beavers.—This is my first letter to your charming Circle. My Daddy has taken the Advocate as long as I can remember and I enjoy reading the letters. I have a little sister and her name is Sara. She will be five years on the 12th of May. I go to school every day and like it fine. Our teacher's name is Miss McGarity and we all like her very much. There are seven going to our school. I am in the second class in school. We have a dog and his name is Snider. He goes for the cows in summertime. As my letter is getting long I will have to close, wishing the Circle success.

CATHARINE MACLEAN. (Age 8 yrs.)
R. R. No. 2, Durham, Ont.

Dear Puck and Beavers.—My father has taken the Farmer's Advocate as long as I can remember, I don't think we could do without it. I have never written to your charming Circle, yet I enjoy reading your letters very much. We have two little calves which my little brother has named Jimmie and Jack. My sister has a pair of bantams; they are very nice; the rooster will crow if you give him a piece of bread. I like reading very much. Some of the books I have read are "The Swiss Family Robinson", "Sing a Song of Sixpence", "Adventures of Alice in Wonderland", and some others.

JENNIE JONES, age 11, (Jr. III).
Uxbridge, R. R. No. 4, Ont.

Dear Puck and Beavers.—I have written before and did not see my letter in print, but others writing made me write too, for I would like to be a little Beaver. I have two little sisters and one little brother. One of my sisters is in the

senior primer class at school. I will close with a riddle.

What is the difference between a naughty boy and a bottle of medicine?
Ans.—One you take before you shake, the other you shake before you take.

CLARA SEENS.

Bailieboro, Ont., R. R. No. 1.
(Sr. II Class.)

Dear Puck and Beavers.—This is my first letter to your charming Circle. My father has taken "The Farmer's Advocate" for a long time. I couldn't do without it. We had seventy-nine chickens come out this spring. They are all black ones. There are a lot of Beavers write to "The Farmer's Advocate" that I know. Well, as this is my first letter I will close now, wishing the Beaver Circle every success. I remain,
Brussels, Ont. MURIEL MCNAIR.

"Willie," said his mother, "I wish you would run across the street and see how old Mrs. Brown is this morning."

A few minutes later Willie returned and reported:

"Mrs. Brown says it's none of your business how old she is."—New York Times.

The More Delicate Sense.—"Bobbie, your face wants washing. Did you look at it in the glass this morning?"

"No, mother, but it seemed all right when I felt it."—New York Sun.

Riddles.

Why is a minister like a brakeman?
Ans.—Because he does a great deal of coupling.

If I were in sun and you were out of it,

Honor Roll.—Mabel Dodds, Gladys McClung, Florence Schroeder, Mary Brown, Josephine Dillabough.

Beaver Circle Notes.

Gladys McClung, R. R. 1, Midland, wishes some of the Beavers to write to her. Florence Schroeder, R. R. 2, Elmwood, Ont., wishes Marion Brown and Edna Hall to write to her.

Several letters could not be published because written on both sides of the paper.

The Windrow

Nearly one-third of the total number of new officers in the British Air Service are Canadians.

During the ten years preceding the present war 22,000 young men of Alsace enlisted in the Foreign Legion of the French army.

Dr. H. Morestin, a French surgeon who made a specialty of face restoration for many years before the war, is in charge of this department of surgery near Paris. He and his staff work wonders in repairing and re-building faces crushed and mutilated in the war. "Bone" is supplied, with "fillers" to give shape and firmness, and skin is grafted over the whole. Cistle from between the ribs of the patient's own body is very frequently used for the foundation.

More than 100,000 tons of German and Austrian shipping, seized by the United States, will be repaired and made available for the use of the Allies by the end of July.

According to the Selective Conscription plan in the United States, many married men are drafted, but only when their wives and children are not financially dependent on them. On the other hand many unmarried men with relatives wholly dependent on their earnings are exempt. Rich wives will have to give up their husbands for the period of the war, but wealthy men whose services at home are considered of more value to the nation than they could render abroad will be retained in the country.

The Roumanians now place the blame for Roumania's speedy collapse on the traitorous pro-German Russian Premier, Sturmer (afterwards murdered), who urged Roumania to enter the war and then failed to send the help he had promised. They now assert that he acted according to directions from Berlin. Germany, knowing that Roumania would strike sooner or later, preferred that it should occur when least harm could be done. Also Hungary and Bulgaria were beginning to manifest war-weariness and a tendency towards independence, and it was felt necessary to check this, an end most easily accomplished by trouble with Roumania.

When we read of the Italian advances we do not always realize what the Italian troops are "up against" in the mountainous country in which they have to fight. The following, from the Bulletin of the Italian War Office, gives a vague idea: "The steep slopes covered with rocks and dotted with thick clumps of brush, constituted a formidable obstacle to an infantry advance. Successive lines of trenches, prepared months ago above deep caverns well supplied with defensive and offensive material, were defended by seasoned troops and protected by batteries placed so as to flank attacks with their fire. Notwithstanding these conditions, the Italian infantry advanced, and still continues to advance."

Lord Devonport, British Food Controller, has prohibited the manufacture of starch for laundry use in order that the corn and potatoes used may be saved for food.

Governor Harrington, of Maryland, has officially endorsed the project of a farm army in which several hundred men have been enrolled. The army when fully recruited will number several thousand, will be uniformed, and each unit will be commanded by a lieutenant. The units will be sent from section to section



The Dollar Chain is Helping Men Such as This.

The photo shows King George decorating Sergeant Masters, a brave Tommy who is so injured that he cannot salute the King.—Underwood and Underwood.

Little Bits of Fun.

Little Benny was looking at a picture of Elijah going to heaven in a chariot of fire. Pointing to the halo about the prophet's head, Benny exclaimed: "See, mamma, he's carrying an extra tire."

The grammar-school principal went from room to room explaining what to do in case of fire. The pupils listened with respectful attention until he came to his final instruction, then smiles and giggles disturbed the principal's serenity. "Above all things," he said, "if your clothing catches fire, remain cool."

what would sun become? Ans.—Sin.—Sent by Alma Colborne, Brigden, Ont.

What is it that goes 'round the room and 'round the room and sits in the corner? Ans.—A broom.

What is it that has four legs and only one foot? Ans.—A bed. Sent by Mary Brown, Glen Buell, Ont.

What turns yet never moves? Ans.—A separator.

What makes a rooster's feathers so smooth? Ans.—He carries a comb. Sent by Josephine Dillabough, Finch, Ont.

for several weeks' work at a time, under state supervision.

Mr. Herbert C. Hoover, United States Food Administrator, was born 43 years ago in a Quaker home in Iowa and was brought up on a farm. He worked to save money to go to college, and while at Leland Stanford University, whence he was graduated in 1895, did laundry work to help to pay his expenses. As a civil engineer he spent some time in China, and now has mining interests in many parts of the world. He was in London when Belgium was invaded, and undertook the task of financing the food problem of that starving nation, afterwards doing the same duty for France. After his experience, and with his natural ability, he is better qualified to hold the position of Food Administrator than any other man in the United States.

The first of the United States Food conservation measures provides for federal supervision of agriculture, and such measures of aid to the farmer as the sale of seed by the Government. It also provides for the punishment of persons hoarding foodstuffs or manipulating the market with intent to limit the food supply or exact extortionate prices. The President is authorized to prohibit dealing in futures on the grain exchange if necessary. Miss Rankin suggested to the House that where the food survey is taken as many women as possible shall be used in the work.

Lieut. Arthur S. Bourinot, one of the poets given place in Mr. Garvin's anthology, "Canadian Poets", is reported among the missing at the front.

The United States Congress has appropriated \$750,000,000 to build cargo ships for carrying supplies to the entente Allies.

Five well-known actors, all British subjects, arrived in Toronto from the United States recently to enlist with the University of Toronto Overseas Training Company. Another New Yorker who has joined the same company is Hugh Black, son of the famous preacher-author, Rev. Hugh Black.

Twenty-four disabled soldiers, returned from the front, left Toronto recently, with their families, bound for the Monteith district in Northern Ontario, where each man has been granted 80 acres of land. The Government of Ontario will do all in its power to help these heroes to found new homes.

The first hospital for dogs wounded while doing Red Cross work in the war, was opened a short time ago in Paris.

How many people could draw the Union Jack without error? Here are some points: The length of the flag is double its width; the width of the red Cross of St. George is one-fifth the width of the flag, and its white border is one-third the width of the Cross. The width of the red Irish Cross is one-third the width of the St. George's Cross; the broad white of the St. Andrew's Cross is half the width of the St. George's Cross, and the narrow white border which separates the red Irish Cross from the blue ground is one-sixth of the width of the St. George's Cross. All this sounds complicated, but the flag must be made so as to comply with admiralty regulations. The Union Jack, as it is now, came into existence gradually, developing from the National Flag of England—St. George's Cross on a white ground—to its present form via the Flag of Scotland, added in 1606, and a red cross for Ireland added in 1801.

One of the functions which fell to Lord Chelmsford's lot in this first year of his Viceroyalty in India, was the presentation of medals and decorations to over 200 native officers and men, many of whom came forward on crutches or had lost an arm.

After the battle of Mons, an officer congratulated an Irishman on his conspicuous bravery under fire. "Well, Pat," he said, "how did you feel during the engagement?" "Feel, captain," answered Pat; "I felt as if ivvery hair on me head was a band of music, and they were all playing 'Home, Sweet Home.'"

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.]

A Suggestion.

Just a word to-day. At a house where I had tea last evening one room has been turned into a knitting-factory for making socks for the soldiers. Its sole furnishing is a stout table and some chairs. Fastened to one end of the table is an "Auto-Knitter", which cost \$50. Last time I saw that room it was a conservatory, filled with ferns and begonias and palms. I am not sure that it is not more beautiful now in all its ugliness, but of course, when the war is over everyone will be glad to see it resume its old duties as conservatory.

However, that is neither here nor there. The point I am coming to is this: would it not be a good idea to have a knitting machine in every rural neighborhood? One could be bought in this way at very little expense to each, and could be kept in a central place. The girls in the neighborhood, and the women with least to do could learn to run it, and so many more socks could be turned out than at the present slow rate of hand-knitting. Of course at first there was a cry for hand-knit socks for the trenches, but now so insistent has become the demand for "socks! more socks!" that knitting-machines are being called more and more into service, and, at any rate, the new machines, which knit more loosely than the old and are more easily learned, make socks good enough for any soldier. Millions of socks must yet be sent out, for "holes" mean sore feet, and the knitting machine is the easiest solution to the problem.

The machine in this house will knit a whole sock, ribbed top and all, everything but fastening the toe, in 20 minutes, and for months and months this particular machine has been turning out 30 pairs of socks a month, the sole work of the young girl of the house. Were there others to keep it going steadily the output would be much more. A cheaper machine, which is also said to be very good, is sold by the T. Eaton Co., Toronto, at the price, I think, of \$22. Directions for knitting always accompany each machine.

Such a machine in any neighborhood should prove a boon in peace-time as well as in war-time, for on a farm there is not any too much time for the tedious hand process. We should like to hear from anyone who is already using a machine.

Subjects for W. I. Work.

"Pansy", Grey Co., Ont., asks for subjects for debates in a Women's Institute. That's a poser, for me,—apart from Institutes as I am here. But may I offer a suggestion? Why not have "Discussions" rather than "Debates", appointing speakers as usual but without pitting them in sides, as a debate, as ordinarily carried on, calls for. Debates usually waste so much time in churning over things that no one can agree with. Then, as to subjects, why not take a few subjects of local interest for a start, suiting them to the immediate needs of your neighborhood, and leading up to a "Resolution" in the end.

- For instance:
1. Should there be women on our school board?
2. Does our neighborhood need a cleaning-up and general beautifying campaign? If so, just what can be done?
3. Does our neighborhood need an improvement campaign of any other kind?
4. Shall we have a Flower Show? If so, where and how shall it be carried out?
5. How can we increase our efficiency as women?
6. What's the matter with our school-house?
7. What could we do with the following left-overs to get an emergency dinner. Some cold boiled potatoes; some scraps of meat, one onion, a bit of suet, 2 eggs, and 2 cups of raspberries. (It is taken for granted that soda, baking-powder, milk and sugar are on hand.)

8. What is the best way to learn how to vote?

9. How to keep cool in hot weather. This will take in plans for lessening work.

10. How to make over old clothes etc., into useful articles.

11. Is the Monroe doctrine an exploded creed?

Of course, if you choose you can turn most of these into form for a debate with affirmative and negative, in orthodox order.

Whew! Pansy, what a mental gallop you gave me! And I'm afraid I haven't helped you much after all. Won't some of you other experienced Institutes come to Pansy's assistance? Tell us about something that has been tried out in your society.

Picnic Baskets.

Even though there is a war in the world picnics are being held this summer, and this is as it should be. We cannot permit ourselves to be morbid, if innocent outings can help us to avoid it. Even behind the lines at the front the soldiers go to cinema shows, and are glad to have them to go to. Then why should not we take advantage of any little change to the routine of life that is inexpensive? Knitting can proceed at a picnic as well as at home, and so the time need not be misspent.

The requisites for making up an appetizing lunch-basket for a picnic, are, of course, the right kind of picnic food, and the right kind of utensils. We will take up the last first.

Just as few utensils etc., as possible should be taken—it is such a nuisance to carry things home again—and a little thought and very little expense will help one to eliminate.

In the first place a hand-around lunch never seems right at a picnic. For afternoon tea on a verandah, with all the accessories of dainty dishes and flowers, it may be all right, but a picnic seems to demand a white cloth that can be spread on the ground. Any old tablecloth will do, however, so this need present no difficulty.

The plates may be the pressed paper ones sold at "Woolworth's" and other places, which take up little space, are light to carry, and may be left behind, since they cannot be used again. If one cannot get them conveniently, then sheets of waxed butter paper will do very nicely. Aluminum jelly cups may be taken to serve salads, etc., as well as tea, and, as every house should own a set of these cups anyway, no extra expense will be entailed. The waxed paper should also be used to wrap sandwiches, meat and cake and keep it from drying out.

It is not likely that in a country place there will be enough thermos bottles to carry tea already made, so it will be necessary to take a small tea-kettle and some tea and sugar. Keeping cream sweet may be a problem, so it may be safer to leave it at home and take a few cans of unsweetened canned cream, which may be bought at a grocery store. Now for the eatables. From the following a selection may be made.

Sandwiches.

Sandwiches are very convenient, and will come out nice and fresh if wrapped in waxed paper and put in a tin box.

Meat Sandwiches: Run cooked ham or beef through a food chopper, season nicely, and use as filling between buttered bread. With the ham French mustard may be used. The beef needs only salt. With these serve pickles.

Egg Sandwiches: Chop hard-boiled eggs, mix with plenty of salad dressing, and use as filling, with or without lettuce leaves.

Cress Sandwiches: Chop water cress or garden cress rather fine, sprinkle with salt and put between buttered bread.

Nut Filling: Chop nuts of any kind fine, mix with plenty of salad dressing, and use with lettuce leaves for filling. This makes very delicious sandwiches.

Tomato Filling: As these do not keep long it is best to take the tomatoes and fill the sandwiches at the picnic ground. Slice them and use with salad dressing or with pepper and salt. Cucumber sandwiches may be made the same way.

Cottage Cheese Filling: Put cottage cheese (milk curd) in a bowl. Season nicely with salt and pepper and mix in a little chopped cress or parsley. Soften with a little sweet cream and use as filling.

Mixed Filling: Mix together finely chopped beef and chopped pickles.

Bacon Sandwiches: Fry thin slices of bacon and use as filling with a little parsley to give a green touch. Serve with pickles.

Jam Sandwiches: Use any kind of jam or marmalade to make sweet sandwiches. Many prefer these to cake.

Chicken Sandwiches: Remove the meat from the bones of a cooked chicken, and boil the bones and liquid down until the stock is almost in jelly. Chop the meat fine, adding a little onion or some celery stalks if you like. Add the stock to the chicken and season nicely. Then when cold use as filling just as it is or with lettuce and salad dressing.

Savory Loaves.

Instead of taking sandwiches one may prefer to take bread and butter and serve with it some sort of savory loaf sliced at the picnic grounds.

Chicken Loaf: Prepare the chicken exactly as for chicken sandwiches, but take in the bowl or mould in which it has stiffened. To be sure of its stiffening it may be well to add a little dissolved gelatine to the boiling stock just before pouring it over the chicken.

Beef Loaf: Boil beans with a little salt pork until they are tender enough to press through a potato-ricer. Season nicely and press in a mould with a weight on top. Serve with tomato catsup.

Beef Loaf: Allow 2 crackers to each pound of meat. Roll the crackers fine, and mix with the chopped meat (round steak will do). Also add 2 beaten eggs to each pound of meat. Season, make into a firm loaf and bake, basting frequently with melted butter or bacon drippings. Cut when cold with a very sharp knife. Serve with pickles or catsup.

Other Suggestions.

Baked Beans: Parboil beans, then bake in a deep vessel, adding some fat pork, also a little water from time to time, if necessary. Some add a very little molasses. The beans should be baked on a washday, when the fire is on for a long time, as they need long baking. Serve with catsup.

Eggs Stuffed: Boil the eggs hard, then let get cold, but do not drop them in cold water to cool as this will soften the yolks. When cold cut in two lengthwise and take out the yolks. Crumble the yolks fine and mix with a little salt, chopped parsley or garden cress, and salad dressing. Refill the cavities again and press each two pieces together, wrapping tissue paper tightly about each. If preferred the eggs may be put in cups with aspic in this way. In some hot strained soup stock dissolve enough gelatine to stiffen it. Pour a little into cups, and when it hardens place the eggs in, adding more of the stock (kept liquid) to fill up. The eggs may be carried in the cups and un moulded to serve.

Pickled Eggs: Drop some hard-boiled eggs, when cold, into the red vinegar off pickled beets. When colored pink remove and drain dry.

Potato Salad: The secret of a good potato salad is to chop the potatoes fine and use plenty of salad dressing, enough to make it quite moist. Mix with the salad some parsley or garden cress chopped fine, and a little chopped onion if liked. Chopped hard-boiled eggs may also be added.

Beet Salad: Chop boiled beets fine and mix with salad dressing. Decorate the top with rings of hard-boiled eggs and the crumbled yolks. Serve with cold sliced meat of any kind.

Ham Salad: One cup cold chopped ham, 1 cup sliced cucumber pickles, 3 hard-boiled eggs. Arrange ham and cucumbers in layers, put the sliced eggs on top and pour cream dressing over. The cream dressing is made as follows: One tablespoon butter, 1 of mustard, 1 of sugar 1 teaspoon flour, a dash of red pepper, yolk of 1 egg, 1 cup vinegar. Heat vinegar and butter, add other ingredients mixed together. Cook 3 minutes. When cold, if liked, a little thick cream may be stirred in.

Cheese Balls: Make cream cheese into balls, mixing with it some finely chopped olives and a very little salad dressing or sweet cream.

How

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Perhaps than anyt and what t lem. Perha pudding' pudding l

1. Raisin slices of st dish in la raisins be mixture of sugar and browned c ding.—Put and a sprin in a dish a cover with moistened baking un cream.—Cr ding.—3 been soake possible. beaten yo a small le cup milk butter. E pie-dish a oven, spre ingue mad stiff, sprin

Bread n in paper crumbs b batter or f of stale b bread sauc recently.

Meat le to use up chopper l minced. I one shoul knife, a all minced can be m vegetables may be curry, or Croquet potatoes, mixture o gravy, ste make into crumbs an

Minced toast and Cover wit with a lig the oven r

Beef Fr sliced ver and salt. dripping i flour and gravy, st pepper, ar meat, sim on a hot p potato, be hot biscui

Veal or veal, 2 ha pepper to good sala

If boile may be r them, add of salt, p sup etc. stale brea butter, or good sala served on

Left-ov onion an flour, sea buttered t be heated and serve with chop dressing. macaroni the maca grated ch

Left-ov after bei dinner, m with dres salad.

A left- and us

How to Use Left-Overs.

In these days of economy, left-overs, should never be scraped into the swill for the pigs. They are quite too expensive for that, for, provided one knows how, every bit of left-over food may be used up somehow.

Perhaps more waste occurs with bread than anything else; crusts will dry out and what to do with them becomes a problem. Perhaps the family will not eat "bread pudding", but have all the kinds of bread-pudding been tried? Here are a few: 1. Raisin Bread Pudding.—Butter thin slices of stale bread and put in a pudding dish in layers, with seeded or seedless raisins between. Pour a thin custard mixture of milk, beaten egg, and a little sugar and salt over, and bake until browned on top. 2. Apple Bread Pudding.—Put apples, sugar, a dash of salt, and a sprinkling of nutmeg or cinnamon, in a dish and bake until almost soft, then cover with slices of stale buttered bread moistened in warm milk, and continue baking until browned. Serve with good cream. 3. Lemon-flavored Bread Pudding.—Crumble stale bread, which has been soaked in water and pressed as dry as possible. To 1 cupful of crumbs add beaten yolks of 2 eggs, grated rind of a small lemon, sugar to sweeten, and 1 cup milk boiled with a dessertspoon of butter. Beat well, pour into a buttered pie-dish and bake. Take it out of the oven, spread with jam, cover with meringue made of the whites of the eggs beaten stiff, sprinkle with sugar and bake brown.

Bread may be dried in the oven, rolled in paper bags and kept in sealers, the crumbs being used to add to pancake batter or for rolling croquettes in. Slices of stale bread may also be used up in bread sauce, for which a recipe was given recently.

Left-over Meats,

Meat left-overs are among the easiest to use up, especially if one has a food-chopper by which they can be quickly minced. If one has not a food-chopper one should have a chopping-bowl and knife, a great time-saver in making all minced dishes. When minced the meat can be mixed with potatoes and other vegetables and fried in croquettes; or it may be made into a hash, meat-pie, curry, or meat loaf.

Croquettes—Mix minced meat with cooked potatoes, mashed beans, cabbage or any mixture of these. Moisten a little with gravy, stewed tomato or milk, season well, make into small cakes, cover with bread crumbs and fry.

Minced Ham on Toast.—Butter hot toast and spread lightly with mustard. Cover with minced cooked ham, covered with a light grating of cheese and put in the oven until the cheese melts.

Beef Fricasee.—Take 3 cups cold beef sliced very thin and season with pepper and salt. Melt 3 tablespoons butter or dripping in a spider, add 2 tablespoons flour and stir to paste. Pour in 2 cups gravy, stock or water, and season with pepper, and salt and onion juice. Add the meat, simmer a few minutes and serve on a hot platter with a border of mashed potato, boiled rice, or bits of toast or hot biscuits.

Veal or Lettuce Salad.—2 cups chopped veal, 2 hard-boiled eggs chopped, salt and pepper to season. Serve on lettuce with good salad dressing poured over.

Left-over Vegetables.

If boiled or baked beans are left they may be made into a soup by mashing them, adding stock or water and seasoning of salt, pepper, onion juice, tomato catsup etc. Serve very hot with dice of stale bread fried crisp in a little fat or butter, on top. Cold beans also make a good salad if mixed with dressing and served on lettuce.

Left-over Tomato.—Stew with a little onion and water, thicken slightly with flour, season, and serve very hot on buttered toast. Stewed tomato may also be heated, stiffened with a little gelatine, and served as a salad on lettuce leaves, with chopped hard-boiled eggs and salad dressing. Or it may be made up into a macaroni dish for tea. Boil and drain the macaroni, add the tomato and some grated cheese, also a little stock and bake.

Left-over Beets.—A few beets left over after being served as a vegetable at dinner, may always be minced fine, mixed with dressing and served on lettuce for a salad.

Odds and Ends.

A left-over egg should be cooked hard and used to garnish a salad, or any

creamed dish, such as codfish, or it may be sliced and placed with slices of cold meat.

Left-over porridge or rice may be added to pancake batter. A very nice pudding may be made from the porridge heated over with a little extra water, with nuts or raisins added. Serve with cream and sugar.

On farms cream that goes sour is never at a loss, as it can be added to the cream-crock for butter-making. But should a little sour cream be on hand, it can be used as a salad dressing for chopped green onions or onions and lettuce mixed. Nothing needs to be added to it but a little salt. It may also be used in pancakes or muffins. If not too sour it is very good on strawberries; indeed some prefer it to sweet cream for that.

A very unthinking woman said, "But there's no economy in using left-overs when you have to put so much other stuff with them to make them eatable." That is not the point at all. The food-value of the dish must be considered. One must have food that is nourishing to the body, and in making food-dishes valuable from this point of view, left-overs may be made to contribute greatly.

Letter From Kent.

Dear Junia.—I have been a silent but interested reader of the Advocate for some time and at last resolved to write a few lines. I think the articles are just splendid they give one such valuable hints that are well worth following. Is not this a backward spring? We are so anxious for good, warm weather, for how can one speed up food production, that the papers are so fond of talking about if we don't have the season? I want to say that I agree with Allan McDairmid on there being a limit to the endurance of the farmers. There are too many people, especially those of the city, who think the farmer is a mere machine that can be dictated to and given advice by them, as their fancy wills it. Let them take it from me that a high percentage of farmers know their own business best and no one is deserving of more credit than they. Do not think I wish to be selfish for there are other professions we can make good in besides that of the farm. We have taken the Advocate for a number of years and would not be without it as it is the best all-round paper we know of.

Kent Co., Ont. FARMER'S WIFE.

It's true,—farmers have been given a good deal of advice lately, haven't they? Well, I suppose it's because of the general ebullition of patriotism. Most city folk can't understand that farm folk as a rule work just as hard as they can, and so can't work any harder, even to produce more. But they're not so bad, after all, these city folk. Most of them are giving heavily from their pockets, and the women are knitting for all they're worth. Perhaps when a few thousand of them return from this summer's experiences in the country they will understand better just how much work farm folk have to do, and how much brain-work it takes to do it. I hope the whole thing will result in greater friendship and understanding between city and country. I should like to see that, because I think the two should be mutually helpful and mutually inspiring. J.

The Cookery Column.

Bean and Lettuce Salad: Use beans of any kind, although Lima beans are the nicest. Cook with as little water as possible, until tender. Put on lettuce leaves with any kind of dressing you like, and serve cold. If you like oil like, and serve cold. If you like oil like, and serve cold. If you like oil like, and serve cold.

Cottage Cheese Salad: Scoop the hearts from red tomatoes, and fill with a mixture of cottage cheese, minced onion and salad dressing.

Egg Salad: Boil some eggs hard. Take out the whole yolks, roll in melted butter or olive oil, then in minced parsley and pickles. Heap on a bed of lettuce or cress, and pour over some mayonnaise to which the chopped whites of the eggs have been added. This will take the

place of meat as a supper dish, served with bread or biscuits.

Prize Pound Cake: It is a very convenient practice to keep on hand always, in a tin box or covered earthen dish, some cake that will keep for a time. Emergencies will come when the cake will be needed. One kind that may be so kept is "Prize Pound Cake". To make it beat together 2/3 cup butter and 1 cup sugar. Next beat in 4 beaten yolks of eggs and 1 tablespoon milk. Next add 1 1/2 cups flour in which 1 level teaspoon of baking powder has been sifted. Beat quickly, then fold in carefully the stiffly beaten whites of the 4 eggs. Add 1/2 lb. chopped citron peel and bake. As the difficulty in baking all pound and fruit cakes is their likeliness to burn, a good plan is to set the cake-pan in a vessel of warm water in the oven. The cake will rise well before it begins to bake. After it begins to rise remove the pan from the water and bake in the usual way. This method is especially good if the oven is very hot.

Hermits: These little cakes also keep well in a covered jar. To make them take 1 1/2 cups brown sugar, 2/3 cup butter, 3 tablespoons milk, 1 cup currants or chopped raisins, 1 egg, 1/2 teaspoon soda, 1 teaspoon cinnamon, 1/2 teaspoon cloves, 1/2 teaspoon nutmeg, flour to stiffen. Beat butter and sugar until creamy, add raisins, egg well beaten, and milk with soda dissolved in it. Mix spices and add, also enough flour to make into dough. Roll out, cut in rounds and bake in a moderate oven. Do not let them become too crisp in the oven. If they are to be used fairly soon the spices may be omitted and chopped nuts used instead.

A New Strawberry Cake.—Make a cake from any recipe for layer-cake and bake in 2 layers. Crush some berries in a bowl with sugar to sweeten, and mix in a cupful of blanched chopped almonds. Put between the layers and on top. Cover with whipped cream, if liked, or with meringue made of white of egg.

Strawberry Ice-Cream.—Mash 1 quart berries, add 2 cups sugar and let stand 2 hours in a cool place. Then mix 2 cups cream with 1 cup milk, a saltspoon of salt and more sugar if necessary. Mix in the berries and freeze as usual.

Greens with Bacon.—Fry 6 slices of bacon crisp. Make a brown sauce of 2 tablespoons dripping in which 2 tablespoons flour are cooked till brown. Season and add gradually a cup each of milk and water and cook until thick and smooth. Make a mound of the hot boiled greens—spinach, beet tops or lamb's quarters—garnish with the meat and a sliced hard-boiled egg, and pour the sauce about. To be good, greens should be put in salted boiling water (just as little as possible), should be drained very dry, and served very hot.

Kneadless Bread.—Take 2 cakes compressed yeast, 2 cups milk, 2 cups water, 2 quarts flour, 1/2 cup sugar, 1 level table-spoon salt, 1 tablespoon lard. Break the yeast into the cup of water and add 1 tablespoon sugar. Let stand 15 minutes. Sift the flour into a mixing-bowl. Make a hollow in the center into which place the lard and salt, the remainder of the sugar, the milk, and 1 cup of the water. Both milk and water should be lukewarm. Add the yeast, and mix gradually until it can be handled. Leave covered for 15 minutes. Butter a large bowl, turn the dough into it and butter the top of the dough. Let rise until doubled in size. Make into loaves and put in greased pans. Let rise again, then bake in a hot oven 3/4 hour.

Cottage Cheese.—Heat sour milk to 100 deg. F. or until it curdles. Put in a colander lined with cheesecloth to drain dry as possible. Season with salt, moisten with cream and shape into balls. These may be served on lettuce as salad, or the curd may be left loose and served with sugar and cream.

Washing Blankets and Sweaters.

Just possibly, because the spring has been so cold and wet, you have not yet managed to get the blankets washed. You have been waiting for the dry, bright, days when they will dry out quickly and smell all the sweeter for the sunshine.

Blanket-washing is usually looked upon as a dreaded, though very necessary event, but really, if the blankets are done by themselves and not added to the

regular washing, the task is not so fearsome at all, and, by following a few simple rules, they may be made to come out soft and white and fluffy.

In the first place never soak them, as that has a tendency to make them become hard and shrink. Shake all the dust out of them; that is all the preliminary necessary.

Have two tubs ready, filled with warm water, and be sure that the water is the same temperature in each. Woollen goods must never be put from a warm bath into a cold one. Some, indeed, have each succeeding water hotter than the last. Needless to say, the water should be soft if possible; if not more pearline will have to be used. Make a good suds in both tubs, of pearline and soap melted to a solution, or with the following mixture: To one bar soap use 3 quarts cold water, 2 tablespoons borax and 1/2 cup wood alcohol. Shave the soap into the cold water and heat to boiling point, then, when cold, add the borax and alcohol. If the blankets are very new and good you may find it wise to use wool soap instead of the ordinary soap. This solution is fine for washing white sweaters, but the sweater must not be fastened to a line as that will pull it into points. It should be dried on a sheet, where it has been put in good shape.

Wash only one blanket at a time, squeezing and sousing until the soil seems to be fairly well out. Never use a board, never rub soap on, and never wring any woollen article. When the first washing is done squeeze out as much of the water as possible and lift into the second tub, repeating the operation. Two rinsings, perhaps three, in clear, warm water, may be necessary. The last time the wringer may be used, but it must be adjusted loosely and the blankets must be put through folded flat.

Dry good blankets on curtain stretchers, exactly as you would curtains, and while drying brush frequently with a whisk to bring up the nap. Older blankets may be dried on the line, but many clothes-pins must be used, and from time to time they must be brushed and pulled into shape to avoid any tendency towards points.

When perfectly dry put the blankets away in a close cedar chest, or some other place where they will be secure from moths.

The Scrap Bag.

Cleaning Combs.

Never wash combs, as water often makes them rough. Keep them clean by drawing strips of cotton between the teeth very frequently, with an occasional washing with kerosene.

Care of Linoleum.

Keep the linoleum well covered with Mar-rot, or some similar coating, and it will wear much longer. A homemade coating is made as follows: Dissolve 2 1/2 lb. paraffine and 1 gal. turpentine by the aid of a gentle heat (in hot water) and apply with a sponge or piece of flannel while warm.

To Remove Tan and Freckles.

Use lemon juice, very sour buttermilk, or hydrogen peroxide, applying frequently. If peroxide makes the face sore, apply a little warm boric acid dissolved in water and a little glycerine. The following is said to be quite effective: Mix together buttermilk, grated horse radish and corn-meal. Spread the mixture between thin muslin and leave on the affected parts as long as possible at night, taking care to keep it away from the eyes.

To Drive Rats Away.

Place at the entrance of their holes a little moist caustic potash. Nothing is better to drive away rats and mice than a cat. Even though the cat is not a very good mouser the rodents scent an enemy and keep away. To protect birds from the cat tie a tiny bell at its neck.

Insecticides.

Sulpho-tobacco soap, which can be bought at any seed house, should be sprayed on the rose-bushes to banish aphids. Hellebore may be dusted on currant and gooseberry bushes to drive away grubs. It is a poison, hence the fruit must be well washed.

The Dust Cloth.

Saturate the dust cloth with coal-oil, and leave aside until the surplus oil

has evaporated. Shake well after each using, and re-oil after the cloth is washed.

The Garden.

Don't forget to stir the surface of the garden soil twice a week and especially after every rain. If you do this comparatively little watering will be needed.

Economy Hints.

Bake your own bread this year, make your own soap and vinegar, use garden stuff rather than cakes and pies. Make over old skirts into petticoats, old shirts into work aprons, and old shirtwaists into coat covers. All these little things help.

Cleaning Matting.

Wash the matting with water in which bran has been boiled, or with hot salted water. If there are any spots which the salt water does not remove rub them with castile soap and rinse off quickly. There is always danger that soap will yellow matting. Straw suit-cases may be cleaned in the same way.

Mixed Marmalades.

Small odds and ends of fresh fruits of all kinds, also left-overs of canned fruits, may be put together and made into "mixed marmalades" that are very palatable. Experiment has shown that the following combine very well: Crab and elderberry; currant and apple; cranberries and apple; blackberry and rhubarb orange and plum; apple and plum; tomato, raisin and lemon; grapes and apple; pineapple, with rhubarb, or orange, or both; melon and lemon.

To Drive Out Flies.

It is said that flies may be driven out of a room in the following way. Put about 20 drops of carbolic acid on a hot pan or fire-shovel, and let the vapors fill the room.

Use of Olive Oil

Olive oil is wholesome and medicinal, and when possible a taste for it should be cultivated. It is good in salad dressings and forms a splendid substitute for pork in pork and beans.

To Improve Cherries and Plums.

Cherries and plums are much more delicate in flavor, and the "chokiness" removed as follows. Pack the fruit into the cans, fill with cold water and bring to a boil in a wash-boiler of water. Next pour off the liquid and use for jelly or fruit juice, and fill the cans up with a syrup made with granulated sugar. The fruit juice may be mixed with currant or apple jelly later, and will give a nice flavor.

A Moth Cure.

The use of a vacuum cleaner helps to keep a house free from moths. The following spray is also effective. Mix together 1 teaspoon carbolic acid, 1 quart benzine and spray through an atomizer on the carpets or other articles. No fire or light must be in the room, and the windows should be opened.

Omit Chocolate.

Do not use much chocolate cake or chocolate filling in very hot weather. Chocolate contains a large supply of fat, which is always heating.

Conserving Food.

This year we should learn to use in our homes the more perishable foods, such as milk, eggs, fish, fowl, vegetables and fruit, and so reserve the more substantial products, meats and grains, for shipment abroad. There should be more vegetables canned in the homes this year than ever before.

Grass, Ink, and Rust Stains.

First rub the stain with molasses, leave for a time, then wash as usual. Ink and rust stains succumb to long soaking (2 or 3 days) in buttermilk.

Oily Skin in Summer.

To remove an oily skin sponge the face night and morning with the following: Boric acid, 2 drachms; orange flowerwater, 2 ounces; rose water, 2 ounces. Also use a slightly astringent powder when dressing to go out.

To Improve Starch.

Add a little kerosene or turpentine to boiled starch, and the irons will be much less likely to stick when ironing.

Canning Vegetables.

Remember, in canning vegetables, that it is always safer to boil on three

days in succession, for 1 hour, loosening the tops while boiling.

To Keep Cheese Fresh.

Wrap it in a cloth previously steeped in vinegar and water, re-soaking the cloth from time to time.

To Save Molasses.

Grease the cup in which molasses is to be measured and every bit of it will come out.

To Remove Mildew.

Sometimes in summer mildew stains appear. Mix some soap with powdered starch and salt, and the juice of a lemon. Brush the stain with this and hang the garment in the open air for a day, then wash as usual.

To Wash White Corduroy.

To wash white corduroy, now so much used for skirts, the following method is given: Wash in warm soapy water until clean, then boil one-half hour in soapy water. Rinse in clean water, changing the water three times, and rinsing again in cold bluing water. Don't wring or squeeze, but hang in the open air to drip dry. Don't iron. If a good quality soap is used and the above directions strictly followed, you will invariably get good results. It is best to use wool soap, "Lux", or Ivory soap.

Thinning Apples in an Old Orchard.

The necessity of thinning apples is far greater than is commonly known. The time to do this work would be when the apples are about the size of marbles, if it were not for the fact that one of the objects of thinning is to remove defective fruit. All apples showing stings of any kind, hail marks, spots of scab, spray or frost injury, or any other deformity, should be removed, even though the crop may be light. Evidently, this cannot be done properly until the fruit is nearly half-grown. The overloaded trees may be thinned first, however, taking care to look for fruits which have any sort of deformity. The past season, the removal of half the fruit from heavily loaded trees was not sufficient.

The coloring of apples is influenced greatly by thinning. It is well known that when two pickings are made, that half-colored fruits left at the first picking will, within two or three weeks, increase in size and put on more color, rivaling the specimens first removed. Earlier thinning accomplishes this result in a still more marked manner.

Many orchards would pay back in one year the cost of putting them in shape, and several hundred per cent. on value of land besides. In several cases, a net profit of four hundred dollars per acre has been secured from an abandoned orchard. It is like reaping where one did not sow, to bring one of these orchards into its own again. An investment in one of these orchards is better than gold-mine stock, for there is no "luck" about it. If there is any risk about operations of this sort, it is because of lack of judgment and industry.—Suburban Life.

T'gether.

BY ERNEST H. A. HOME.

Th' daisy clans hae climbed th' hill,
Nae lum is reekin' at th' mill,
Sae we'll awa'
Frae troubles sma',
Awa' amang th' heather,
For auld lang syne,
Dear lass o' mine,
Just you an' I t'gether.

There's bonny troot in Allan loch,
There's sonsy lams in Donald's flock,
Sae dinna rue,
Dear lass, th' noo,
An' we shall roam th' heather;
'Tis ower lang
Syne linnets sang
For you an' me t'gether.

Private Doherty was six feet four in his socks; his sergeant was about a foot shorter. The sergeant looked along the line. "Head up, there, Doherty!" he cried. Doherty raised his head. "Higher!" said the little sergeant. "There, that's better!" Don't let me see your head down again!" "Am I to be always like this?" asked Doherty, staring above the little sergeant's head. "You are." "Thin I'll say good-bye to ye, sergeant, dear, for I'll never see ye again in this world."—New York Mail.

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. Price fifteen cents PER PATTERN. If two numbers appear for the one suit, one for coat, the other for skirt, thirty cents must be sent. Address Fashion Department, "The Farmer's Advocate and Home Magazine," London, Ont. Be sure to sign your name when ordering patterns. Many forget to do this.

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

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

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Measurement—Waist..... Bust.....
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Reducing Rural Distances.

EDITOR "THE FARMER'S ADVOCATE":

It is somewhat disheartening to be forced to admit that too often the decided merit of any proposition may, when viewed from a different standpoint, be as decidedly, a demerit. Take for instance, the generous space of the country. What a delight to us are its far-reaching vistas of forests and fields, of streams and mountain-tops! Ah, but what prodigality of effort does their intimate enjoyment constrain from the devotee! Likewise the large farm, or barn, or house, represents not only the pleasure and profit of possession, but also the toll of human energy that all possession proportionately, and inevitably, entails. The larger the farm, barn, or house the longer its inherent distances, the more extended its areas and logically, the greater its demands from those who must, perforce, cover them.

Especially to the farm woman does it seem as if rural distances are often of too generous a measure. It is so far from one end of the big kitchen to the other; so far to the bottom of the cellar, or to the top of the garret; so far to the wood-shed, the hen-house, the dairy, the stables, the garden, the nearest neighbor, the church, the city, the possibility of pleasure apart from the daily pastime; so far that in reaching to either the one or the other the woman squanders the zest, vitality, strength, spirit, call it what you will, that is given to her to achieve success. Her power is, as it were so lost in transmission that she is resultively robbed of the satisfaction that only comes when the accomplishment of purpose is in proportion to the price paid for its possibility.

But if it is so important to reduce rural distances why is it that so little has been, and is being done in that direction? Let me tell you. It is because that when we are young and strong, and ambitious, we cheerfully, nay eagerly, take the most precious of possessions and tender it in reckless exchange for that big farm, or house, or barn, that we covet, and then later, when we have become poor in a spiritual or intellectual sense; when we are faded and old before our time; when we realize that we foolishly, and perhaps very unnecessarily, paid too much for our whistle, it is often too late for us to make any radical change. We must have lost our power of initiative and adaptability. So the meed that was when our grandfathers stumbled off the treadmill remains for us, as it will remain for our children, if we do not accord it the consideration that its importance demands.

But if we do, if we feel rightly our responsibility in the matter, if then as in the past we planned our rural distances on too large a scale, for thus meant our ambition for a large farm, which perforce includes all the far-away-ness of the country, so now we must contrive to reduce these distances whenever it is possible to do so. The following ideas, although, perhaps, not applicable to all cases, may yet be suggestive of practical means.

In the first place the best way of reducing the distance from the farm to either the village or city, the church, the railroad station or the nearest neighbor, is to go in wholeheartedly for the establishment of good roads. A good road is



9421 Girl's Chemise Bathing Suit, 8 to 14 yrs. Price 15 cts.

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never as long over, a good short road if horse, or even it with. Give roads movement.

Likewise the other outbuilding constructing good between them ment that will less dirt will

A further kitchen floor reducible dist that can be kitchen wall, have the ordi set of ball-proved, and a the box can filled and wards with cellar, it will do not have Think before trip do the s stance, when tables after l only the butt ner but also t go down em suring yours something b to take an ex stout basket gem jars is a conveniently poses in resp the having, stepped stai stallation of are the most the distance

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never as long a one as a bad road. Moreover, a good road is easily turned into a short road if we have either a car, a good horse, or even a good bicycle, to travel it with. Give your influence to the good roads movement.

Likewise the distances to the barn and other outbuildings can be reduced by constructing good gravel or cement walks between them and the house, an improvement that will also mean that a great deal less dirt will be tracked into the kitchen.

A further prevention of tracking the kitchen floor and of wasting energy over reducible distances, is to have a woodbox that can be filled from the outside of the kitchen wall, or if that is impracticable, to have the ordinary one mounted on a strong set of ball-bearing castors. Thus improved, and all at the cost of twenty cents, the box can be placed near the door to be filled and placed into position afterwards with very little effort. As to the cellar, it will not seem so far down if you do not have to descend there so often. Think beforehand, in order to make one trip do the service of half a dozen. For instance, when you go down for your vegetables after breakfast bring with them not only the butter that you will need for dinner but also the preserves for the tea. Never go down empty handed without first assuring yourself that you are not leaving something behind that will constrain you to take an extra trip a little later. A large stout basket that will hold about a dozen gem jars is a great commodity if it is kept conveniently at hand for carrying purposes in respect of the cellar. That, and the having of a well-lighted, and wide-stepped stairway, or better still, the installation of a dumb waiter or refrigerator, are the most approved means of reducing the distance to the farm house cellar.

And now we come to the kitchen itself, which, on the farm, is really the most important room of the whole house. If it is so large as to tire you unduly, can you not reduce it by cutting off a portion of it for either a wash-room or closet? Or if it is too small, or too dark, can you not enlarge it and add more light, and consequently more cheerfulness and better sanitation? Remember that there is nothing more depressing and unhealthy than to work in a half-dark room. Plan to so place your sink, stove, and kitchen cabinet that the trio will have all the advantage of the best possible light and that your steps will be as few as possible between the one and the other. If the kitchen is large, a small table on wheels, or if the floor is reasonably smooth, on a set of ball-bearing castors, will mean a great saving in the latter respect. Such a table, double-decked, and fitted with drawers for cutlery, and hooks for basting spoons, holders, etc. will prove itself invaluable by following the housewife around the kitchen and dining-room and carrying in one trip what her two hands could not do in a dozen.

In conclusion I want to put in a plea for the little folks of the farm. We are so apt to forget that rural distances are even greater for the children than they are to us who take longer steps and can see farther along the way. Have you never considered the buying of a pony for your little ones? They cost a little to be sure but then they also eat very little, and they are about the best and most enjoyable way of reducing the rural distance for the little farmer to be. It will not be far to go for the cows, nor to the village store, nor to Sunday-school, if the little boy or girl is on the pony's back. The rows of vegetables will not be so long if the pony is drawing a small cultivator. The wood pile will not seem so far away if the pony is sharing the job of moving the wood to the kitchen door. I know that the usual advice is to give the farm boy or girl a plot of ground for a garden of their own, or a pig, calf or colt; something in fact that will grow in value in a money sense; that will add its quota to the savings. It is all very good but it is also good to sometimes forget adding up dollars and cents; it is also good to sometimes give a gift purely apart from any purpose of financial profit; it is also good to sometimes remember that our savings lie perhaps more in the money that we have spent than in that which we have in the bank. For what we have spent we have enjoyed, and because of our enjoyment it has become a part of ourselves. What we have in the bank we have merely handed over for the financial benefit of a class inimical to the true welfare of the rural interests. To withhold a love-gift from your children because the cost of it will lessen that benefit to a slight degree, is

I am sure, not the best part of wisdom. Think it over.

For if it is the rule that rural distances are too great and need to be reduced there is yet the exception that the one from childhood to a full working day is all too short and needs to be prolonged as much as possible. A pony will help to do this. Ask your little boy or girl about it. —MRS. W. E. HOPKINS.

The Golden Gown.

BY LOUISE TAYLOR DAVIS.

It appears that Claudia had come to town that morning to do some shopping intending to go home on an early afternoon train; but a very slow waitress disarranged all her plans. It seemed perfectly absurd that it should take a waitress fifteen minutes to bring a simple sandwich and a cup of cocoa even in a crowded, clattering, department store restaurant at the busy hour of one o'clock. It was just at the moment when Claudia gave up all hope of getting her train that she remembered that the sheets and towels she had bought that morning had cost seventy-five cents less than she had expected to pay for them. The combination of these two thoughts, the missed train and the saved money, brought a third thought—the play she wanted to see most in the world was at a theater just around the corner and a lofty but perfectly good seat cost just exactly seventy-five cents.

The waitress finally came back and thumped Claudia's luncheon down in front of her; but of course by that time there was no possible chance of getting the train. All the time she was eating her sandwich and sipping her cocoa she kept reminding herself that there would be another train only half an hour later and that she needed the seventy-five cents for a great many practical things. Down in her heart though she knew that she was going to squander her afternoon and her seventy-five cents on that play, Claudia loves the theater.

I remember perfectly that I had just come back to the office that day after getting my lunch when she called me up. "Would you mind, Peter," she said in a voice that I recognized as her excited-about-something-going-to-happen voice, "would you mind if your dinner should be a little late to-night?" "Of course not," I said. "What's up?" "I'm going to stay in town all afternoon and go out with you on the 5.20 train," she said a little mysteriously. "I can cook something in a hurry after we get home." "Nonsense!" I said. "Let's go somewhere and get a little dinner before we go home. Come on! It'll be a lark." "No indeed," said Claudia promptly. "It would be very extravagant. Because Peter—" her voice dropped to a rather ashamed whisper—"I've just spent seventy-five cents for a matinee ticket!" "Good heavens!" I returned laughing. "Well I'll meet you on the 5.20 then. Have a good time."

I've been to the theater with Claudia quite often and have observed her narrowly on such occasions; so I can imagine just how great was her enjoyment of this particular matinee. I can picture her climbing up, up, up, until she reached her seat in the very topmost balcony, and when she finally attained that lofty perch taking off her hat and coat and fluffing up her hair with that little gesture I am so familiar with. I know with what pleasure she listened to the strains of the far-way orchestra and with what interest she watched her neighbors settle into their places. I am quite sure that when the curtain went up she leaned forward in her seat with parted lips and that when the Golden Gown came on the stage she said, "O-oh!" under her breath and gave a little shiver of sheer delight in its beauty. Bumping homeward on the 5.20 suburban local she told me about it. "All gold, Peter!" she said, with rapt eyes and bated breath. "Thick, thick, gold bated satin; but, oh, so soft! And something like sparkly golden gossamer floating all over it, but clinging too, and a long, long train!" Her gesture sketched the thick, soft folds, the golden gossamer and the splendid train.

"And, oh, Peter, a golden band around her golden hair!" She looked out of the window into the darkness, and I saw her eyes catch her reflection in the darkened glass.

"Really, Peter," she said, and blushed and laughed a little, "she looked beautiful;

but I think maybe in a dress like that I would look rather nice myself."

I looked at her, smiling at me with a charming little air of embarrassed, half shy coquetry, and I did not doubt it in the least. Claudia has golden hair.

"Claudia," I said rather sadly, "I wish you weren't so beautiful. Then I shouldn't feel so much like a miserable worm because I can't buy you a golden gown."

"Silly!" said Claudia. She squeezed my hand under cover of a fold of her skirt. Then she stole another glance at her reflection in the glass and smiled; but I thought it was a wistful smile.

It was only a few days after Claudia's trip to the theater that I came home rather early one afternoon and found her with her head on the kitchen table, sobbing wildly. She had not intended to have me find her crying I am sure, for as soon as she saw me she jumped to her feet and tried to pretend there was nothing much the matter. Claudia is a good sport. I suppose I should have accepted her explanation of a headache, induced her to lie down and waited for her to be herself again. But a woman doesn't sit crouching over a table, shaken by paroxysms of childlike, unrestrained sobbing just because she has a headache—at least not a woman like Claudia. I was worried and made up my mind to get at the real trouble. Under my questions her shaken nerves gave way, and she told me the reason for her tears.

It was a funny, pathetic little tale of a day of small disasters; but there was something tragic underlying it all, something that wrung my heart. The woman hadn't come to help Claudia clean the house; she had had to do it all alone. The fire in the kitchen stove had gone out and she had carried coal and wood up from the cellar to build a new one. She had run a splinter in one hand and burned the other. The fire wouldn't burn, and she didn't know when my dinner would be ready. Here I patted her consolingly on the back and tried to cheer her up a little by telling her I wasn't a bit hungry; but she raised unhappy eyes to mine.

"Oh, Peter, that isn't all! Look at me! Here I am, when you come home, all tired out and dirty and disheveled, when I ought to be clean and attractive and happy. Just because I've been working all day, doing hateful, dirty, grubby things that will have to be done over and over again! It frightens me, Peter! We shouldn't have married until you had more money. You have to deny yourself so much too. And it's all very well to say that things will be different and you'll make a lot of money some day; but, Peter, suppose you don't! Lots of fine men don't succeed; they stay poor all their lives."

Claudia's sobs broke out afresh, and I walked over to the window and stood staring out, feeling all at once very tired and hopeless and lifeless. This then was what our life and upward struggle together really meant to her—"doing hateful, dirty, grubby things that will have to be done over and over and over again!"

After a long silence Claudia went on in the tone of one who having introduced a painful topic is determined to talk it all out: "I suppose you hate me for being so small; but you know it's not because I don't love you enough to go through anything for you. It just seems so unfair. Other people have so much, and we have nothing. We can't do anything! We can't go anywhere! I should love to travel! We just exist, Peter, and it will be that way for years and years, until we're too old to care for pleasure and luxury and beautiful things. Then maybe we'll have them."

Her tone was bitter. This was a Claudia I had never seen before. She stood up and faced me defiantly. Then she changed to her natural self. "Oh, Peter, I'm a beast!"

I don't know what she saw in my face; but she flung herself on me suddenly in a passion of self-reproach and the Claudia I knew came back to me.

By a silent understanding, we never alluded to that scene again. Claudia I know reproached herself deeply, for she was especially tender and gay and optimistic during the weeks that followed and took unheard-of pains with her house-keeping, as a sort of self-inflicted penance I suppose. Her gallant, pathetic attempts to atone for what she had said only made me doubly unhappy.

There was no warning of the event that made Claudia a rich woman—no signs in the heavens or other unusual occurrences. She went to bed one night just plain

Claudia, and at breakfast the next morning opened the uninteresting looking envelope that told her she was rich, "beyond the dreams of avarice," as she told me with a solemn and awestruck look. It was a matter of some litigation begun half a century before and just settled.

For a while our life went on without much outward change. We went on living in the little suburban house, but with a maid to do the work which Claudia had formerly done. I went away to the city every morning and came back every evening, to be greeted by Claudia just as in the days before the great news reached us. But I knew this could not last long. Claudia said she was just going to keep still a while and get her breath back after the shock before she decided on anything definite. I dreaded the time of her decision, for I could very plainly see that she was harboring a mistaken idea as to the influence her sudden wealth would have on my own method of living.

The time for talking it all out came upon me suddenly and quite unexpectedly. It was Sunday morning, a beautiful, early spring day, and Claudia and I were lingering over a late breakfast. There were daffodils on the table, and the fragrance of spring came in through the window with the sunlight. Claudia laughed suddenly and pushed back her chair.

"Peter," she said, "this weather makes me so happy! It makes me feel so alive. Peter, we are going to Europe."

She said it with a great air of confidence, but she watched me anxiously. As for me, I felt miserably that I would have given ten years of my life to have the next ten minutes safely over with.

"Claudia, darling," I said, trying to speak lightly, "I am a man and I have a man's work to do. I can't play with you."

She clenched her hands in her lap and drew a deep breath. Then she spoke, very quietly. "Do you mean to say that you are going to keep slaving away in that old office when we might be getting something out of our life together—some beauty, some pleasure? Haven't we all the money we'll need for the rest of our days? What is the sense of working for any more?"

"It isn't my money, Claudia," I reminded her.

I had said the wrong thing. She turned on me indignantly. "Peter, how small of you! What does it matter? It was only luck that made it mine instead of yours. Would I have refused to share it if conditions had been reversed? Isn't it more than enough for both? What could I do with that money all by myself? What pleasure could I get out of it? Oh, my dear, I didn't think you were the man to let an out-worn tradition, a stupid, narrow sense of pride, step in between us! Why, we're one. Nothing's mine or yours! I thought you loved me more than that."

Dear, foolish, wonderful Claudia! I went and leaned over her, putting my arms about her and kissing her bright hair. "Listen, dear," I said. "I'm not refusing to share with you. You may build yourself a beautiful house, and I'll live in it with you. You may buy huge automobiles, and I'll ride in them with you. You may give me a present now and then, and I'll thank you for it and treasure it. And once in a while if you ask me to go away with you as your guest on a little journey I will go and see wonderful sights and be happy with you. But no matter what happens I must work and work hard. It's not only to make money, dear. It's—Can't you understand. It's to keep my self-respect. A man's got to be of some use in the world, to have some reason for his existence. Don't you see why I can't just look for the pleasure and the beauty in life? Oh, I can't explain; but it's a feeling as old as the world! A man's not all a man unless he earns his own living in one way or another."

Claudia sat with averted head, looking down at her clasped hands. "You know you wouldn't feel that way if it were your money," she said at last.

"I think I would. I hope I would!" I said. "I don't know. Human nature is weak, and there's such a lot in life to enjoy. But whatever I might have done if the money had been mine doesn't change this, Claudia dear. It's yours, and I want you to have the best time in the world with it. I'll play with you whenever I can, but I must work. You will try to understand and forgive me, won't you?"

I turned her head toward me until her eyes looked into mine. They were wet with tears of disappointment, and her



Give each of Your Children a War Savings Certificate.

LET them feel that they are Canada's partners—that they have each a definite share in the stern struggle—the certain victory—and the free and glorious future.

Encourage them to save and buy Certificates themselves! You'll be developing their patriotism, their thrift and their business sense—for Canadian War Savings Certificates offer absolute security and excellent interest return. More important still, you will be guaranteeing their future, for every dollar lent to Canada helps win the war.



For each \$21.50, \$43 or \$86 lent now, the Government issues a Certificate, payable in three years, for \$25, \$50 or \$100. This means that interest is added at over 5% per annum. Certificates may be purchased at any Bank or Money Order Post Office.

For the sake of Canada and your children, save and invest in War Savings Certificates.

The National Service Board of Canada,
OTTAWA.

27

mouth had the grieved droop of a child's denied some anticipated joy. As I bent my head to kiss her, however, she smiled at me bravely and patted my cheek. "Dear old Peter!" she whispered. "Just let's have all the fun together your horrid conscience will permit anyway. There are so many lovely things to do and see!"

Claudia had surrendered gracefully; but I knew how hard it had been for her to give up her dreams of us two rambling around the world together, poking into all sorts of delightful, out-of-the-way places and leading an altogether care-free existence. In my gratitude to her for having been willing to acquiesce in my decision I determined that we would, as she had said, "have all the fun together" we possibly could and told her so. She was delighted at my unqualified and enthusiastic response, and we spent the rest of the evening making plans for a short stay in town. The morning of our departure she took the early commuters' train with me and talked and laughed and made so many plans for my entertainment during the time I was to be her guest that I gave up all pretence of reading the paper.

"What are you going to do with yourself all day?" I asked during a pause in the plan making.

"My dear," Claudia exclaimed, "I've a million things to do! And all those million things together are to make one huge surprise for you, Peter. I've been planning it for weeks—almost ever since I became a near-millionaire."

"What kind of a surprise?" I inquired with some misgivings. I wondered if I could ever get over that uneasy dread of

having Claudia spend her money on me. She read my thoughts.

"It's nothing I'm buying you, silly! It's things I've bought for myself. And, Peter, if you don't say I'm gorgeous!"

We parted at the subway station, Claudia having admonished me some twenty times to be at the B—in time to dress for dinner at six-thirty, so we should not be late for the theater. We were to have a whole box to ourselves to see the first performance of a famous star's new play, and Claudia said she didn't want to miss one minute of it.

When at six o'clock I knocked at the door of the suite to which the bell-boy had brought me, Claudia's voice cried, "Is that you, Peter? Wait a minute."

I waited patiently, hearing her move about inside the room. At last she spoke through the closed door. "Peter, I'm going to let you in now, and I want you to shut your eyes and not open them until I tell you to. Promise?"

I promised and shut my eyes tight. The door swung open, and a hand on my arm guided me a few paces into the room. Then the door closed softly behind me, the hand left my arm, there was a soft rustle and swish, and a voice, gay, excited and triumphant, said, "Now!"

I opened my eyes. The room was full of the radiance from many shaded lights overhead, and all this light seemed to draw together and center on the figure of Claudia standing, slim and tall, in the center of the floor. She was wearing the counterpart of the Golden Gown. I knew it instantly. The golden satin clung, the golden gossamer floated, and the "long, long train" lay in lustrous, gleaming folds



Thrift that brings Comfort instead of Sacrifice

THRIFT, the paramount national duty, applies to time as well as to money—to small personal outlay as well as to larger family expenditure. Applied to the daily shave, thrift means the use of a

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The Razor of National Service.

The Gillette reduces shaving time to five minutes or less—an actual saving of a week of working days a year! To the man who depends on the barber, it saves still more time, and from \$25 to \$50 or even more annually. This means the cost of one or several War Savings Certificates.

Moreover, there is not a man living with a beard to shave who cannot shave better with a Gillette if he will use it correctly—with the blade screwed down tight and a light Angle Stroke.

For the thousands of young men just reaching shaving age the Gillette Safety Razor is a source of good habits—not only thrift, but punctuality, personal neatness, and efficiency in little things. For yourself or your son, at home or Overseas, it is a splendid investment.

Gillette "Bulldogs", "Aristocrats" and Standard Sets cost \$5.—Pocket Editions \$5. to \$6.—Combination Sets from \$6.50 up. Send for Catalogue. 251

Gillette Safety Razor Co. of Canada, Limited,
Office and Factory: The Gillette Bldg., Montreal.

about her feet. From the golden band that bound her golden hair rose a wonderful feathery aigrette—the gift of a lovely bird which had died that Claudia might be beautiful. She gleamed and glistened and sparkled and shimmered. From the shining, intricately woven masses of her hair to her satin shod feet she was golden—the typification of wealth and of feminine beauty enhanced by wealth.

I think Claudia was as happy that evening as she had expected to be—and that is saying a great deal. Beauty and luxury were hers now, and they became her as though she had known no other environment. Even I had never realized before how beautiful she could be. She fascinated me. I could hardly take my eyes from this dazzling, golden, great lady; yet underneath it all was a little stifled ache and longing for the Claudia of a year ago—a blue gingham girl who had never dreamed of being a near-millionaire.

When the famous star had made his last bow and the last sound of applause had died away I wrapped Claudia in her satin cloak and said, "Where to now, Your Majesty?"

"I had thought of going somewhere for a little supper," said Claudia, "but I think if you'd just as soon I'd like to go home and go to bed. I believe I'm sleepy."

We were whirled along through streets as bright as day and full of people—all happy, all smiling, all bent on amusing themselves. The atmosphere seemed full of gaiety, of the joy of life—of wealth. The taxicab rolled smoothly up to the curb and deposited us at the dazzlingly

lighted entrance of the great hotel. When it had rolled smoothly away again Claudia stood for a moment to gather up her golden draperies, smiling up at me with some little jest about her unaccustomed splendor. Then it was that I saw a wonderful thing happen. A woman, walking slowly, came within the radius of the brilliant flood of light about us. She was an incongruous figure in that place—some scrub-woman possibly going to her night's work. She was dressed in dingy, shapeless black, and she moved like a person infinitely weary and infinitely hopeless. Her two hands—red, coarsely swollen, black nailed hands—clasped a huge bundle wrapped in a crumpled newspaper. A few paces from us she stopped and stood staring at Claudia, and Claudia seeing her drew a quick, gasping breath and gazed back at her. As those two women, oblivious of time and place, looked into each other's eyes I felt sweep over me in a great heart-breaking flood the realization of the cruel irony, the unspeakable bitterness of this thing we call chance and destiny. Here was something more than two women, rich and poor, confronting each other; here was unalterable tragedy. I saw nothing but the woman's eyes—eyes that looked as if they had never been young. In them were despair, dull anger, hopeless revolt against injustice and, most pitiful, a dim gleam of admiration, purely feminine, unquenchable.

All this happened in the space of a few heart-beats. Then, "Claudia!" I whispered sharply, and the revealing moment, the miracle, was over. The woman started to pass on which left me strangely

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The supply of good seed is very limited. Order promptly and avoid being disappointed.

ALFALFA	Bush
Montana Grown, No. 1	\$15.00
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Hungarian Millet	\$4.00
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Jap. Barnyard Millet	7c. lb.
Rape (Dwarf Essex)	13c. lb.
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Condensed advertisements will be inserted under this heading at three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisements inserted for less than 50 cents.

RINGLET BARRED ROCKS - PUREBRED. Trap-nested, heavy winter layers, beauty and utility combined; setting \$1.50; 100% fertility guaranteed. Book order now. Particulars, F. Colham, Barriefield, Kingston, Ont.

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We are open to handle shipments of live spring chickens, etc., at highest market prices, according to quality. Write us for quotations.

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 Fish, Game, Poultry, Eggs and Vegetables
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Want and 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 counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

AGENTS WANTED—EITHER GENTLEMAN or lady, returned soldier preferred, to handle one of the best selling articles on the market to-day. Big profits, enormous demand. Write to-day for full particulars. May Manufacturing Co., Elora, Ontario.

COLLIE PUPS—A FINE LITTER OF well-bred Scotch Collie pups. Order early—get first choice. L. D. Willson, Aurora, Ont.

FOR SALE, QUARTER SECTION, 160 ACRES—Land in North Ontario. A good lot good land; plenty good water; good road through; plenty of good pulp-wood and other timber, part cleared and under cultivation. \$5 per acre. Apply to H. Horsman, Krugersdorf, N. O.

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EST. 1877. Formerly Patent Office Examiner. Makers of Patent Saws, Book, full information, free. 99 St. James St., Montreal. Branches at Ottawa and Washington.

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

"1900" WASHER COMPANY

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 (Factory, 79-81 Portland St., Toronto)

Absolute, lasting, positive satisfaction is assured with every

SHERLOCK-MANNING

20th Century Piano—known as "Canada's Biggest Piano Value"
 Write Dept. 18 for free Catalogue "T."
 THE SHERLOCK-MANNING PIANO CO., London, Canada
 (No street address necessary)

thinking only of her tragic hands, clasping tightly the crumpled newspaper bundle.

Claudia, standing beside me, gazed; then cried out, "Tell me where you live. I must know! I want to talk to you—to help you. Tell me where you live!"

It was a strange look the poor shabby, broken creature gave her—an apathetic look, appraising, but without interest. She seemed too tired to be capable of curiosity. Nothing which could happen to her could rouse her. "Why?" asked the woman. Just the one word—nothing more; but the almost contemptuous indifference of it was like a blow in the face. Claudia caught her breath.

"I want to help you. Tell me!" she said again.

The woman murmured a street and a number and went on without a backward look.

"Have you a pencil? Please write it down," Claudia said to me, chokingly. Then she turned back toward the entrance of the great hotel, and I followed.

Claudia went up to our room like a person in a dream. Without a word she walked to her dressing table and began mechanically to take off the jewels she had worn and drop them in a sparkling heap. She loosened the golden band from her hair, and then, still silent, stood looking into the mirror, but with unseeing eyes. Suddenly she turned to me. "They don't trust rich people, do they?" she said bitterly. "I don't blame them. They ought to hate us! Look at me! Look at these clothes of mine! Do you know what they cost, Peter? Hundreds of dollars! Did you see what she wore? Did you see her hands? Look at my hands, Peter!"

She flung them out—long, slender, white, with rosy palms and perfect nails, beautiful hands made more beautiful by careful tending. I caught them and drew her to me; but she turned away and dropped into a chair, half hiding her face against the back of it.

"Don't!" she said. "Don't try to comfort me! I want to think it out. I know I've been wicked. I've only thought of what this money could do for me! I've planned to spend, spend continuously for my own pleasure because I said to myself that all my life I had been poor. Poor, when there are women in the world who look like that!"

I bent over her, caressing her, trying to soothe her. She looked up at me and clasped my hand tightly between both of hers, clinging to me. "It's really not so much my fault, Peter; do you think so?" she asked like a child. "I just didn't know. I thought if you were pleasant to your family and friends and polite to strangers, and went to church, and didn't ever harm anybody you were a pretty decent sort of person and were doing all that could be expected of you. I didn't realize that any one had any more responsibility than that. You see I was asleep—asleep and dreaming about life. When this money came I was glad in my sleep because it made the dream more beautiful. But when I saw that poor woman I really saw for the first time in my life, and—Oh, Peter, at first I hated the money! I loathed it! I wanted to fling it away!"

She rose to her feet and faced me, her head held high, her hands clenched at her breast, the folds and ripples of the golden gown gleaming about her. But there was something in her face which dimmed its splendors, which made us forget all else. Claudia's soul looked from her eyes.—Pictorial Review.

The Dollar Chain

Contributions from June 15th to June 22nd: Geo. Sherriffs, Preston, Ont., \$1. For Byron Military Hospital for Tubercular Soldiers: Agnes Malcolm, R. 2, Ravenna, \$1; "Reader," Pembroke, \$1; Mrs. Jno. Clements, Ivanhoe, 25 cents; Mrs. D. L. Fleming, 25 cents; Mrs. J. H. Fleming, 50 cents; Ida K. Standeven, St. Mary's, \$1; Mrs. Wm. Edge, Benbrook, \$1; Stanley Laidman, R. 1, Glanford Station, \$1; "A. K. S.," Lambeth, \$1; "A. H. C.," Watford, \$1. The total for Byron Hospital is now \$487.85, leaving \$12.15 still to be made up.

Amount previously acknowledged	\$4,717.90
Total to June 22nd	\$4,726.90

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

Current Events.

Two railway experts, Lieut.-Col. J. W. Boyle of the Canadian Militia, and Lieut.-Col. J. A. MacDonald of the Canadian Railway and Pioneer Battalions, have been sent to Russia to offer advice and aid in reorganizing the railroads already built. They carry credentials to the British and American Ambassadors and the Russian Provincial Government from members of the British Government and representatives of the U. S. and the Russian Government in England.

Crow's Nest mines, which have been shut down on account of a strike, have been taken over by the Government, and work will be resumed at once on terms and conditions satisfactory to both parties.

The Canadian Postal Corps in England distributed over 3,250,000 letters, and over 200,000 parcels during April.

The nations at war have raised for war purposes, and practically expended, the enormous sums of \$66,521,400,000, of which amount Great Britain has raised \$21,021,400,000; Germany coming next with \$14,226,000,000.

The Allied blockade of Greece has been lifted; presumably this means that the Allies are satisfied with the situation in Greece, and see no further need for the measure.

Suggestions are already being made for the regulation of the great increase of air traffic after the war. It is proposed that the first 2,000 feet should be kept for the owner of the soil, and for purposes of landing; the next altitude to be reserved for machines using silenced engines; above this would be different levels reserved for different grades of traffic, and above 10,000 feet the air to be international and free to all, subject to international rules and regulations. Great Britain, with her widely scattered possessions, is in a particularly favorable position and would be able to arrange an air route round the world without asking concessions from any other power.

Earning His Pie.

Eph. Wasson did not believe in the sweetness of bread earned by the sweat of the brow—at least, not by the sweat of his own brow. So Mandy, his wife, like many another industrious colored woman, not only took in washing to pay for the groceries, but chopped her own wood, built the fires, and waited on Eph. besides.

But there was a change when their daughter Clarissa came home. "Clar," who was an expert cook, had gone to school and became a teacher, and had acquired an independent spirit. She quickly took in the domestic situation.

Now all the spring Eph. had watched the cherry-tree in his back yard with a watering mouth. If there was one thing that Eph. liked more than another, it was cherry pie; and Clar was famous for her cherry pies. As good luck would have it, she had come home just as the cherries were ripe.

"Clar, honey," said Eph. in a wheedling tone the morning after her arrival, "won't you cook yo' ole daddy a cherry pie?"

"Very well," said Clar, and Eph. shuffled off happily to his usual loafing-place.

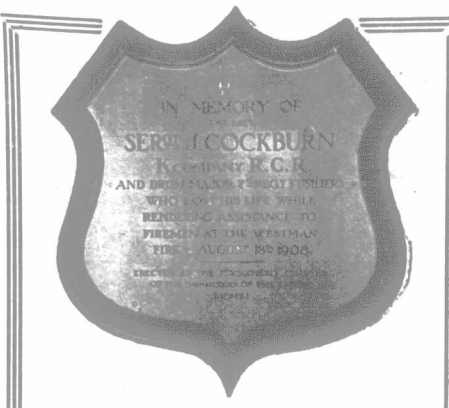
"Law, honey," said Mandy, when Clar started to make the pie, "dar ain't enough wood. Yo' mammy'll have to get some."

"Not a stick!" ordered Clar, emphatically.

Moreover, there was no sugar, and only a half-cup of flour. However, that did not disturb Clar. She picked a pint of cherries, put them in a pan, and poured over them the pint of flour stirred in water. This mixture she put in the oven, and lighted the only two sticks of wood in the house.

At noon Eph. came in with eager anticipation and sitting down at the table, called for his pie. Clar set it before him. He rolled his eyes at the mess in astonishment. It was a queer-looking pie; still, Clar was

Continued on next page.



'Remembered'

THE LAST thing that can be done for brave fellows who have paid for their devotion to duty with their lives, is to keep alive the memory of their nobleness.

Families, churches, lodges, societies, and others wishing to erect appropriate bronze or brass memorial tablets will find every assistance here. Please address Memorial Department.

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Points to Consider When Purchasing a Railway Ticket.

A Canadian Pacific Railway ticket does not represent merely a means of transportation between given points. It, in addition, provides the traveller with every comfort and convenience developed by modern railway science. "Safety First," with up-to-date equipment, unexcelled dining service, palatial sleeping cars, in a word, everything that a railway can provide for the comfortable transportation of its passengers, including courtesy.

A Chance for Those Going West.

Homeseekers' Excursions to Western Canada at low fares via Canadian Pacific each Tuesday until October 30th, inclusive. Particulars from any Canadian Pacific Agent, or W. B. Howard, District Passenger Agent, Toronto, Ont.—Adv't.

Attractive Dining Car Service.

Probably nothing helps more to make a railway journey really enjoyable than a visit to the "Dining Car," especially if it be a Canadian Pacific Dining Car, where the passenger is assured of the highest form of efficiency in the culinary art, the choicest provisions that the market affords prepared on the scientific principle known as "Dietetic Blending."

Your favorite dish, as you like it, may be enjoyed at reasonable cost, amidst ideal surroundings, while travelling on the Canadian Pacific.

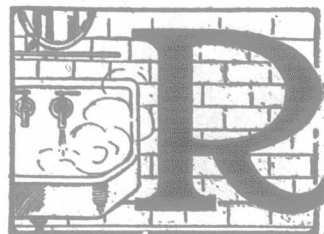
Your Chance—The West is Calling.

Homeseekers' Excursions to Western Canada at low fares via Canadian Pacific each Tuesday until October 30th, inclusive. Particulars from any Canadian Pacific Agent, or W. B. Howard, District Passenger Agent, Toronto, Ont.—Adv't.

"Two penn'orth of bicarbonate of soda for indigestion at this time of night," cried the chemist, who had been aroused at 2 a.m., "when a glass of hot water does just as well!"

"Weel, weel," returned Sandy hastily, "I thank you for the advice. It'll no bother ye after all. Gude night!"

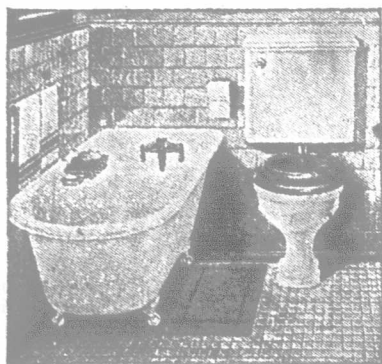
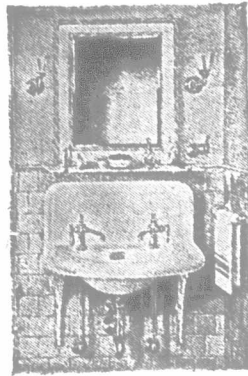
Mabel—"I'm going to get married next month, Lizzie, if Jim can get a week off from his job. I think he'll be able to; yer see, it isn't as if 'e was asking for a vacation to have a good time."—Vanity Fair.



Running water for every building on your farm

Mr. James N. Birrell, of Fanshaw, Ont., writes us regarding his Empire water supply system as follows:

"Dear Sirs:—I never spent money that gave me better satisfaction than your Pressure System. It is a complete success and I am sure that hundreds of rural homes would have your system installed if they knew of its success and convenience."



Empire Water Supply Systems

are giving satisfaction in hundreds of homes to-day. They perform every water carrying service required in the house and barn by the simple turning of a tap. Learn more about this water system.

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Empire Manufacturing Company, Limited
EAST LONDON, CANADA. Branch Office, 119 Adelaide St. W., Toronto.

always learning something new. He cut into it, and took a big mouthful.

"Why," he exclaimed, "you done forget to put the sugar in!"

"No," said the daughter. "You forgot to get it."

"Tain't half-done!" he grumbled, with the sour, clammy mixture sticking to his teeth.

"It cooked as long as the wood lasted," said Clar, unconcernedly.

"And I ain't had a cherry pie for more'n two years," Eph. said, pushing the plate back and shaking his head mournfully.

"When you get something to make it with and something to cook it with, I'll bake you a cherry pie," said Clar.

"Huh!" grumbled Eph., in disgust. "If I's got to work for a cherry pie, I'd rather have greens."

"All right," said Clar. "The greens are out in the pasture; go eat 'em."

But the next day there were wood and flour and sugar in the house in time for a cherry pie. After missing three regular meals, Eph. had concluded that victuals of any sort were worth working for—if he could not get them any other way.

Markets

Continued from page 1055.

cent prices. As a consequence, dealers quoted 38c. per dozen for select eggs; 35c. for No. 1 candled and 33c. for No. 2.

Butter.—The quality of the creamery arriving continued good, but possibly not quite up to that received earlier in the month. Receipts have shown some increase and prices were lower being 37½c. for finest and about 36½c. for fine creamery. Dairies ranged from 31c. to 34c. for fine to choicest, and down to 29c. for lower grades.

Cheese.—The market was very uncertain, but transactions took place on country boards at around 21½c. and locally, at 21½c. to 21¾c., with smaller lots bringing more.

Grain.—The market for oats was quoted at 79½c. for No. 2 Canadian Western; 78c. for No. 1 extra feed, and No. 3; 76½c. for No. 1 feed; 74½c. for No. 2. feed, ex-store; No. 2 Western rye sold at \$2.61 and American No. 2 yellow corn at \$1.85.

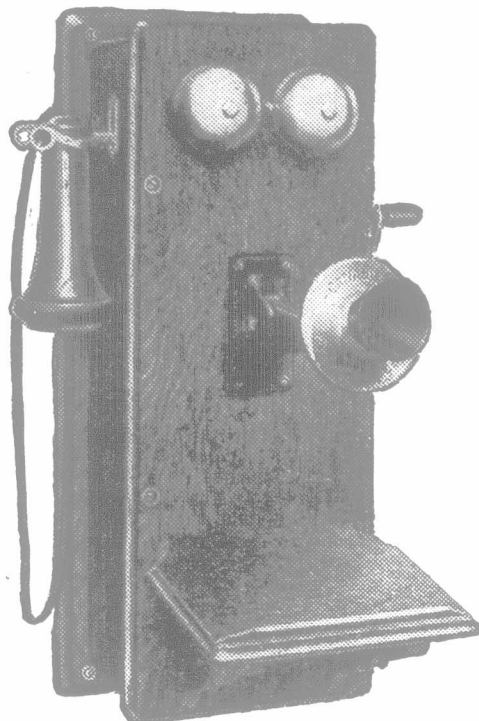
Flour.—Prices were easier at \$13.50 for Manitoba first patents, \$13 for second and \$12.80 for strong bakers', per barrel, in bags; Ontario 90% patents, \$12.50 to \$12.80 in barrels, and \$6 to \$6.15 per bag.

Mill Feed.—Bran was lower at \$33; shorts at \$38; middlings, \$40 to \$42; pure grain mouille \$47 to \$49; mixed \$44 to \$45, including bags, per ton.

Baled Hay.—The market was unchanged at \$13 to \$13.50 per ton for No. 2 baled hay; \$11 to \$11.50 for No. 3, and \$10 to \$10.50 for clover mixed, ex-track.

Hides.—The market has again turned strong. Beef hides were ½c. up at 25c. 24c. and 23c. per lb.; calf skins were up 3c. at 35c. and 33c. per lb.; lamb skins

Keep Money in Canada



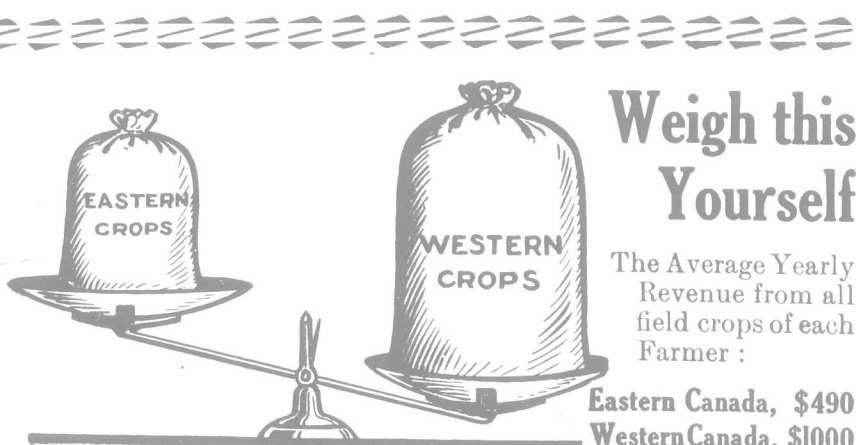
It's good business to buy home-grown and home-manufactured products during war time and keep all the money possible circulating in Canada.

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Eastern Canada, \$490
Western Canada, \$1000

Why not double your earning power by taking up a Free Homestead in Western Canada along the lines of the Canadian Northern Railway? Low Homeseekers' Fares are in effect once a week, till October 31st, from Eastern points.

For full particulars and any of our descriptive booklets, "The Homeseekers and Settlers Guide," "Peace River Guide," or "British Columbia Settlers Guide," apply to Gen. Pas'gr Dept., Montreal, Que., Toronto, Ont., or Winnipeg Man.

CANADIAN NORTHERN RAILWAY

were 5c. more, at 50c. each. Horse hides are \$7. Tallow 3c. to 6c. per lb. for rough, and 11c. to 12c. for rendered.

Cheese Markets.

Belleville, 21½c.; Vankleek Hill, 21¼c.; London, 21c.; St. Hyacinthe, Que., 20½c.; Cowansville, Que., 20¾c.; Montreal, finest westerns, 21¾c.; finest easterns, 21¾c.

Gossip.

Terms of Wilson-Armstrong Sale.

The following are the terms of the Wilson-Armstrong sale to be held at Fergus on July 3: Cash or nine months' credit on bankable paper with 6 per cent. interest. For further information see the advertisement and write for particulars.

Sale Dates.

June 28.—J. M. Gardhouse and J. A. Watt, Elora, Ont., Shorthorns.

June 29.—Mitchell Bros., Burlington, Ont.; Shorthorns.

July 3.—A. and J. A. McKillop, Argyle Farm, West Lorne, Shorthorns.

July 3.—Adam Armstrong and Matthew Wilson, Fergus, Ont., Shorthorns, grades and swine.

Brown Swiss Illustrations.

In the issue of June 14 the illustration of a representative bull of the Brown Swiss breed of cattle appeared. In this number a record-making cow of the same breed is illustrated. Anyone interested in Brown Swiss cattle can obtain information in respect thereto from Ralph H. Libby, Stanstead, Que., Sec'y of the Brown Swiss Breed Association.

The Wilson-Armstrong Sale.

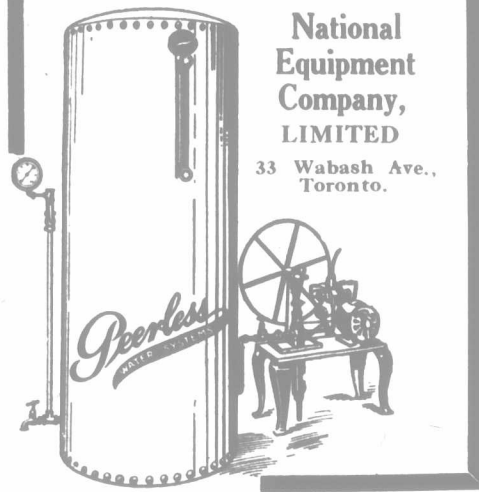
The offering of Shorthorns and Yorkshires advertised by Matthew Wilson and Adam A. Armstrong for sale by public auction at Monkland Farm, Fergus, Ont., on Tuesday, July 3rd, is one of the most select small offerings that will come before the public in any open sale-ring this year. The Yorkshires include twenty-five young sows, all of Monkland breeding and nearly all farrowing around sale time. They are an exceptionally strong selection from a noted herd, and further notes regarding them are quite unnecessary. The Shorthorns could not be a better lot, if they had been picked from herds of double the size, while much of the breeding is pure Scotch and Scotch topped. There are, among the offering, cows that are far above the ordinary for milk production and still every animal offered shows an abundance of Shorthorn character. The families are Stamford, Duchess of Gloster, Broadhooks, Roan Ladys, Raphaels, Clementinas, Cecilias, etc. A good Stamford cow, a Duchess of Gloster cow, and also a 13-months-old daughter of the latter are all in calf to the noted young sire of Escana Farm breeding. Bandsman Hero, a roan six-months bull calf by this sire and out of a Stamford dam, will also be a feature of the sale. Miss Quality, a Roan Lady, five-year-old show cow, selling, also has a bull calf in the sale that will command attention. She is due again in August to Gainford Perfection, a son of Gainford Marquis, while her 15-months bull is got by Monkland Laddie, a Pettit-bred bull got by Silver Prince. This is one of the best calves of the year, and he has been used considerably on many of the younger things in the offering. Four younger bulls offered are also by Monkland Laddie, and each is not only a good prospect for the smaller shows this fall but worthy of a place at service in many of the country's best herds. Those of our readers who will be needing a young sire for service this fall would do well to keep these youngsters in mind. A card addressed to either Mr. Armstrong or Mr. Wilson will bring a catalogue, giving full particulars regarding the entire offering as well as all train connections for Fergus, terms of sale, etc. Study carefully its pages, and aside from the sections mentioned note the breeding as well as the comment given on the younger females that have not been referred to in this short review.

Peerless WATER SYSTEMS

Let us presume that there is no need to convince you that it is better to turn on a tap than to go and pump water, then carry it around.

It remains for us to prove that the system that "works as you hoped it would" is the "Peerless." We want to prove this, not by our word, but by the written experiences of those who have installed Peerless Water Systems. They know!

Write us to-day for the booklet and copies of convincing testimonials.



National Equipment Company, LIMITED
33 Wabash Ave., Toronto.

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
Dovercourt Road Toronto

VOL-PEEK mends holes in all kinds of kitchen utensils, granite ware, aluminum, enameled ware, tinware, etc., etc. VOL-PEEK is like a stiff putty. Simply cut off enough to fill hole. Easily applied by fingers. It hardens in 2 minutes. Repairs the article neatly, quickly, and is sanitary. Food cannot lodge under mend. Costs only 1/2c. for each mend. Your dealer has it, or from us, 15c. and 25c. per package, postpaid. VOL-PEEK Mfg. Co., Dept. D., P.O. Box 2024, Montreal, Can. Made in Canada.

CORRUGATED METALLIC ROOFING CO. LIMITED. TORONTO, CANADA. IRON

The **MUTUAL of Canada** has been investing money for forty-five years without the loss of one dollar.

Cabbage Plants

In best Winter and Fall varieties as Danish Roundhead, Brunswick, Succession, etc., \$1.00 per 1,000 by express, 20c. per hundred, prepaid, per parcel post.

HEROLD'S FARMS
Beamsville, Ont. Niagara District
When writing please mention Advocate

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

Cleaning Out a Watercourse.

A watercourse touches on six farms. D has dug a ditch between C and E deep enough to carry the continual stream of water after the freshet. D then requests C to open the ditch across her farm, but she refuses. In the meantime E has cleaned his ditch and the sediment that washed down could not get away, consequently it lodged in the ditch and causes the water to overflow 9 acres of pasture land. What steps should D take to get the ditch opened across C and B. A has already opened his ditch and cleared up his land.

L. A. B.
Ans.—If an agreement cannot be reached between the parties interested the Municipal Drainage Act provides that "upon the petition of the majority in number of the residents and non-resident persons, exclusive of farmers' sons not actually owners, as shown by the last revised assessment roll to be the owners of the lands to be benefited in any area as described in such petition within any township, incorporated village, town or city, to the municipal council thereof for the drainage of the area as described in the petition by means of drainage work, that is to say, the construction of a drain or drains, the deepening, straightening, widening, clearing of obstructions, or otherwise improving of any stream, creek or watercourse, the lowering of the waters of any lake or pond, or by any or all of said means as may be set forth in the petition, the council may procure an engineer or Ontario land surveyor to make an examination of the area to be drained, the stream, creek or watercourse to be deepened, straightened, widened, cleared of obstructions or otherwise improved, or the lake or pond, the waters of which are to be lowered, according to the prayer of the petition, and to prepare a report, plans, specifications and estimates of the drainage work, and to make an assessment of the lands and roads within said area to be benefited and of any other lands and roads liable to be assessed as hereinafter provided, stating as nearly as may be, in his opinion, the proportion of the cost of the work to be paid by every road and lot or portion of lot for benefit, and for outlet liability and relief from injuring liability as hereinafter defined." Thus it will be seen that it is possible to compel C and B to do their share in opening up the drain. The engineer will assess each farm according to the benefit derived from the drain.

Gossip.

Shorthorn Sale at West Lorne.
Owing to the scarcity of labor and the illness of their herdsman, the firm of McKillop Bros., will offer their Shorthorn herd by public auction at their Argyle Farm, three miles from West Lorne, on the M. C. R., on Tuesday, July 3. This is one of the many good herds of Elgin County. The young bull, Royal Duke, is at the head of the herd. He is of the Kelso family, and his dam is one of the best cows in the county. Most of the young females were sired by Dignity 86938. This splendid sire was of the Duchess of Boston family and his dam was by imported Palermo (77387). The Syme family, noted as a milk and beef producing strain, is well represented in the offering. For full particulars regarding the individuals to be sold see the advertisement and write to McKillop Bros., Box 100, West Lorne.

"What's the difference between a socialist and a plutocrat?"
"There are many; but the leading one is that the former fights for his principle and the latter for his interest."—Baltimore American.

"I could not have done without it this Summer, as help is so scarce"



Here is the experience of one of the scores of dairy farmers for whom the

EMPIRE Mechanical Milker

is taking the place of the farm help they can no longer get, and enabling them to keep their herds together and take advantage of the prevailing high prices.

R. R. No. 3, INGERSOLL, ONT.

Gentlemen:—

I have used one of your "Empire Milkers" since early last April, on from 30 to 45 cows continually, and can find no injurious effects on the cows. They seemed to like it from the first time, and I think gave rather more milk than with the best hand milking. Easy cows seemed less inclined to leak, and hard ones gradually became easier. I have sent the milk a number of years to the Borden Condenser Company, and have had no complaints. I have just followed the instructions for keeping it clean. I could not have done without it this summer, as help is so scarce. I may say further that I have been milking cows for over 50 years, and have been in the milk business nearly that length of time. I have had no previous experience with milking machines, but have had very little trouble or expense for repairs. I have used it on heifers never milked before, with perfect satisfaction, no matter how small their teats were.

The Milker has been of more practical value to me than I ever expected.
WILLIAM COLYER.

We will be glad to send you Booklets showing exactly how the Empire Mechanical Milker works, and telling the experience which dozens of prominent dairy farmers have had with it. Address Dept. G

The Empire Cream Separator Co. of Canada, Limited,
58 MONTREAL TORONTO WINNIPEG.

Help to Win the War

Lloyd George says that shells and food are what are wanted to win the war. By prodigious efforts we have now shells in abundance, but the

Empire Cries Aloud for Bread

We need wheat and still more wheat, and a certain way to get it is by applying

Sydney Basic Slag

when putting in the crop this season. Send us your name and address, and let our man call on you.

The Cross Fertilizer Co., Limited

Sydney, Nova Scotia

Fairbanks Pitless Wagon Scale

You Can Move It Anywhere

There are many places where you need a wagon scale for only a limited time. It is for just such purposes that the easily moved Pitless Scale is particularly adapted.

If you need it in the field—at the barn or railway siding—it can be ready in an hour's time, and it will save its cost every year. Platform is only 9 inches above the ground.

It is equipped with Full Capacity Compound Beam, requiring no loose weights. Weighs accurately up to 6 tons.

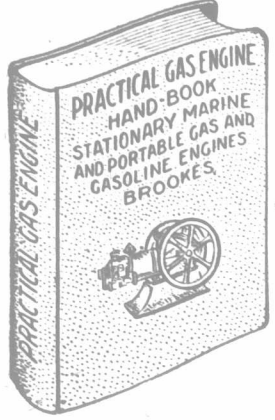
Your local dealer can supply you with guaranteed Fairbanks-scales for every weighing purpose. If not, write us direct.

The Canadian Fairbanks-Morse Co., Limited
Montreal and Principal Cities.

Fairbanks-Morse Power Farm Equipment



The Practical Gas and Oil Engine Hand Book



A most valuable source of information for all Gas engine users. Saves its cost many times over in repair bills and fuel consumption. Price, Leather cover, \$1.50.

Other valuable books and all Power Users' Necessities, such as Belting, Hose, Oil Pumps, and Gasoline Engines, etc., fully described in our 1917 Catalogue. Ask for it.

WINDSOR SUPPLY CO.
57 Sandwich St. West, Windsor, Ontario

Fistula and Poll Evil

Any person, however inexperienced, can readily cure either disease with FLEMING'S FISTULA AND POLL EVIL CURE—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in Fleming's Vest Pocket Veterinary Advisor. Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durably bound, indexed and illustrated. Fleming Bros., Chemists, Church Street, Toronto, Ont.

MESSRS. A. J. HICKMAN & CO. (LATE HICKMAN & SCRUBY), 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.

MORE HORSE-POWER if your teams are equipped with Ventiles. 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.

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. 4, London, Ont.

BROWN SWISS
Learn the merits of the Brown Swiss. Get acquainted and become a breeder of these cattle. For information write to RALPH H. LIBBY Sec. of Canadian Brown Swiss Association Stanstead, Quebec

BALMEDIE ABERDEEN-ANGUS
Get high-class Angus bull and breed the champion steers. I have show-ring quality bulls from 10 to 24 months of age; also choice 1 and 3-yr. old heifers. T. B. BROADFOOT, FERGUS, ONT.

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

Kennelworth Farm Aberdeen-Angus At special prices. Six young bulls sired by Victor of Glenora. All are of serviceable age, and show individuals.
PETER A. THOMSON, Hillsburg, Ont.

Please mention Farmer's Advocate

Questions and Answers. Miscellaneous.

Broken Litter Carrier.

I bought a litter carrier last fall from an agent. It all worked fine but one switch. I notified agent several times last winter and he always said he would come and see it, but failed to do so until the 28th of May. When he came he examined it and took it away with him and said he would send it back to the firm, and on the 31st of May I received a note from the firm saying they had not received it and I have not heard of it since. It is putting me to quite a lot of inconvenience. What proceedings would you advise me to take to recover the switch? Could I collect damages for the time it has been out?

A. K.

Ans.—Evidently it is simply a matter of carelessness on the part of the agent. No doubt his intentions are good, but he keeps putting off attending to the matter. Call on him and have him explain why the switch has not been attended to. If he pays no attention to you your course would be to serve notice to return your property. Owing to the difficulty of proving the extent of damages owing to the switch being out of commission it would be difficult to collect. However, it would all depend on how a judge viewed the case.

Building a Concrete Water Trough.

What is the proper way to build a large, permanent water trough to be used on a cattle ranch? I wish to build it of concrete and have it so that it will neither heave nor crack with frost. It has to be built in a low but not springy place. Surface water runs into it but there is no way of emptying it. Would raising the foundation on a foot of stone and gravel prevent it from heaving?

A. D.

Ans.—Where frost goes into the ground to a depth of 1½ or 2 feet it is rather difficult to build a concrete trough in the open that will not crack if left full of water. A foot of stone and gravel in the bottom would certainly afford drainage, thus partially eliminating danger from heaving. It is advisable to have the foundation below the usual frost line. An 8 or 10-inch wall built of concrete in the proportion of one of cement to six of gravel should be strong enough. Wire or iron rods could be bent at right angles and placed in the corners to prevent them from cracking. If it were possible a tile drain should lead away from the trough to drain the foundation and it might also be connected up with the trough so that by removing a plug the trough could be emptied during the winter.

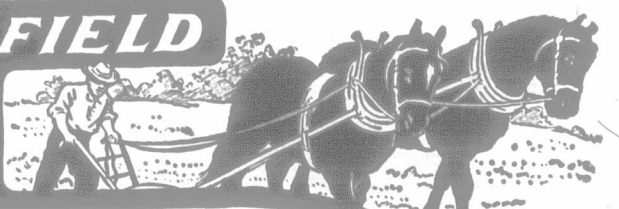
Difficulty Over an Outlet.

We have a farm beside one of our neighbors, and about three years ago he wanted an open ditch tiled. He said the cattle filled it up. We agreed to put in tile and did all the work, he giving two hundred tile, we furnishing the rest. He said if it was tiled about forty rods into the swamp that was all he wanted, as there is an open run away from there. Now, because a little water lies on his field after a heavy rain he asks us to lift the tile and put in an open ditch or larger tile. A three-inch tile would take all our water, but there is a five-inch in now. Can he force us to raise it and put in large tile? When we refused to do that he served us and another neighbor with papers to have a meeting to open the ditch through our swamp about 80 rods and across the road into neighbors' pasture farm and run it down about one hundred rods into a creek. It does not benefit us or our neighbors any as the land is pasture and swamp land. It is all for his own good. He has all the fall he needs when it is run into swamp, as no water lies on our field. We are willing to do what is right, but do not think that we should do all the work to benefit him. The ditch is his main outlet for his farm, and I think he has a right to dig some of it. Can he force an outlet like that for his benefit when water gets away all right now?

A. J. T.

Ans.—It is oftentimes difficult for men to see eye to eye on drainage problems. If you cannot agree it is advisable to call on the engineer who will decide on the amount of work each should do.

IN THE FIELD MAKING MONEY



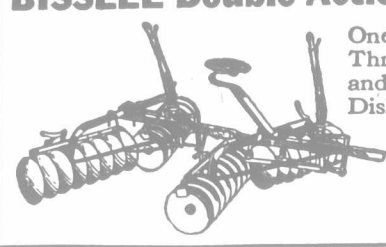
or lame in the barn, "eating their heads off"? One means profit—the other means loss. When a horse goes lame—develops a Spavin, Curb, Splint, Ringbone—don't risk losing him through neglect—don't run just as great a risk by experimenting with unknown "cures". Get the old reliable standby—

KENDALL'S SPAVIN CURE

Mr. David Yerex, Sonya, Ont., writes—"I have used your Spavin Cure for fifteen years, and know it to be a good cure". Be ready for emergencies, keep a bottle of Kendall's in the barn. Then, if a horse goes lame, you have the remedy on hand to cure the trouble quickly, \$1. a bottle—6 for \$5. at druggists'. Ask your dealer for free copy of book—"Treatise On The Horse"—or write us direct.

Dr. B. J. KENDALL CO., ENOSBURG FALLS, VERMONT, U.S.A. 110

BISSELL Double Action Harrows will thoroughly cultivate and pulverize any soil.



One Harrow is Out Throw; the other is In Throw. They are simply constructed, rigid and durable. The Gangs are flexible and the Disk Plates are so designed that they "hang" right into the soil. Bissell Harrows are built in sizes and weights suitable for horse or tractor use. Write Dept. W for free catalogue. 98

T. E. BISSELL CO., LTD., Elora, 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.

Clontarf Farm MANNING W. DOHERTY Established 1820
Clydesdale Horses-Holstein Cattle-Yorkshire Hogs
We always have some choice young breeding stock to offer.
Post Office—Malton Nearest Station—Cooksville C. P. R.
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.

ESCANA FARM SHORTHORNS

Sires in use; NEWTON GRAND CHAMPION (IMP.), a Marr Clara, recently imported, and RIGHT SORT (IMP.). His get has won numerous first and special prizes at Toronto.
FOR SALE—Seven bulls, choice individuals at reasonable prices. Also a dozen cows and heifers, some of them bred to our herd sires. Herd numbers 100.
MITCHELL BROTHERS BURLINGTON P.O., ONT.
Jos. McCrudden, Manager. Farm, ¼ mile from Burlington Jct.

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 Kingleader, 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.

SHORTHORN CATTLE AND LINCOLN SHEEP

Young cows and heifers of the best Scotch families. Sire in service, Sittytton'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.

CLYDESDALES and AYRSHIRES

Two Canadian-bred stallions, rising 3 year old, sired by imported horses, one from an imported dam other's dam is Dolly Murray, the Canadian-bred champion mare at Toronto, 1913. Come and see them. They are priced to sell. We are offering some choice young bulls and a few females.
LAURIE BROS., AGINCOURT, 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.

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

Pleasant Valley Farms We have for sale (at prices that will move them in the next 30 days) the following exceptionally good bulls 1 ROAN, 1 BROADHOOKS, 1 ROSEWOOD, 1 WIMPLE, 1 STAMFORD, 1 MERRY LASS, 2 DUCHESS OF GLOSTERS and several others. Also equally well bred cows and heifers bred to (imp.) ROYAL SCOTT, and BEAUMONT BEAU. Inspection invited. Our cattle will interest you. 90 head to select from.
GEO. AMOS & SONS Farm 11 miles east of Guelph, C. P. R., MOFFAT, ONTARIO

NICHOLSON'S SHORTHORNS

Herd headed by "Best Boy" =85552 =, and "Brownvale 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.

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.; Murtle, 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.

Green Grove Shorthorns

Our herd represents the best Scotch families. Present stock bull, "Victor Stamford" =95959 =. Present offering 3 young bulls and several young cows and heifers. Some choice show stock.
Geo. D. Fletcher, Erin, Ont., R. R. 1, Erin Sta., C.P.R. L-D, Phone.

HORSE OWNERS! USE

GOMBAULT'S CAUSTIC BALSAM.
 A safe, speedy and positive cure. The safest, best BLISTER ever used. Removes all bunches from horses. Impossible to produce scar or blemish. Send for circulars. Special advice free.
 THE LAWRENCE-WILLIAMS CO., Toronto, Canada

WANTED CREAM
 We pay highest market prices for churning cream of good quality. We Remit promptly, Test accurately, Supply you with cans, Give you a square deal.
 Enough said. Write for fuller particulars to
ROSEDALE CREAMERY CO.
 Kitchener, Ontario

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

GOOD LAGER BEER
 Make it in your own home with **HOP MALT EXTRACT**
 Made only of pure hops and malt. Real beer with the good old flavor conforming to the Temperance Act.
 Small Tins \$1.00; Large \$1.50 Prepaid. Full directions with each tin. Agents Wanted.
DEPT. A Hop Malt Co., Beamsville, Ont.

PLASTER HILL HERD
 DUAL-PURPOSE SHORTHORNS.
 A few choice bull calves coming on; also a few heifers in calf to Butterfly Champion 110726.
F. Martindale & Son, Caledonia, Ont. R. R. 3.

Mardella Shorthorns
 Bulls, females, sires, 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

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

Brownlee Shorthorns. Offers a choice lot of young bulls, ranging in ages up to nine months and sired by the Nonpareil bull, Royal Saxon. See these before buying elsewhere. Could also spare a few females.
Douglas Brown Bright, Ont., R. R. 3, Ayr Station, C. P. R.

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.

Mertoun Shorthorns FOR SALE. Stock bull, Prince Albert =92693=; Sire, Roan Chief (imp.) =69865=. He has proved a good sire, is quiet, sure and active. His heifers coming of breeding age, reason for selling.
James Hill, R. R. No. 1, Staffa P.O., Ontario

Questions and Answers. Miscellaneous.

Cow Does Not Give Milk Freely.
 I have a pure-bred cow showing every indication of being a good milker, but every time we commence to milk she draws herself together and does not let down the milk. The teat does not seem to be obstructed. Would lancing the teat be advisable?
W. S.

Ans.—It may be that the pressure on the teat hurts the cow. Sometimes the opening is very small which results in a small stream of milk being drawn. It is possible to operate when the cow is dry, but it is advisable to have a qualified veterinarian do the work.

Line Fence.
 How should a line fence be divided? A and B live on adjoining farms; B sells part of his land to C, which included his share of the line fence between him and A. B now claims he has no fence to build. Should he build half the line fence on his remaining land?
H. M.

Ans.—The law requires that a man build and keep in repair one-half the line fence. Owing to the land being divided, a new distribution of the line fences would be necessary in this case and B would be called upon to keep up one-half the fence between he and A, while A would be responsible for one-half the fence between he and C.

Dislocation of the Patella.
 Last January a lump about the size of a goose egg came on the stifle of a ten-months-old colt. It disappeared and there was no lameness. His stifle now swells and he is quite lame. Sometimes the leg is stretched back as if resting it on the toe. Most of the time, however, it is forward. Can anything be done to remedy it?
R. Y.

Ans.—The symptoms indicate dislocation of the patella, commonly called stifle. Get a blister of 2 drams each of biniodide of mercury and cantharides; mix with 2 ounces of vaseline, clip the hair off the front and inside of the joint. Tie the colt so it cannot bite the parts, rub well with the blister once daily for two days. On the third day apply sweet oil and turn loose in a box-stall. Oil every day until the scale comes off, then tie up and blister again and repeat once a month for four or five months if necessary. It is advisable to keep him quiet.

Variation in Cream Tests.
 1. A has a herd of cattle of the same breed as B's herd, who lives on an adjoining farm. Both use the same make of cream separator. If cream screws are set the same can there be any difference in the quality of cream? Should they not both test the same?
 2. Is cream from one cow any better than from another—for instance, with a cow giving 6 gallons and another giving 4 gallons, irrespective of breed?
H. J. W.

Ans.—1. The cream screw largely regulates the consistency of cream, but there are other factors which enter in and tend to vary the test. The temperature of the milk, the rate of feeding the milk into the separator, and the speed of the bowl all influence the test.

2. Butter-fat is butter-fat, although some claim that certain breeds give higher quality butter-fat than others. The amount of cream will vary with different cows, but if the cream tests say 30 per cent. butter-fat from the cow giving 6 gallons and the one giving 4 gallons there should be little difference if any in the quality.

Military surgeon to patient newly arrived.—"What's the trouble?" Scottish patient.—"Nae trouble, sir." Surgeon.—"Well, what's your complaint?" Patient.—"I dinna' complain at a'." Surgeon.—"Then why did you come here?" Patient.—"I was just sent." Surgeon.—"But have you no wound?" Patient.—"Oh, ay, I hae a wheen o' them!"

Fifty-fifty.—Passing a hand over his forehead, the worried drill-sergeant paused for breath as he surveyed the knock-kneed recruit. Then he pointed a scornful finger. "No," he declared, "you're hopeless. You'll never make a soldier. Look at you now. The top 'all of your legs is standin' to attention, an' the bot-legs is standin' at ease!"—Tit-Bits.

23 SHORTHORNS
AT AUCTION
Seventeen Females Six Young Bulls
 Carefully selected from the herds of Adam A. Armstrong and Matthew Wilson, both of Fergus, Ont. With one exception the females are all young cows and heifers, and are made up of some of the very best Scotch-topped families. Excepting those that have calves at foot, nearly every female offered will be showing safe in calf at sale time.
 The young bulls are one hundred per cent. good ones, bulls that will be winners at the coming shows, and, like the females, their breeding too is all that can be desired. Come and see them sold at
MONKLAND FARM, FERGUS, ONTARIO, on
Tuesday, July 3rd, 1917
 At the same time there will also be sold 25 Young Yorkshire Sows, all of Monkland breeding and all near farrowing. Write for catalogue now, mentioning this paper, to
Matthew Wilson, Adam A. Armstrong, Fergus, Ontario.
 Monkland Farm is only 300 yards from C. P. R. and G. T. R. stations.
CAPT. T. ROBSON, Auctioneer.

Shorthorn Sale
 The Shorthorn herd belonging to the estate of A. McKillop will be sold at auction. This is a splendid chance for anyone wishing high-bred stock. There are about 30 head and some excellent milkers and all regular breeders.
 Sale will take place at Argyle Farm, 3 miles north of West Lorne, on the Pere Marquette and Michigan Central Railways, at 1 p. m. on
Tuesday, July 3rd, 1917
A. & J. A. MCKILLOP, Trustees

There are men that have good Shorthorn Herds that need good bulls to head them. There are men that have herds that are kept to breed thick, easy-feeding cattle and big cows that are good milkers. There are men that are trying hard to start improvement in their own herds and in their neighborhoods.

I have a suitable bull for each at a moderate price and I PAY THE FREIGHT.
 Business established 81 Years **Robert Miller - Stouffville, Ont.** One hour from Toronto

OAKLAND-- 50 SHORTHORNS
 A herd of breeders, feeders, 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

Imported Shorthorns Cows and heifers in calf, or with calf at foot. Yearling bulls and bull calves. One of the best importations of the year. You will be surprised when you see them.
Will. A. Dryden, Maple Shade Farm Brooklin, Ont.

BLAIRGOWRIE 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.

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

SALEM SHORTHORNS
 Nothing for sale at present. Annual sale June 28th.
J. A. WATT, Tel. 101, Elora, Ont.

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

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.

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 Ayr.

When writing please mention Farmer's Advocate

MANOR FARM

Senior Herd Sire is

KING SEGIS PONTIAC POSCH

Sire, King Segis Pontiac Alcartra (the \$50,000 bull)
Dam, Fairmont Netherland Posch

7-DAY RECORD, 4 YEARS, 29 DAYS

Butter..... 32.54
Milk..... 511.50
%fat..... 5.09

Junior Herd Sire is

KING KORNDYKE SADIE KEYES

Sire, Sir Sadie Korndyke Segis

Dam, Lulu Keyes

7-DAY RECORD

Butter..... 36.05
Milk..... 785.40
Highest day's milk. 122.80

What better combination can be had? I have no sons from my junior sire yet; there are just a few left from King, from good A. R. O. dams, and priced right to sell.

Gordon S. Gooderham

Manor Farm

Clarkson, Ont.

HOSPITAL FOR INSANE

Hamilton, Ontario

Our only offering at present is a bull born February 10th, 1917, a grandson of Dutchland Colantha Sir Mona, and the great cow, Lakeview Lestrangle, 28.34 lbs. butter in 7 days. His dam is a high-producer and tester, and carries the blood of King of the Pontiacs and King Segis.

Apply to Superintendent

Sunnybrook Farm Holsteins

YEARLINGS:—Male and female for sale, from high-record dams testing from 14 to 30 lbs. butter in 7 days, giving from 7,000 to 12,000 lbs. of milk; sired by Sunnybrook Mercedes Natoye, whose dam has a seven-day record of 29.34 lbs. butter, and Count Favorit Sylvia Segis, highly strained in the blood of the world's only 50-lb. cow.

Joseph Kilgour, Phone, Toronto, Adelaide 3900, Belmont 184, Eglinton, 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

WANTED—Registered Females

I am on the market for a number of pure-bred Holstein females, with records up to 30 lbs. Would be pleased to hear from you as to what you have to offer. Kindly state in your first letter, pedigree, price and full information, with photo of each animal

W. G. Bailey, R.R. No. 4, Paris, Ont. Oak Park Stock Farm

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 bulls 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

Low Banks Farm Holsteins K. M. Dalglish, Prop., Kenmore, Ont.

Pontiac Korndyke and May Echo Sylvia—strongest combination of milk and butter in the world. Present offering—3 beautiful young bulls, sired by Sir Echo, from daughters of Pontiac Korndyke, with 2-year-old records of considerably over 20 lbs. each; also 4 sons of Fairview Korndyke, from dams with similar records, going as high as 30.14 lbs. All straight, good individuals at moderate prices.

Canadians Buy English Cattle.

EDITOR "THE FARMER'S ADVOCATE":

Colonel Reid, a Canadian lover of the Jersey breed of cattle, paid 86 guineas for a yearling heifer, Matchless 3rd, offered at Joseph Carson's sale of 47 head at Crystalbrook, Theydon Bois, Essex, at the end of May last. Matchless 3rd is bred for milk. She is by Proconsul, out of Matchless 2nd (an island cow). Now, Matchless 2nd yielded 6,084 lbs. of milk in 330 days with her first calf, and Post Obit, the dam of Proconsul, yielded 95,994 lbs. of milk in nine years or a general average of 10,656 lbs. She won 22 prizes in inspection classes, including six firsts and two silver cups. Matchless 1st, the grandam of this Canadian heifer, produced in the island 2 lbs. 12½ ounces of butter from 49 lbs. 6 ounces of milk. Going back still further on Proconsul's side we find that his great grandam, Miss Viola, won six firsts and one champion prize in the show-ring and yielded 12,342 lbs. of milk with her calf in 1906-7; 10,358 lbs. in 1908 and 10,353 lbs. in 1909, and averaged 9,098 lbs. for six years. And still another great grandam, Marigold, won 24 firsts, including three gold medals, in butter tests, and averaged for 12 years 9,448 lbs. of milk. If those records do not satisfy Canadians they are hard to convince as to the value of "line" breeding.

The Royal Show champion Aberdeen-Angus cow, Evmonda, owned by James Kennedy, Doonholm, Ayr, has been sold to J. D. MacGregor, Brandon, Manitoba, for a big price.

Extraordinary prices are being made for English commercial stocks—both cattle sent to market and farm horses that have to come under the hammer. Bullocks (fat) offered by auction at weekly marts are realizing £70 or about 17s. to 18s. per 14-pound stone. Farm horses make £105 to £120 as easily as winking. Unbroken colts are costing £63. Sheep will rise to an undreamt-of height this autumn—shure.

ALBION.

A young Swede appeared at the county judge's office and asked for a license. "What kind of license?" asked the judge. "A hunting license?" "No," was the answer. "Aye tank aye bane hunting long enough. Aye want marriage license." —Freeman's Journal.

We Buy Wool

WRITE US

Harris Abattoir Co., Limited
Strachan Ave., Toronto

Willowlee Holsteins Record 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.

RIDGEDALE 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.

We have the only 2 sons in Canada of the 46-lb. bull, Ormsby 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 38.4lbs. butter in 7 days. 11 bull calves of lesser note and females all ages.

R. M. HOLTBY, R. 4, Port Perry, Ont.

SILVER STREAM HOLSTEINS—SPECIAL OFFERING:

Two bulls fit for service, sired by bulls with 30-lb. backing, and from R.O.P. dams with records up to 500 lbs. butter made as two-year-olds. We also offer three bull calves from 3 to 6 months. If you want a bull of like breeding, write quick. Priced reasonable so you can buy.

J. MOGK & SON, R. R. No. 1, Tavistock, Ont

CLOVERLEA HOLSTEINS

Our entire lot of bulls, fit for service, as advertised, are sold. We still have a number coming on, eight months and under, which will be priced right for immediate sale. Write quick, for they will go fast—as the others did.

GRIESBACH BROS. COLLINGWOOD, ONT.

DUMFRIES FARM HOLSTEINS

175 head to choose from. Special offering: bulls from one month to one year old.

S. G. & ERLE KITCHEN, ST. GEORGE, ONTARIO

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.

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 293½ lbs. butter. His first granddaughter, through his son, at 2 yrs. 2 months, made 440 lbs. milk and 23½ lbs. butter. Young stock for sale.

A. A. FAREWELL, OSHAWA, ONTARIO.

Riverside Holsteins Herd headed by "King Johanna Pontiac Korndyke", a brother of Pontiac Lady Korndyke, 38.02 lbs. butter in 7 days, 156.92 in 30 days—world's record when made. His ten nearest relatives have official records that average 34.94 lbs. butter in 7 days. His daughters have made good in official test. The present R. of P. cow of Canada was bred here. Choice young bulls for sale.

J. W. RICHARDSON, R. R. No. 2, CALEDONIA, ONT.

Questions and Answers. Miscellaneous.

Modest Sphinx.

Under separate cover I am mailing a parcel containing a large insect which I found flying at night. Kindly name it. W. M. C.

Ans.—The insect received at this office is known as the Modest Sphinx (marumba modesta). It is one of the most beautiful of the Hawk-moths.

Bloody Milk.

What would cause a young cow to give bloody milk from one quarter? When the cow is hurried it is worse. What treatment do you advise? R. T.

Ans.—The trouble is due to the rupture of small blood vessels in the udder which may be due to inherited weakness or to an injury. In some cases the recurrence of the trouble cannot be prevented. Bathe the udder well and often with cold water and give one ounce tincture of iron in a pint of cold water twice daily until the blood ceases to appear in the milk.

Work Hours on the Farm.

1. What hours, chores included, are considered a day's work on a farm for a man hired by the month?

2. Can he collect for overtime?

3. If he loses time by sickness or accident does he have to put it in? W. J. C.

Ans.—1. There are no definite hours of work on the farm; it is largely a matter between the employer and employee. It is customary to work in the field from seven until six, with one hour or an hour and a quarter off at noon, and do the necessary chores before and after the hours mentioned. During the rush seasons of haying and harvest, the hours in the field are sometimes a little longer.

2. Unless it is specifically stated in the contract that a certain number of hours comprise a day's work no collection can be made for overtime.

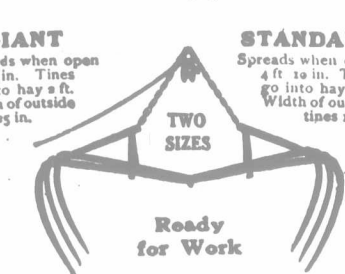
3. If an accident happens when doing the regular work and through no carelessness on the man's part, it is reasonable that he should collect pay for time lost. In case of sickness time lost is supposed to be made up.

LOUDEN

Balance Grapple Fork

GIANT
Spreads when open 6 ft. 7 in. Times go into hay 8 ft. Width of outside tines 25 in.

STANDARD
Spreads when open 4 ft. 10 in. Times go into hay 6 ft. Width of outside tines 19 in.



TWO SIZES

Ready for Work

For All Kinds of Hay

In alfalfa, timothy, loose grain or straw, there is nothing to equal it. There can be no disappointment to the user of a Louden Fork. Build your loads without special care, by hand or with a loader, it does not matter, this fork goes right after it, and handles it right.

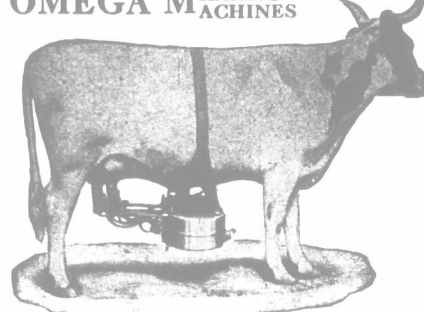
Not difficult to work
Our Patent Arch Support insures a perfect balance, and swings the fork true open or closed. Handled as easily as a harpoon fork, and gives much better service.

REMEMBER, there is not another fork just as good. Insist upon a Louden. Write for catalogue covering our complete lines.

"Everything for the Barn"

LOUDEN MACHINERY CO. OF CANADA, LTD.
Dept. 712 GUELPH, Ont. 7

OMEGA MILKING MACHINES



MILKS FAST AND CLEAN

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.

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C. RICHARDSON & CO., St. Mary's, Ont.

Harab-Davies

Fertilizers

Yield Big Results

Write for booklet.

THE ONTARIO FERTILIZERS, LTD
WEST TORONTO

LAKESIDE AYRSHIRES

A few young bulls for sale from Record of Performance dams, imported and Canadian-bred, sired by Aucherbrain Sea Foam (imp.) 33738, grand champion at both Quebec and Sherbrooke.

Write for catalogue
GEO. H. MONTGOMERY, PROPRIETOR,
Dominion Express Building, Montreal, Quebec
D. McARTHUR, MANAGER, PHILIPSBURG, 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

Herk 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 Str., G. T. R.

SUNNYSIDE AYRSHIRES

We have at present the strongest lot of young bulls we ever offered—one by Hobsland Masterpiece, one by Sunnyside Matchless, and the others by our present herd sire, Sunnyside Masterpiece.

Jno. W. Logan, Howick 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.

A Town That Was Different.

Were you to drop into a certain little town in one of the Middle Western States, you first would be impressed with the unusual amount of business being transacted, and you would notice that everybody you met seemed happy and contented. If you were a keen observer you'd detect the fact that many of the people in the stores and on the streets were farmers. And if you were real curious to know the reason for this condition as was the traveler who furnished the foundation of this story, it would be a simple matter to get at the bottom of it merely by accosting the first man you met and asking him, "What is there about this town that gives it such an air of prosperity and happiness?" He would tell you virtually the same story that we have here set down—the same story that was told by a big, pleasant-faced farmer to our friend who wanted to know.

Here is his tale—commonplace, you may say, yet brimful of facts of interest to all of us who are concerned in our community's welfare:

"Several years ago this town was not unlike most of the smaller villages throughout the country—in fact, it was a typical small town. Business was fair, schools were mediocre, and the roads leading into town, in good condition part of the year, were practically impassable at times. The people of the entire community went their own way, content to think and act as their fathers had done before them. And then came the big idea—the idea that is responsible for the conditions that prompted your question, 'Why is this town better?'"

"One day, just an ordinary day, a business man and farmer were talking in a general way about conditions in the community. It dawned suddenly on both of them that their interests in the community were identical; that what was of interest to one was of interest to the other; that if one prospered, the other prospered. They decided to have a get-together meeting of townsmen and country people of the community. The meeting was held, and those attending saw that a permanent organization was necessary to carry out the plans discussed. And so a community club was formed.

"It is unnecessary to go into detail, explaining the workings of this community club. You can see with your own eyes the effect that it has had on this town. So far as the benefit to the country is concerned, I wish that you had time to drive out to several farms and talk with the farmer residents of this town. This term may sound strange to you, but we ARE residents, although we live on the outskirts. We have wiped out the imaginary economic line that sometimes acts as a barrier between town and country. We believe that a man who drives five miles to the town proper to do his trading is just as vitally interested in the growth of the town as is the fellow who walks five blocks. Because, as the town grows, just so does the value of the farmer's land increase. You may think that this last statement places undue emphasis upon the selfish side of the question. But remember this: Although both the farmer and merchant do prosper, it is the result of an unselfish rather than a selfish motive. The fellow who goes into our organization simply to play his own game doesn't last long.

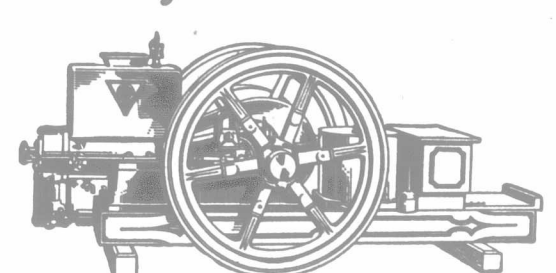
If you were to drive out to the different farms of this community, you would notice that the owners would refer to 'our town'. They are proud of the town. They are proud of the community as a whole.

"Through the teachings and benefits of these community meetings the farmers have learned how to farm better, how to raise bigger crops and better stock. Roads have been improved so that they are passable during practically all seasons of the year. This has made possible sending our children to the high school. And don't you forget that the farmer is vitally interested in good schools. Through the co-operative work of all the people of this community, our schools have been raised to a much higher standard. Courses in agriculture, with efficient teachers at the head, have been established. Our children now have first-class city school advantages, something denied them before the roads were improved and before the get-together movement started.

"And then there is the social side of life. Before we had this community club, the farmer was practically isolated

HARD JOBS MADE EASY

if you have an



Alpha Gas Engine

THE farmer who goes on doing all his work by hand is wasting a lot of time and energy.

He could accomplish a great deal more work, and do it more quickly and more cheaply, if he had a good gas engine.

For some reason, many farmers who without hesitation will buy a mowing machine that they can use only seven or eight times a year, will balk at buying a gas engine with which they could save time, money and labor every day. They seem to regard it as a luxury, when, as a matter of fact, it can be put to so many different uses that it will save its own cost more quickly than any other machine on the farm.

Go in and see the local Alpha agent. Let him show you for how many different purposes you can use the Alpha, and why it is the most economical engine to buy and the most satisfactory to own. If you don't know who handles the Alpha in your neighborhood, write us for his name.

The sooner you get an Alpha, the sooner it will pay for itself.

Ask for catalogue, prices and complete information. Made in eleven sizes, 2 to 28 H.P. Each furnished in stationary, semi-portable and portable style, and with hopper or tank-cooled cylinder.

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

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

PREPAREDNESS

The Government says that milk will be paid for by test—therefore

Buy Jerseys NOW

CANADIAN JERSEY CATTLE CLUB

Jno. Pringle, President
London, Ont.

Bartley A. Bull, Secretary
Brampton

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.

THE WOODVIEW FARM JERSEYS

LONDON, ONTARIO
Jno. Pringle, Prop.

CANADA'S MOST BEAUTIFUL JERSEY HERD

Present offering—Some high-class bull calves ready for service, from Record of Performance dams, including grand champion bull at last Western Fair and his full brother; also cows and heifers. State distinctly what is wanted if writing WE WORK OUR SHOW COWS AND SHOW OUR WORK COW

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.

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.

Heaves CURED
—by removing the cause—and cured to stay cured—If 3 boxes of Fleming's Tonic Heave Remedy fail to effect a cure of any case, old or new, we will refund the full amount paid.
For Box, \$1.00; 3 for \$2.50. Mailed on receipt of Price.

Scratches Disappeared
Gentlemen—I gave a course of your Tonic Powders, which has put a horse and his mate in fine shape, and a touch of scratches has quite disappeared.
Geo. A. Miles, Oxville, Alta.

Full information in Fleming's Vest Pocket Veterinary Adviser
Write us for a Free Copy

FLEMING BROS., Chemists
75 Church St. - Toronto, Ont.

**HEADQUARTERS FOR
COTTONSEED MEAL**

BRANDS
"American Red Tag" Protein 38 1/2%, Fat 6%.
"Surety Brand"; Protein 36%, Fat 5.50%.
"Creamo Cotton Seed Feed Meal"; Protein 20 to 22%, Fat 5%.
Mills conveniently located in the south, in every cotton-growing state.
Prices on application in car lots or less.
Fred Smith, 32 and 34 Front St. W., Toronto.

Yorkshires

From choice stock on both sides. Several young litters. Also some young sows, ready to be bred.

WELDWOOD FARM

Farmer's Advocate, London, Ont.

**SPECIAL OFFER OF PEDIGREE
Tamworth Breeding Stock**

Young sows in pig, also males and females about to be weaned.
HEROLD'S FARMS, Beamsville, Ont.
(Niagara District)

Avonhurst Yorkshires and Collies
A choice litter of pedigreed Collie puppies, sable and white; both sexes. A few good sow pigs, 8 weeks.
B. ARMSTRONG & SON,
Codrington, Ont.

TAMWORTHS

Young sows bred for August 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.
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from the social affairs in town. The women folks, who had worked hard all day, many times wished to go to some entertainment in town, but were denied the privilege, principally because of bad roads and the fact that the town folks, due largely to conditions over which they had no control, made little effort to get the country people into town.

"Things have changed now. Of course the automobile has been a factor in altering these conditions. We don't think anything of driving to town in the evening to some sociable or entertainment, and the townspeople visit our country entertainments and church affairs. Talk about the problem of keeping the boy on the farm—we have solved it. He has his boy friends in town, they visit back and forth, and, altogether, life for the boy is worth living.

"We all have got better acquainted and have a much nicer time than we formerly had. Through our closer contact socially we have found that we are all just folks—and that we are very much interested in one another's welfare.

"We have all broadened our viewpoint through association. We farmers realize that the merchants have a place in the community and perform a real service to us. After all, the needs of the farmer were largely responsible for the town's springing into existence. And now that we have been leading factors in creating the town, we should support it. And the townspeople are obligated to help the farmer. This is the view that we in this community, have taken and—well, it's a mighty good community to live in."

The foregoing story illustrates the good results accruing from a closer co-operation between town and country. After all, no one individual, whether he be merchant or farmer, can prosper without its affecting other people in the community. It may act more or less indirectly, but the influence is felt—eventually.

Some day—and that day is in the not very distant future—the small town will be recognized by all as the hub of the social and business activities of the community. It will be the central or assembling place where farmers north, east, south and west of town will gather and become better acquainted with each other and with farm problems with which they may be confronted. They will be brought in closer touch with the merchant and will understand and appreciate his problems. Women and children from town and country will meet socially at frequent intervals, which will be mutually beneficial. A community pride will be instilled in the heart of every citizen, and the spirit of neighborliness, which has unfortunately been crowded back with many of the old-fashioned things, will be revived, and the slogan adopted by one thriving community, "Get acquainted with your neighbor—you might like him," will express the sentiment of communities in all parts of the country.—The Furrow.

Jersey Cattle Herd Book.

Through the courtesy of the Secretary of the Canadian Jersey Cattle Club, volume two of the Jersey Records or Herd Book has been received at this office. It is a neatly-bound volume containing pedigrees numbering from 2,731 to 6,010. The list of officers, rules of entry, scale of points, lists of members, rules and regulations for record of performance tests are all to be found in this volume.

At this season of the year the bands of the silo should be carefully examined and tightened if necessary. Whilst the shrinkage of the staves of the Lister or Premier silos is reduced to a minimum by the treatment to which they are subjected, yet some shrinkage is bound to occur in a few instances. This can be corrected by a little adjustment of the nuts on the ends of the bands, and this work carefully done becomes an effective form of insurance. If the bands are kept tight, the danger of the silo blowing down is practically eliminated. An hour or two spent on this work now may save you much expense and trouble later.

In another column of this issue J. Hill Staffa, Ontario advertises for sale his stock bull, Prince Albert. This bull is a son of Roan Chief and has proven to be a good sire. Write Mr. Hill if in need of a herd header.



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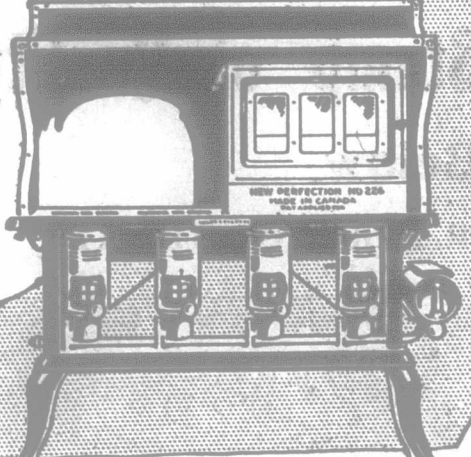
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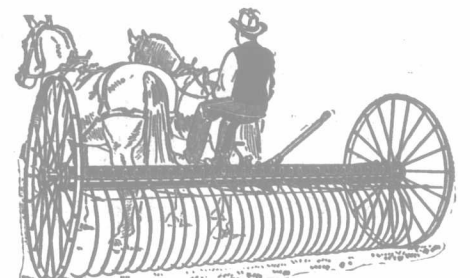
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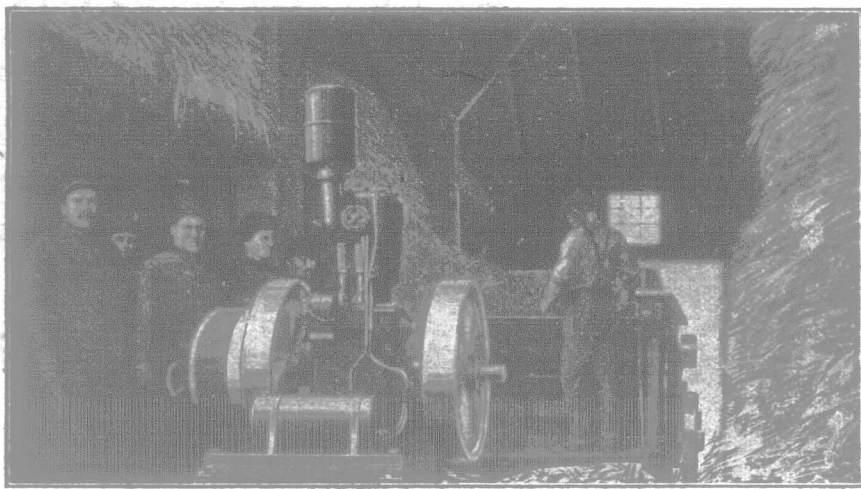
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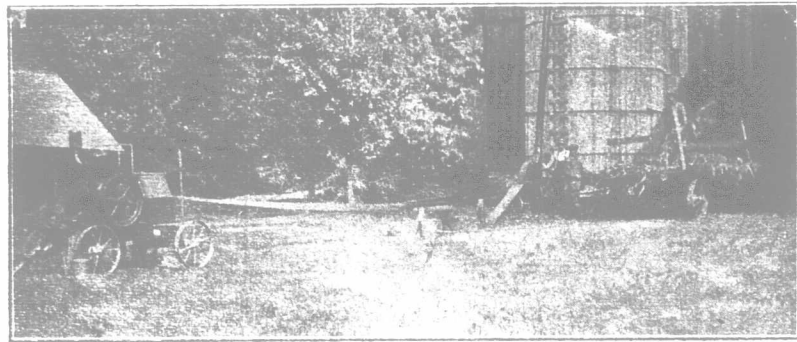
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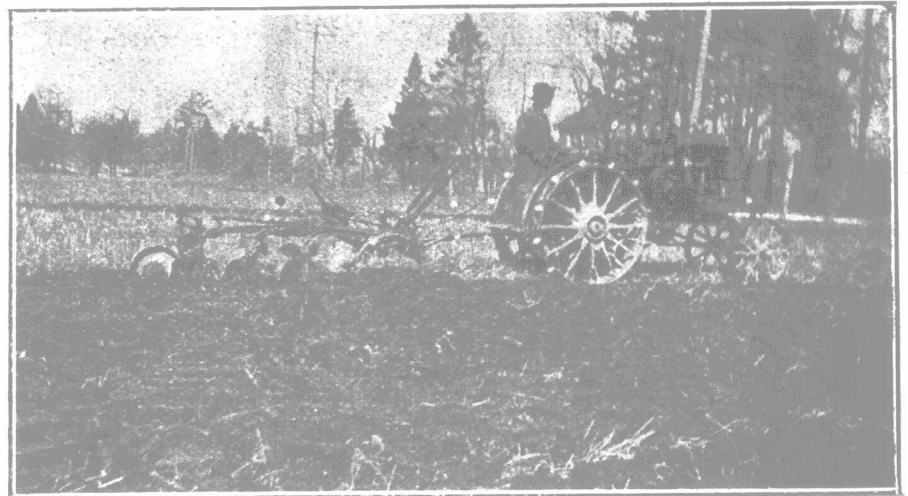
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