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THE FARMER'S ADVOCATE
AND HOME MAGAZINE
 * AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE *

Director-General Exp. Farm
 31.10

VOL. LI.

LONDON, ONTARIO, SEPTEMBER 14, 1916.

No. 1251

To Give High-Class Service The System Must Have High-Class Telephones



**No. 6 Bulletin
 FREE**

This is the latest book describing our modern telephones for rural party line service. Write for a copy.

THE very best equipment is none too good for a rural telephone system. There are always some people in every municipality whose voices are a little husky and others a little thin. It needs high-class telephones to transmit and receive these voices with maximum clearness. There are other people whose hearing is a little below normal and who certainly require the easiest-hearing telephones procurable.

Canadian Independent Telephones are noted for their clear-talking and easy-hearing qualities. They have earned a great reputation for the high-quality service they have given on scores of independent systems in Ontario, Eastern and Western Canada. Their records for low maintenance cost have never been surpassed.

These telephones are sold at fair prices. They are strongly guaranteed. And they are made by a company that has always been fighting on the side of the independent systems and against monopoly. The Canadian Independent Telephone Company has always been a staunch friend of independent telephone systems.

If your system is in the market for new telephones, switchboards or construction materials and you want high-class equipment, fair prices and square dealing, then send your order to us.

Canadian Independent Telephone Co.

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261 Adelaide Street West, Toronto

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New Prices August 1st, 1916

The following prices for Ford cars will be effective on and after August 1st, 1916:

Chassis	\$450 ⁰⁰
Runabout	475 ⁰⁰
Touring Car	495 ⁰⁰
Coupelet	695 ⁰⁰
Town Car	780 ⁰⁰
Sedan	890 ⁰⁰

f. o. b. Ford, Ontario

These prices are positively guaranteed against any reduction before August 1st, 1917, but there is no guarantee against an advance in price at any time.

Ford Motor Company of Canada Limited

Ford, Ontario

Assembly and Service Branches at St. John, N. B.; Montreal, Que.; Toronto, Ont.; London, Ont.; Winnipeg, Man.; Saskatoon, Sask.; Calgary, Alta., and Vancouver, B. C.

GILSON ENGINES
 start without cranking—have high tension ignition,—improved governor,—efficient carburetor. They are perfectly balanced,—Powerful, Durable, Simple and Economical. Efficiency guaranteed without qualification.
 Write for free engine book and special proposition.
 Gilson Mfg. Co. Ltd., 59 York St., Guelph, Canada

THE HYLO SILO
\$7,798.56 Returns on an Investment of Approximately \$200.
 A Hylo Silo, figuring profit at the moderate rate of \$200 a year, and compound interest at 6%, will make you the above profit clear in 20 years. Do you know of any investment that will pay you as big returns?
 Can you afford to be without a HYLO SILO, or can you afford to put up a silo without getting full particulars of the HYLO—wherein it differs from any other silo, and why it will yield better ensilage with greater profits year after year? Also why the better class of dairymen and farmers—men of discernment and keen business judgment—choose the HYLO SILO. It is the cheapest because it pays the biggest returns. Write for free silo book and prices to-day.
GILSON MANUFACTURING COMPANY, LIMITED
 209 York Street, Guelph, Ontario

When Writing Please Mention Advocate

Progressive Farmers
 keep a binder to harvest crops at the right time, without waiting for others to do it for them when they get to it. It is just as important for you to own an Ensilage Cutter. Let us tell you why you should own a—

GILSON
SILLO FILLER

Cut your green fodder and pack your silo full—at the right time. Save the value that is lost by delay. The GILSON is simple—few parts—all easy to get at. Guaranteed to cut and lift silage to top of highest tank with any power, provided the cutting wheel does not fall below the moderate speed of 600 revolutions a minute.
 Your engine will run it. Thousands are now successfully operated by 4 to 8 h. p. gas engines. The GILSON runs at slow speed, therefore uses less power and lasts longer.
 Cutting blades strike heavily and make clean, regular cut along their entire length. Easily adjusted in a minute's time, and once set, stay set.
 Six fans instead of four increase blowing power. Silage flows without clogging, through small pipe, in fine, steady stream—not in bunches. Silage packs firm as old silo.
 Send for 1916 Gilson Silo Filler Book FREE. Explains the many money and time saving GILSON advantages. Varies also.
GILSON MFG. CO., Ltd.
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THE GILSON
 "IT THROWS AND BLOWS"

GRAND TRUNK RAILWAY SYSTEM
Western Fair
 London, Ont.
SEPTEMBER—8th—16th
 Return tickets at reduced fares to London, Ont., from stations in Ontario, Belleville, Scotia Jct., and south or west thereof. Special train service and
Low Rate Excursions
 from principal points on certain dates.
 For full particulars, regarding train service, fares, tickets, etc., consult Grand Trunk Railway Agents.

Rebuilt Portable, Traction Engines and Threshers
 A number of good rebuilt Portable and Traction Engines suitable for silo filling and Threshing, also a few good separators for sale cheap.
The Robt. Bell Engine & Thresher Company, Limited
SEAFORTH ONTARIO

"London" Cement Drain Tile Machine
 Makes all sizes of tile from 3 to 18 inches. Cement Drain Tiles are here to stay. Large profits in the business. If interested, send for catalogue No. 2.
LONDON CONCRETE MACHINERY CO.
 Dept. B. London, Ont.
 World's Largest Manufacturers of Concrete Machinery.
 Do not fail to see our exhibit at the Western Fair, London.



Hard-Hitting Big Game Cartridges

are the only sure kind to make your hunting trip the success you expect it to be. Velocity and accuracy are the two important features in big game ammunition.

Dominion Cartridges

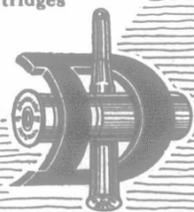
embody fully these requirements and supplement them with the reliability that comes from high quality materials, skillful workmanship and careful testing.

A sensitive primer that flashes deep into the powder gives instant response to trigger and aim and makes Dominion the high-power ammunition for caribou, moose, bear, deer and all Canadian big game.

A sure "hit and stop" is loaded into each cartridge to back up the sportman's aim. No matter what the shooting conditions Dominion Cartridges meet the requirements.

Write today for our attractive picture "A Chip of the Old Block."

Dominion Cartridge Co., Limited,
829 Transportation Bldg., Montreal.
Dominion—the only Canadian-made ammunition.



THRESHERMEN, READ THIS!
The Improved Veteran Endless Canvas Drive Belts will give you better service than any other. You want the best. Order now. Sold only by **WINDSOR SUPPLY CO., Windsor, Ont.** Headquarters for Suction Hose and all other Thresher Supplies. Write for catalogue, "Engineers' Bargains."

Exclusive manufacturer and patentee of

Filtered Well Casing

which allows free inflow of water and prevents inflow of sand, for bored wells in water sand. Low Draft Filters used in connection with my patent. Sand and gravel (column) system of procuring a good flow of water from water sand. Lock Filters, for preventing inflow of sand in deep-drilled wells. Sand Pumps for pumping sand out of deep-drilled wells. Atmospheric Pressure System of elevating and storing water, thus greatly increasing the amount of water that can be taken from wells at slow feed. Stockmen's Syringe Pumps, made of hard aluminum. There are none so simple, better, nor more sanitary. Tools for lifting lost pumps out of deep-drilled wells.

H. C. Hogarth, Tillsonburg, Ontario

She married for a home

—"You see, her first husband left her without a penny—and with three little children to bring up. You can hardly blame her—can you?"

Tragic? Yes! "Of course," you'll say, "that won't be said of my wife if I should die suddenly."

But stop a moment! How would your wife and kiddies fare if you should die to-day? What provision have you made for such a contingency?

If you haven't provided as much protection as you know they should have, you need an Imperial Home Protection Policy. Let us send you our pamphlet and full particulars. You will find them interesting.

THE IMPERIAL LIFE Assurance Company of Canada
HEAD OFFICE - TORONTO
Branches and Agents in all important centres

The Imperial maintains for policyholders' protection a larger Government Deposit than does any other Canadian life company.

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More Milk

Milk is 87 to 88% water. A cow must be given over 4 quarts of water before she can produce a gallon of milk. Increase milk production by giving your cows lots of water.

Never let them go thirsty. Never drive them out on cold winter days to drink icy water from spring or trough, for they will not take half what they need for a maximum milk production. A water bowl outfit which keeps a constant supply of fresh water before them all the time will pay for itself in 90 days by increasing the milk yield.

Water Bowls

These are strong bowls, very simple in their construction, a valve in each bowl keeps feed from getting into the pipes and clogging them. To clean the bowls, just remove the rubber plug at the bottom, and rinse out any sediment or feed that has collected.

Once you install these BT Water Bowls, your cows are watered automatically; BT Bowls practically take care of themselves. You have scarcely to think of them. They cut out hours of work.

Write for illustrated folder that tells what the cows think of Water Bowl Outfits. We will send it free to any man who will fill in and mail the coupon

Beatty Bros., Limited
K 253 Hill Street, Fergus, Ont.

BEATTY BROS. LIMITED
K 253 HILL STREET
FERGUS, ONT.

Send me your illustrated folder that tells what the cows think of a water bowl outfit.

I have _____ cows

Name _____

P.O. _____ Prov. _____

GET THIS BOOKLET

Bales at Highest Speed—Lowest Cost

UNBEATABLE records for baling greatest amount of hay in the shortest amount of time and at lowest expense for power and crew being made constantly with

The Admiral Motor Hay Press—The Hay Press With the Hustle

Has the hurry built right into it. Simple as A B C. Free from needless parts. Smooth running—easy on the engine that runs it. Engine absolutely dependable, thoroughly tested for all conditions of field work. Plunger operates on the power which comes through a long lever working against the sharp grip behind the plunger head. Result, each stroke is powerful, with no back kick. Many exclusive features. A big money maker for the man who uses one. J. N. Inman & Sons, (Haybalers), Independence, Mo., say: "Bales 90-80-lb. bales in 55 minutes from windrow, and 70-70-lb. bales in 50 minutes from stack. Have made big money. Hundreds have had the same experience."

Admiral Hay Press Co., Box F Kansas City, Mo.

FREE—Big Hay Press Book, "Leverage is the Work." Postal today brings you copy by return mail.

Make Big Money Baling With an Admiral

Farmers
harvest crops
out waiting for
when they
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Let us tell you

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value that
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of highest class
cutting wheel
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Thousands are
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Book FREE
and time saving
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RAILWAY SYSTEM

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Agents.

Traction
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Portable and
for silo filling
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cheap.

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500,000 Square Feet of Paroid

A Real Recommendation of a Real Roofing

The Government authorities, by the use of over half a million square feet of Neponset Paroid Roofing in Camp Borden and for the military barracks at Hamilton and at Halifax, fully endorse the preference of thousands of farmers and builders all over Canada for

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Hundreds of Paroid Roofs—18 years old and upwards—prove the durability—and economy, too—of this fire and weather-resisting roll roofing. It is the least expensive roofing in the world, because it gives such long, hard service under the MOST TRYING conditions on farm buildings, factories and railroad buildings.

LOOK FOR THE PAROID ROLL

Paroid is sold by over two thousand Neponset dealers in Canada. It is made in three colors—grey, green and red. Saturated through and through with asphalt, it will not dry out, curl up, split or crack, and will not run in the hottest weather

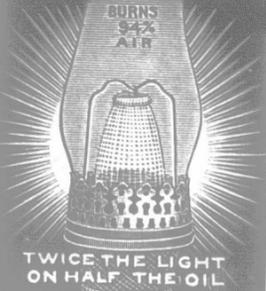
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The Largest Manufacturers of Roofings, Wall Board and Roofing Felts in Canada
 70 King Street East, HAMILTON, ONT.

Warehouses—Winnipeg, Calgary, Vancouver, Montreal, St. John, Edmonton.

New COAL OIL LIGHT BEATS ELECTRIC OR GASOLINE

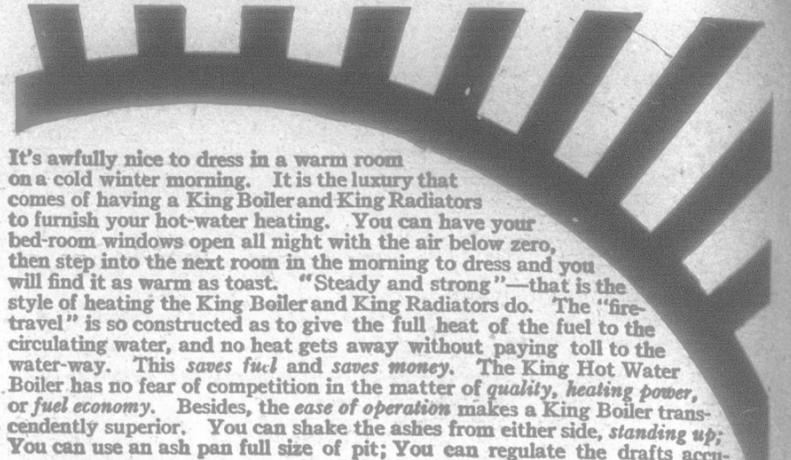
10 Days FREE—Send No Money



We don't ask you to pay us a cent until you have used this wonderful modern white light in your own home ten days, then you may return it at our expense if not perfectly satisfied. You can't possibly lose a cent. We want to prove to you that it makes an ordinary oil lamp look like a candle; beats electric, gasoline or acetylene. Lights and is put out like old oil lamp. Tests by Government and 34 leading Universities show that it

Burns 70 Hours on one Gallon common coal oil (kerosene), no odor, smoke or noise, simple, clean, won't explode. Three million people already enjoying this powerful, white, steady light, nearest to sunlight. **Won Gold Medal at Panama Exposition.** Greatest invention of the age. Guaranteed. **\$1000 Reward** will be given to the person who shows us an oil lamp equal to the new Aladdin in every way (details of offer given in our circular). We want one user in each locality to whom we can refer customers. To that person we have a special introductory offer to make, under which one lamp is given free. Write quick for our 10-Day Absolutely Free Trial Proposition and learn how to get one free. **FREE MANTLE LAMP COMPANY, 508 Aladdin Building, MONTREAL.** Largest Coal Oil (Kerosene) Mantle Lamp House in the World

Our trial delivery plan makes it easy. No previous experience necessary. Practically every farm home and small town home will buy after trying. One farmer who had never sold anything in his life before writes: "I sold 24 the first seven days." Christensen says: "Have never seen an article that sells so easily." Norring says: "92 per cent of homes visited bought." Phillips says: "Every customer becomes a friend and booster." Kemmling says: "No money talk necessary. Sells itself." Thousands who are counting money endorse the Aladdin just as strongly. **NO MONEY REQUIRED.** We furnish stock to reliable men to get started. Ask for our distributor's plan, and learn how to secure an appointment and make big money in unoccupied territory. State occupation, age, whether you have rig or auto, whether can work spare time or steady, when can start, townships most convenient for you to work.



It's awfully nice to dress in a warm room on a cold winter morning. It is the luxury that comes of having a King Boiler and King Radiators to furnish your hot-water heating. You can have your bed-room windows open all night with the air below zero, then step into the next room in the morning to dress and you will find it as warm as toast. "Steady and strong"—that is the style of heating the King Boiler and King Radiators do. The "fire-travel" is so constructed as to give the full heat of the fuel to the circulating water, and no heat gets away without paying toll to the water-way. This saves fuel and saves money. The King Hot Water Boiler has no fear of competition in the matter of quality, heating power, or fuel economy. Besides, the ease of operation makes a King Boiler transcendently superior. You can shake the ashes from either side, standing up; You can use an ash pan full size of pit; You can regulate the drafts accurately on account of tight fitting doors and joints. Flues are easily cleaned, ample combustion space allows complete burning of gases instead of their going free up the chimney. Simple to erect and economical to instal. We have a King

King Hot Water Boiler

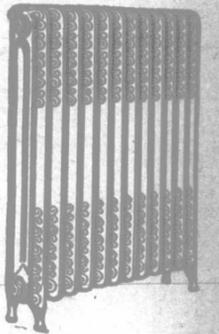
Heating Apparatus for every requirement, from a cottage up to an apartment house. We manufacture everything required for heating—steam or hot water—for buildings of all descriptions.

IF YOU WANT FACTS REGARDING THE ADVANTAGES OF HOT WATER HEATING AND THE COST, WRITE US. INFORMATION GLADLY SUPPLIED.



King Radiators

The success of the King Radiators is founded on the same principles that have made the Boiler so successful—the quick circulation principle. King Radiators are made to fit any size or shape of space. Let us tell you what a King Hot Water Heating System would cost. Our Illustrated Booklet, "COMFORTABLE HOMES" sent FREE on Request.

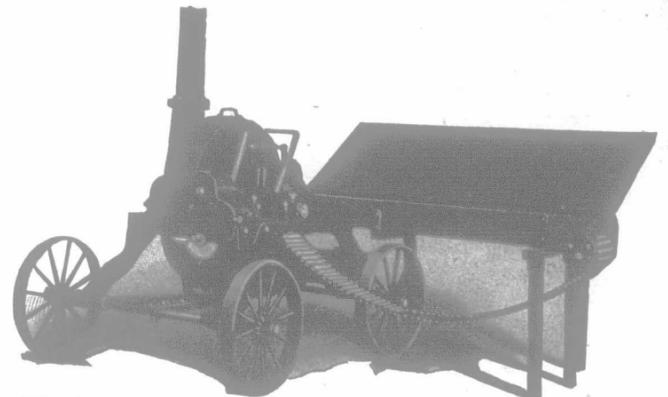


Steel and Radiation, Limited

Manufacturers of Steam and Hot Water Heating Apparatus for Buildings of Every Description; also Fenestra Solid Steel Sash; Expanded Metal Reinforcing, Etc.

Head Office: 123 Fraser Ave., Toronto.

THE MONARCH Ensilage and Straw Cutter



The Most Perfect of all Knife on Balance Wheel Types

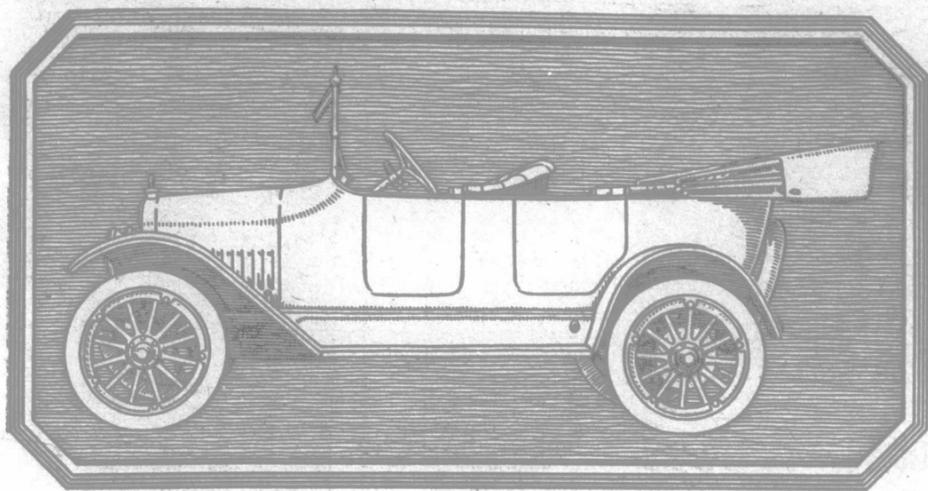
HERE is the MONARCH, the Ideal Straw and Ensilage Cutter, for use with any kind of power, as it requires less power to operate than any other blower of equal capacity that is on the market.

Look at the strength of this machine, and we know you will agree with us that for durability and superior points we have a winner.

WRITE FOR CATALOGUE

Canadian Engines, Ltd., Dunnville, Ontario

"See Our Exhibit at the London Fair."



\$850

F.O.B. WINDSOR, ONT.

An Improved Car At The Same Price

BEGINNING September 13th, Maxwell Motor Cars will be equipped with a new and improved windshield, still longer and more flexible springs, wider seats, deeper and softer cushions, dash light, gasoline gauge and other equally important refinements.

Not content with the generous value heretofore present in our product, we have just added these extra improvements. This is in line with our policy—so widely advertised—not to change the Maxwell in any essential detail, but to improve it from time to time in minor respects so that it would always be a standard, recognized product, constantly abreast of the best practices of the industry.

Notwithstanding the superlative and sometimes confusing claims that are made in behalf of various automobiles, we restate our sincere conviction that *Maxwell Motor Cars offer more real value per dollar than any other car in the world.*

This is the belief of hundreds of distributors and dealers who sell Maxwell cars. It is the belief of thousands and thousands of Maxwell owners. And these beliefs are supported by actual and tangible facts.

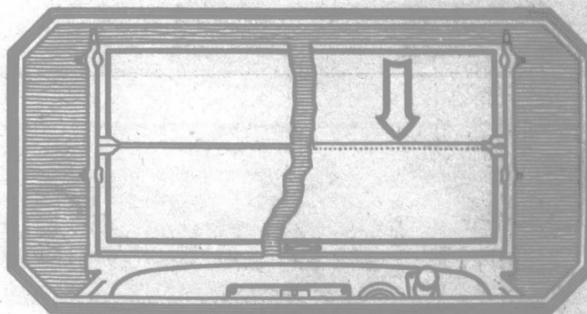
We absolutely *know* that within the entire history of the automobile business, no motor car—in any class or at any price—has equalled the Maxwell in honest, dollar-for-dollar value. *We know this.*

And if you will examine a Maxwell, ride in it, compare it with other cars, consider its splendid record, reputation and past performances, *you, too, will know it.*

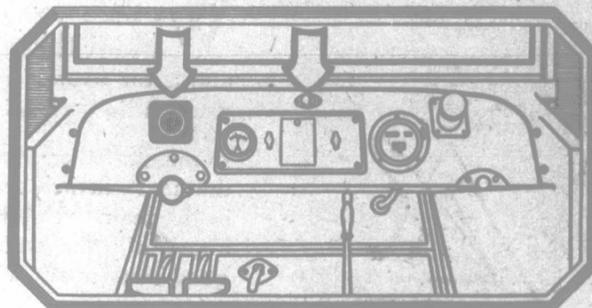
Roadster, \$830; Touring Car, \$850; Cabriolet, \$1235; Town Car, \$1300; Sedan, \$1400. All prices f. o. b. Windsor, Ont. All cars completely equipped, including electric starter and lights.

Write for the New Maxwell Catalogue. C-6

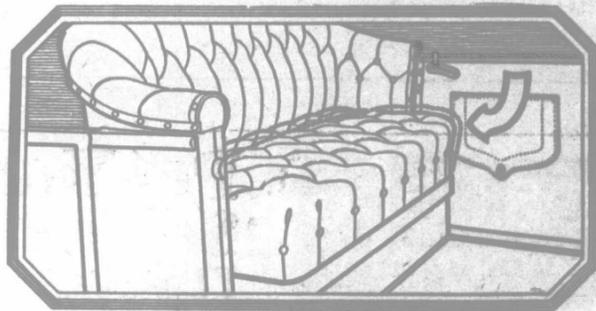
Maxwell
Motor Company of Canada, Ltd.
Windsor, Ont.



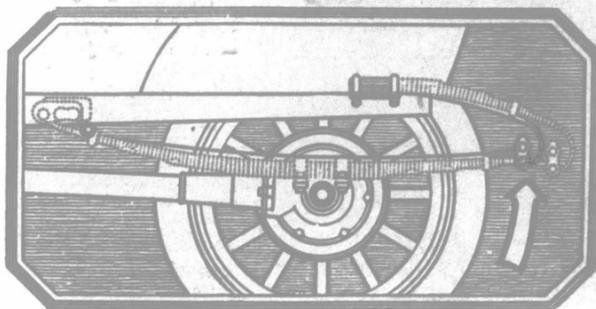
Arrow points to new and improved windshield. Upper half overlaps lower half. Absolutely rain-tight.



Instrument board, showing gasoline gauge and electric dash light, as well as speedometer, electric starting and lighting plugs and ammeter. See arrows.



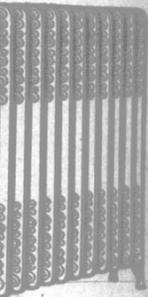
Wider and longer seats and deeper cushions, as indicated by arrow.



Arrow shows old and new spring construction. New springs much longer and more flexible.

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Penmans

WHEN you buy Penmans Hose you get all those things to be expected from them, and a bit over. They wear just a little longer, look just a little better, feel just a little more comfortable.



Penmans make sox for every occasion. You can get the heavy article or the light one, with lots of weights in between. You'll find warmth, wear, comfort, and above all, the satisfaction of knowing you made a good investment when you bought them.

Next time, say Penmans——your dealer has them.

Penmans Limited
Paris

BOB LONG
UNION MADE
GLOVES and OVERALLS

ASK
YOUR
DEALER



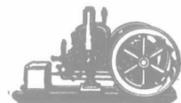
My
Dad
wears
'em

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

When writing please mention this paper.

Put Your Barn on a Self-Watering Basis

A self-watering Barn is about what it means when a farmer puts in our complete watering tank, pump, piping, and automatic self-filling water basins in the stalls, cause a tremendous saving of work, and an enormous advantage to the cattle in beef-raising and dairying. Where cattle are watered by hand-pumping, they never get all they would like and do not make as good a showing. Plenty of water to drink means productiveness and health in cattle. Together with our Litter Carrier, Steel Stanchions, etc., the barn work is so reduced that one man can care for 25 to 40 head of cattle. This saving of labor means saving of hired help and a chance to expand on a larger scale and make more profit. Write for our Book on "Barn Equipment."



Farm Homes with City Comforts

After all, life on the farm is worth while, in proportion to the reasonable comforts that are supplied. With inexpensive power to run pumps, feed grinders, wood saws, washing machines, churns, separators, etc., the labor of the farm is lightened. With running water in the house, the home is made as comfortable as a city home, and the cost is very slight indeed. Write us for full information.



The "Toronto" Windmill, easy-running, powerful, and strongly constructed, pumps water, even in a light breeze. For pumping to water cattle, there is no method so inexpensive. Write for Windmill prices.

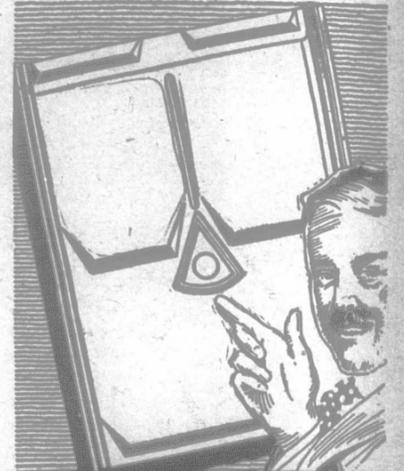
Pipe Water into the House.

The same Windmill or Engine and Pump that supply water for the barn will supply the house. Particulars of the methods and cost of running water in farm house on request.

Write us for Catalog of Barn Equipment and Water Systems

A piped, self-regulating watering system, with individual basins, is the greatest saver of labor, time, and money. We will give you figures on the entire cost of a water system for your barn or house, or both, if you wish. Write us to-day.

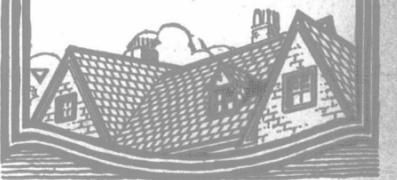
ONTARIO WIND ENGINE AND PUMP CO., LIMITED
93 Atlantic Ave., TORONTO. Branches: Montreal, Winnipeg, Regina, Calgary



PEDLARS 'OSHAWA' SHINGLES

GIVE wind and weather a chance to get beneath the shingles of your home, and you are in for no end of trouble and expense—warping, rotting, loosening shingles—leaking roofs and endless repair. Pedlar's "Oshawa" Shingles give you the permanence of a single sheet of metal with the beauty of separate shingles. Lock tight on all four sides—windproof, rainproof, rustproof—not even the nails are visible. There's safety and permanence in a Pedlarized roof. The cost is small. Write now for "The Right Roof" Booklet L.F.

THE PEDLAR PEOPLE LIMITED
(Established 1861)
Executive Office & Factories
OSHAWA, ONT.
Branches: Montreal, Ottawa, Toronto, London, Winnipeg



R.M.S.P. FORTNIGHTLY SAILINGS

Twin-Screw Mail Steamers
FROM
ST. JOHN (N.S.)
AND
HALIFAX (N.S.)

WEST INDIES

Excellent Accommodation for 1st, 2nd and 3rd Class Passengers
SPECIAL FACILITIES FOR TOURISTS

NEXT SAILING FROM HALIFAX;
R.M.S.P. "Caraque" Sept. 22, 1916

APPLY TO
The Royal Mail Steam Packet Co.,
57-59, Granville St., HALIFAX (N.S.)

GO TO THE
Local TICKET AGENCIES.

CHURCH BELLS

CHIMES AND PEALS

MEMORIAL BELLS A SPECIALTY

FULLY WARRANTED

McSHANE BELL FOUNDRY CO.,

BALTIMORE, Md., U. S. A.
Chicago Office: Room 84, 154 W. Randolph St.
Established 1856



MILTON BRICK

Smooth, Hard, Clean-Cut. Write for booklet.

MILTON PRESSED BRICK COMPANY
Milton, Ontario

The Farmer's Advocate and Home Magazine

PERSEVERE AND SUCCEED

ESTABLISHED 1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

L.I.

LONDON, ONTARIO, SEPTEMBER 14, 1916.

1251

EDITORIAL.

Put in a little wheat if you have the land ready.

Exhibition reports in THE FARMER'S ADVOCATE are accurate and complete.

Watch the little weeds in their effort to produce seed this fall, and cultivate to kill.

It is not always the man who talks the most who has the best stock. See for yourself.

Do not forget that the boys at the front are still in need of comforts. Keep up the supply.

When sales of breeding stock are most numerous, it is more difficult to make a big showing at the fairs.

A pure-bred male animal, not of good conformation and not showing reasonable thrift, should be altered.

Canada is a big country, but there is no great hurry to fill it up with foreigners who can scarcely be Canadianized.

Give the boy the responsibility of looking after some of the stock as his very own this winter, and watch the effect.

The man who keeps the plow going, even though the ground be hard, is generally best up with his work when Jack Frost closes operations in the fall.

Be the better prepared for after-the-war conditions by being prepared to farm better than ever before. Let us win our way to the top by our own efficiency.

It is a satisfaction to note the uniformity in the breeding classes at the big fairs. Exhibitors and breeders who cater to them are having a good effect upon Canada's live stock.

Attendance records should not be the sole aim of any fair, but such records, made as a result of good management in putting on a superlative exhibition, are a source of gratification.

At "Weldwood" the corn crop is so heavy this year that it is necessary to build another silo to accommodate it, and it is all due to thorough underdrainage and frequent cultivation, for it got a late start and has had practically no rain later in the season.

Show the young men that there is something in farming and more of them will stay on the farm. Many are driven away by the grumblings of the older folks, who see nothing but drudgery in farm life. Talk about the good things in connection with the farm and forget the unpleasant.

Shows as Live-stock Indicators.

In conversation with a live-stock breeder, a few days ago, he made the remark that it was not always the best indication for a breed to be too numerous at an exhibition. It was his contention that great numbers on show might mean slow sales and an increased effort on the part of breeders to dispose of stock. As a general thing, the breed most numerous at the fairs is the breed most popular in the particular part of the country upon which the fair draws, but, notwithstanding this, we are forced to believe that there is something in what our friend said. It is also quite true that when demand flattens out too much, there is generally a small show. This year, at Toronto, some breeds of stock were not as strong as usual. Shorthorn breeders, for instance, claimed that the great American demand had so depleted the show stock in Canada that it was difficult to keep a real strong show herd together. The demand for breeding and bacon hogs had an effect upon some herds of swine at the fair, and the great sales of sheep influenced some of the breeds of this class of stock. These are just a few instances to show that the smaller turnout of stock at a fair does not necessarily mean a slackening of interest in, or poor times for a breed. It may indicate that business has been phenomenally good. On the other hand, when classes are extremely well filled, it may not indicate brisk business, but rather more strenuous competition in making sales. At the present time Canada's live-stock trade is flourishing.

Try a Little Cost Accounting.

The greatest value in a system of accounting to ascertain the cost of various farm products to the farmer may not be the simple fact that a profit or a loss is shown nor that a means is found of cutting down expense on any one particular phase of production, but that such a system serves as a stimulant to greater and more concentrated and better regulated effort in all the farm work. When the farmer knows just what a thing costs him, he knows whether or not it is profitable. If it is not profitable, or even if it is making a little money, he will get down to hard thinking and endeavor to evolve a system in the work which will cut down cost and correspondingly increase net returns. There is, as now practised, too much hard work and not enough deep thinking practiced by the average farmer. It is, we'll admit, rather difficult under some circumstances, to find time to think, but it is always expensive to neglect it. Try a little cost accounting in one department of your farm work, and see if it is not a revelation to you. The cure will soon be applied to all departments once it is tried. It is a great and lasting stimulant and a breeder of enthusiasm.

"Carry On."

As the news from the battle front steadily grows better and more reassuring, we are liable to forget that there are thousands of men in the trenches who still require comforts and all the help those at home can give them. There is a tendency to belittle the gradually failing strength of the Teutons. It would be well to be prepared for a longer struggle than many believe will continue. If the war collapses suddenly, no one would regret that preparation had been made to give the boys all they needed, even though the fight had gone on for months longer. A cold winter is approaching, and the need for supplies will be just as urgent as ever. As time goes on and more nations join the Entente Allies, Germany's strength wanes, but it is not broken down yet. The preparation must be kept up that the fight may be won decisively, as it should and will be. Keep the work going at home.

The Small Breeders' Opportunity.

The remark has often been made that the small breeder has very little chance of winning in the larger shows when he is obliged to exhibit against the moneyed importer and dealer in high-class, pure-bred stock. It sometimes looks as if he would require an exceedingly good animal to win, but we still have confidence enough in Canada's live-stock judges that, if the animal were good enough, it would win. But the greatest honor is not in the winning, although that is the part that gets most publicity. To the breeder and feeder should go more of the credit for conspicuous winnings. The small breeder, especially if he is located near a larger breeder who has some high-class sires, is in just as good a position to breed a few good ones as is the big breeder. At some of the recent big fairs in the United States some of the best prize winners were bred and raised by men who had only a few females of the breed. In the Old Land many of the winners are bred by tenant farmers who have a few good females and mate them judiciously. The same is true, to a certain extent, in Canada. The small breeder has an opportunity to breed the good stuff, and he should make every use of it. In his advertising he should never forget to mention the fact that his herd or flock produces winners, even though they may have been sold to a big breeder or dealer before they were shown. And it might be well for the encouragement of the young breeder and the older breeder who produces choice stock on a small scale if the breed associations in Canada would consider adding something to prize money at the large fairs to go to the breeder of the stock, limiting this, of course, to Canadian-bred classes for shows in this country. Whether this is done or not, the small breeder should go ahead to produce the best, and if it wins after it leaves his hands, he should use the win, in so far as possible, to "boost" his own herd. Money will buy good ones, but it takes brains, ability and foresight to breed and fit them. To the breeder and feeder should be most of the honor.

What Is Consolidation?

The consolidation of our rural schools is not a new-fangled fad, and indeed has never been a fad. On the other hand it is likely to prove the only efficient way of improving district schools in our municipalities. The movement for consolidation of rural schools began in Massachusetts as far back as 1860 and has continued in that state to the present day, until now it can hardly proceed any farther for the simple reason that there are comparatively few one-room schools left. So successful was the movement that it was adopted as a state policy, and in 1882 the small district unit was abandoned and the township unit organisation adopted officially in its stead.

Neither is it an untried experiment advocated by educators and agricultural leaders to take hard earned money out of the pockets of farmers for the sake of notoriety to themselves with doubtful advantages to the children. On the contrary, the movement has proved so successful that it has spread over nearly every state in the republic to the south of us and forms part of the educational system of thirty-two of the states, while, in addition, examples are to be found in the others. The movement is not new nor is it a fad; and it is far from being untried or impractical. Indeed it is gaining momentum every year and when it is properly appreciated by the farmers it will prove irresistible. Already it has gained headway in Manitoba and has been started in Saskatchewan. In Ontario, the machine system of education has done most for the higher types of educational institutions and for the cities, and least for the country districts. In this province there are only two consolidated schools, and one of them was a gift, located at Guelph.



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Quebec needs consolidation most owing to the scattered nature of the English-speaking rural communities, and here it is most difficult to secure because of the long routes that would be necessary for transportation. Probably the nature of consolidation and its advantages have not been properly understood. What then is Consolidation?

The Old District School.

At the outset it should be stated that our rural schools first began by being built in outlying districts to serve the neighbors. Legislation created small school districts with elected school boards to supervise the instruction and appoint teachers and raise the money. This last function was the most important one, and, in the interests of the taxpayers' pockets, this was done as badly as it could be done legally. But thus arose the old rural school—the little red school house—with which we are all familiar. As the land was cleared and farmers got married, their children went to school together, and in some generations the enrolment was fairly large and the school prosperous. However, as the pioneer farmers were all of the same generation, the younger population came at first in waves with alternative depressions, during which periods the schools lost in average attendance, in public interest and in financial support, as the earlier settlers were now free from the direct parental interest in the school, and their chief concern became the financial one. Some district schools had such a small attendance that it was found uneconomical to continue them, and the pupils were sent to another neighbouring school which then became a union school.

The Union School.

The union school, however, is still an ungraded, single-room school. It has no further advantages than the employment of one teacher to teach a small number of pupils for whom two teachers were formerly employed. The educational advantages are no greater unless we consider the greater sociability in the playground and the greater element of competition in the class work. There exists in this type no possibility of satisfactory grading and no higher work is attempted. In some cases such union schools might even be inferior in type, if overcrowding were permitted. In some American schools this actually took place, until an attempt was made to lighten the teacher's labors by adding another teacher to the staff. Sometimes the two teachers actually had to teach in the same room without partitions. In other cases a flimsy curtain or improvised partition divided the classes so that there was separation but no sound-proof isolation. Teaching under such conditions is, of course, unsatisfactory, especially as in numerous

cases an old district building was used without alteration or addition. This case of inferior consolidation is a mere makeshift and does not improve educational conditions. But it may prove to be the forerunner of a better state of affairs, as for example at Bridgenley, Manitoba, where the pupils of McKinley district were added to those of Bridgen and conveyed to the school at that place. This may be termed a partial consolidation and saved the ratepayers a considerable sum of money, as the expense was reduced from about \$75 a pupil to little more than half that sum. They do not have sufficient pupils yet to form a graded school, but expect to have them before long. This purely rural, consolidated school, situated four miles from the nearest village has an ambition to achieve the fullest measure of consolidation in time. Most of the consolidations in Quebec have been of this nature—mere partial consolidations—and it is noteworthy that no one-room rural schools are now being built.

The Consolidated School.

The complete consolidation results only when two or three or more schools unite to form a graded school in some central or other convenient situation, to do higher grade or high-school work in some cases. The pupils from a distance of over a mile from the school are usually conveyed by some means to the school, generally at public expense in vans or sleighs or in private carriages, a small payment being allowed to the parents. In some instances the parents are willing to provide conveyance themselves, or the children arrive on horseback, stabling their horses in the school sheds. The essential point is, however, that more than one teacher is employed, better grading introduced and higher work provided. For example, Warren Consolidated School in Manitoba is a purely rural consolidation, comprising the three former district schools of Hanlan, Meadow Lea, and Invicta which were sold. Two teachers are employed, one of whom is a male teacher who acts as principal. These two teachers teach eight grades, and prepare also for second and third class teachers' certificates. The eighty pupils are nearly all conveyed by the vans every day at public expense. These covered vans which become sleighs in winter are heated with footwarmers and provided with robes. In the same province the Vermilion school was abandoned and the thirty children are conveyed in two heated vans to the town of Dauphin which lies to the southeast. There they have the advantage of a full collegiate course and manual training and sewing. Eight of these rural children took up entrance and collegiate work. The town has two schools and seventeen teachers. This makes possible a perfect grading, a condition which gives only one grade to a teacher. Yet the school tax in the rural district was only \$17.50 for the average quarter section. But surely the advantages were worth this!

Two Types.

Thus we see that consolidation has developed gradually from the old district school and has two types which should be clearly distinguished. The first type is the union school which still remains a one-teacher, ungraded school and in some cases is no better than the original one, and may even be worse. Sometimes, however, it is an improvement and may ultimately become a real graded school, whenever the attendance justifies an addition to the staff and to the building. The union school, however, should not be confused with the higher type and should never be known as anything but a "partial consolidation." The second type is the real consolidated school combining three or more district schools of one or two rooms each. It provides at least two teachers, better grading, higher work and free public conveyance. This is the type to which all rural districts should endeavor to approximate. A good example is the Gilbert Plains School, of white brick, containing six class-rooms, assembly hall and basement. In this school the male principal assisted by an efficient staff of female teachers carries on entrance work with twenty-eight pupils very successfully. Here the children have all the advantages of education that city children have, without the dangers and also without being enticed citywards through the allurements of city life. There is no fear of their parents migrating to the city for the sake of giving their children a good education.

The difference of the two types is a fundamental one; it consists of a difference in standards of work and in efficiency of education. The union school is a combination school intended to promote economy and still remains an ungraded rural school. The real consolidated school is intended to secure higher standards of work, to promote higher education, to obtain a better staff of teachers and a more modern building with up-to-date equipment. It is a superior school doing advanced work.

Elimination of Weak District Schools.

One of the most hopeful signs of progress for country life is the great impetus given to the consolidation of schools in nearly every state of the Union. Many of these states have now passed legislation which either gives permissive power to consolidate or compels consolidation. For example, several states have fixed an arbitrary standard below which rural schools cannot fall without running the risk of being closed. This standard is based on the average daily attendance and when this is less than the prescribed number, the schools may be closed. These figures for some of the states

are as follows:—Indiana 12, Louisiana 10, Maine 9, Ohio 12, New Mexico 25, Texas 20. There are noticeable variations in the limit set, but the intention clearly is to abolish weak and unprofitable schools. No teacher can be expected to teach more than two or three grades efficiently especially with the great variety of subjects now placed on the course of study. She cannot prepare adequately the work required for seven or eight grades, nor can she be expected to change with lightning-like rapidity from class management of children of five years of age to youths of fourteen who require such a different mode of handling. The problem contains too many difficulties and requires too great differentiation of treatment to be managed successfully by any young teacher. The work may easily become congested; pupils are neglected and know they must be; it is difficult to plan a workable daily timetable and each pupil gets little teaching or individual attention. It is no wonder that the boys and girls are glad when their school days under such conditions come to an end.

New School Laws Necessary.

State or Provincial legislation will be required to secure progress for consolidation. Permissive legislation means very little to anybody unless there is an educational campaign to enlighten those who might take advantage of such permissive laws. But if these are unknown or little understood and appreciated, no progress will be forthcoming. No legislature has fulfilled its duty by merely placing favorable laws on the statute book and letting the matter rest there. Public opinion must be moulded and financial aid guaranteed. For instance, if there is a minimum limit for a school, any district which fails to meet the standard must be forced or aided to transport the children to some other school in the neighborhood. This is the case in Indiana. In other cases government aid of a substantial nature should be given to stimulate consolidation. The grants previously paid to the small district schools should continue to be paid without diminution to the enlarged school. An annual grant should also be paid in respect of each school consolidated, either increasing with the number combined or at a flat rate per school. As the transportation item is the heaviest part of the cost, a government grant of one quarter or one half of the cost should be given. The state would be amply repaid by the higher character of the education obtained by consolidation. A further good reason for giving a grant would exist if high school work were attempted, especially if candidates went on to take second or third class teachers' certificates or rural teachers' certificates. Thus the state or province would be provided with just the right class of teacher for the rural schools. At present we have too many city trained teachers in the country. They are neither happy nor successful there; but the consolidated school student, after professional training of course, would be just the ideal person to fit into country school conditions. The scarcity of teachers would rapidly cease and a sufficient supply of suitable teachers would be forthcoming who would not be the proverbial square peg in a round hole. Then again an opportunity would present itself for the efficient teaching of special subjects like agriculture, manual training, domestic science, including sewing and cooking, and physical training. These are bound to be neglected if one teacher is responsible for them all. But satisfactory courses in these subjects are worth a grant, and this is one of the methods adopted in Iowa to support consolidation once it is effected. It is a good method too. Just contemplate the possibilities for development of sports and games of all kinds. At Warren, Manitoba, the playground is six acres in extent on which it is the intention of the school board to provide spacious lawns, grounds for football, baseball, basketball, croquet and tennis, and large gardens and experimental plots. This is the way to look after the health, the play instinct, and the moral welfare of the rising generation. The saddest sight in some rural schools is the playground at recess, where eight or nine pupils wander around aimlessly, like bears in a cage, ignorant of simple games and not caring for them either.

Larger Educational Districts Needed.

Wherever the county or township system of education prevails, the consolidation movement has made most progress. Indiana has 600 such schools in a township system, Washington has it in thirty out of the forty counties already, Florida in thirty-three of the forty-eight counties, North Carolina in eighty-two of the ninety-two counties. In Montgomery County, according to the report of the United States Commissioner, eighty-four per cent. of the schools are consolidated schools and only sixteen per cent. are district one-room schools. It must be clear that consolidation has proved its value wherever a township or county is the administrative unit. It would also prove its value even when the school district is the unit, if only the various boards would co-operate in giving it a chance. But in these places the school boards are hard to move. In Illinois where the district is the unit, there are fewer than fifty consolidated schools according to the last available statistics, whereas Louisiana has 300 and Ohio 200. Vermont sends one-fifth of her rural children to consolidated schools, and North Carolina has now about one fourth of her pupils attending consolidated schools of one or more rooms. And so the tale goes on. There is no doubt that consolidation is the only real cure for the education

problem in country districts. Even consolidation has its own problems, such as transportation, a good road system, properly planned routes, and government assistance. These, however, can easily be overcome by persistent demand for their solution and this should be begun by the farmers and their natural leaders.

It should be remembered that every city school is a consolidated school, made easy by the nearness of the homes, because in many a city block there is a population sufficient to people a large-sized village. But no city dreams of building a one-room school-house for every group of thirty school children. City schools are consolidated without the transportation problem. Consolidated schools in the country have merely the transportation difficulty to overcome. This has been accomplished in hundreds and hundreds of cases. Idaho transports over five thousand children; Oklahoma eight thousand; Kansas nine thousand; Minnesota sixteen thousand; and in Rhode Island there are fewer than two hundred ungraded schools left. Yet there are some districts where the means of communication are so bad and the population so scattered that consolidation will hardly be practicable for many years. The old district school will still have a place in the less favored localities.—By Sinclair Laird, Dean of the School for Teachers, Macdonald College.

Nature's Diary.

A. B. KLUGH, M. A.

There is no sound more characteristic of early fall than the note of the Snowy Tree Cricket. It is one of the most persistent, if not the most persistent, musician to be found in our fields or woods. It begins its song in the late afternoon and keeps it up, without a moment's pause, until just before dawn. The best rendition of this song which we can give in syllables is "Re-teat—re-teat—re-teat—re-teat." There is to my ears a quality about it which suggests the rhythmic compression and relaxation of a slightly rusty spring. Burroughs calls it "a rhythmic beat;" Thoreau a "slumbrous breathing;" and Anna Botsford Comstock says "It is delightful, rhythmic and sleep-inspiring." Personally I think that the Snowy Tree Cricket overdoes it a little, and that his note is inclined to become monotonous and a trifle aggravating. Writing of this song Dr. Comstock says:

"So far as we know, this Snowy Tree Cricket is the only one of the insect musicians that seems conscious of the fact that he belongs to an orchestra. If you listen on a September evening, you will hear the first player begin; soon another will join, but not in harmony at first. For some time there may be a see-saw of accented and unaccented notes; but after a while the two will be in unison; perhaps not, however, until many more players have joined the concert. When the rhythmic beat is once established it is in as perfect time as if governed by the baton of a Damrosch or a Thomas. The throbbing of the cricket heart of September, it has been fitly named. Sometimes an injudicious player joins the chorus at the wrong beat and he soon discovers his error and rectifies it. Sometimes, also at night, one part of the orchestra in an orchard gets out of tune with the majority, and discord may continue for some moments, as if the players were too cold or too sleepy to pay good attention. This delectable concert begins in the late afternoon and continues without ceasing until just before dawn the next morning. Many times I have heard the close of the concert; with the wee sma' hours the rhythmic beat becomes slower; towards dawn there is a falling off in the number of players; the beat is still slower, and the notes are hoarse, as if the fiddlers were tired and cold; finally when only two or three are left the music stops abruptly."

There is a distinct relation between the temperature and the number of notes per minute in this species, and Professor Dolbear has reduced this relation to a mathematical formula. He says "Let T equal the temperature in degrees Fahrenheit and N equal the number of beats per minute. Then T equals 50 plus; N minus 40, divided by 4. Dr. Edes and Mr. Faxon have tested this formula in Massachusetts, and have found that it works with an extremely close approximation to absolute accuracy. Thus we have a sort of animated thermometer in the Snowy Tree Cricket: the higher the temperature the faster the time of his song.

This species is a slim, ghost-like cricket; pale green, almost white, in color and about three-quarters of an inch in length. It has slender, long hind legs, clear wings, and long antennae, pale gray in color, and the female has a long, sword-like ovipositor. It is with this latter instrument that she deposits her eggs in slits in raspberry and blackberry canes, in this way often doing a considerable amount of damage as the canes sometimes break off at the point of injury; the young Tree Crickets feed on plant-lice and the adults feed on the insects and on tender shoots of plants.

The floral procession of the year is now coming to an end, and it finishes with a glorious blaze of purple and gold—the purple of the Asters, the gold of the Golden-rods. Of Golden-rods we have in Canada a great many species, and in any one locality there are usually from ten to fifteen species to be found. The various species grow in all possible land habitats, in the fields, in clefts in the rocks, in thickets, woods, swamps and bogs. Some species are quite well-marked and easily distinguished, while others

can be told from their allies only by very careful botanical study. One of the very common species is the Canada Golden-rod (*Solidago canadensis*), which grows in fairly dry soil. It is from three to five feet in height, has a large, densely-flowered, spreading panicle, a rough stem and lance-shaped leaves which are very prominently three-veined. A species of much the same height and kind of panicle is the Early Golden-rod (*Solidago juncea*), but in this species the upper leaves are much smaller than the lower ones which are broadly elliptical and taper into broad petioles. In the woods and thickets is a pretty little species, the Blue-stemmed Golden-rod, (*S. caesia*), which has a stem with a bluish bloom on it, studded with pale golden clusters of tiny florets in the axils of lance-shaped, feather-veined leaves for nearly its entire length. In swamps and peat-bogs the Bog Golden-rod (*S. uliginosa*) sends up a stem three or four feet in height topped by a densely flowered, oblong spire, the branches of which are so appressed as to give the plant a wand-like appearance.

The Golden-rods attract a host of different kinds of insects, which come to gather pollen and nectar, and there are at least three kinds of galls made by insects on their stems, so that the insect population of a patch of Golden-rod furnishes an interesting entomological study.

THE HORSE.

Keep the Colt Growing.

The fall of the year is often the most critical time with the colt. Very often his dam is allowed to run with him in good pasture through the summer, but is taken in and compelled to do team work on the plow and other implements commonly used in fall cultivation. The colt is often allowed to run in the field where the mare is working, which is a mistake, and unless the mare is well fed and the youngster has a chance through getting a fair allowance of good oats and some bran he is likely to "go back." This is weaning season, too, for early colts, and the newly weaned colt requires a little extra care. Pastures are dry and browned, and whether or not the colt is weaned, it is necessary that he be fed a little extra. Fed in small quantities, cow's milk is valuable at this season, and be liberal with the grain. Keep the colt out of the flies during the day and let him out nights, provided the weather is not cold and wet. If the colt starts to fail now, it may take all winter of careful feeding to get him going right again.

Eczema in Horses.

I have a horse 6 years old which has an irritation in his skin. He rubs himself considerably, which causes the hair to come off and sore, scurvy spots to form. Could you prescribe a cure for him through your valuable paper as soon as possible?

A SUBSCRIBER.

Ans.—We have had several enquiries regarding this trouble of late. It is likely eczema, and, after again examining to make sure there are no lice on the animal, purge with 6 to 8 drams aloes and 2 drams ginger. Follow this up with 1½ ounces Fowler's Solution of Arsenic twice daily for a week. Give the horse a thorough washing with strong, warm soap-suds, well rubbed in with a scrubbing brush. After this, dress thoroughly twice every day until cured with a warm solution of corrosive sublimate, 30 grains to a quart of water. Heat this solution up to about 110 degrees F. before applying.

LIVE STOCK.

Diarrhoea or White Scours in Calves.

Diarrhoea, commonly called white scours, in calves appears in two forms. First, sporadic or accidental diarrhoea, second, infectious or germicidal diarrhoea.

The first form is usually due to unsanitary surroundings or wrong feeding, or both. It seldom

occurs in calves that nurse their dams, except in rare cases, where the dam's milk is abnormal. The first milk of the dam (called colostrum) has a laxative effect, hence tends to rid the calf of the contents of the intestines at birth (called meconium) often, if this milk is withheld, the intestine becomes irritated. Constipation often ensues, and is succeeded by a diarrhoea of a serious nature, caused by absorption of the toxic substance from the intestine. Changes in the dam's ration, excitement, unusual exercise and disease are liable to change the composition of the milk and cause diarrhoea. When the young are raised artificially, or by hand, and fed milk from different cows, or when changed from whole to skimmed milk, acute or chronic digestive disorders that are accompanied by diarrhoea are not uncommon. Feeding calves out of filthy pails, allowing them to drink too rapidly, and giving them fermented milk are common causes of the trouble.

Unsanitary surroundings, as dark, cold, damp, filthy quarters, lower the vitality of the young animals, and predispose them to diarrhoea as well as to other diseases.

Symptoms.—In many cases a more or less well marked constipation precedes the diarrhoea. Colicky pains are often noticed. When diarrhoea sets in, the symptoms, of course, are plain. There is a frequent discharge of semi-liquid or liquid faeces, usually of a pale-yellowish or whitish color. Hence the name "White Scours." There is usually a weakness and decrease of appetite. After a time the discharge has a foul, disagreeable odor. The faeces may be made up largely of undigested, decomposed milk, which adheres to the tail and hind quarters. If diarrhoea be severe, the patient refuses to nurse or drink, and rapidly loses flesh and strength, and lies a great part of the time.

In other cases the diarrhoea, while well marked, is not severe, and does not rapidly deplete the animal, becomes chronic. In such cases, while the patient retains a reasonable amount of vitality and strength, it has an unthrifty appearance, the abdomen becomes large, commonly called "Pot Bellied," and has a general unthrifty appearance.

Treatment should be largely preventive. The young animals should be provided with dry, clean, well-ventilated quarters, and allowed a reasonable amount of exercise. If the calf is to be raised by hand, the first milk of the dam should not be withheld, and warm, whole milk should be given in reasonable quantities, and often, for a reasonable length of time; and when a change is being made from whole to skimmed milk, or food of other nature, it should be made very gradually, and it is wise to reduce the amount given when a change is being made, and then gradually increase as the little animal becomes accustomed to the change. Pails or other vessels from which the animals are fed should be kept clean.

Curative Treatment.—When the symptoms are not severe and the patient is reasonably strong and has a fair appetite, all that is necessary in many cases is to change back to whole milk, and add to the milk, or other fluid taken, about quarter of its bulk of lime water. This is easily made by slacking a small lump of lime in a pail or other vessel, then filling the vessel with water and stirring it well with a stick. Then allow it to stand. The undissolved lime precipitates, and the clear liquid on top is "lime water."

In some cases it is wise to give the calf 4 to 6 ounces of raw linseed or castor oil, to remove undigested food from the stomach, but in many cases the lime water alone will correct the trouble.

In cases where diarrhoea is acute and the patient weak, it is necessary to take prompt measures of checking the trouble. In such cases 1 to 2 drams (60 to 120 drops) of laudanum, according to size of patient, should be given in about a pint of a mixture of 2 parts new milk and 1 part lime water, every 4 or 5 hours, until diarrhoea ceases.

The Infectious form of the disease is due to a specific germ that exists in the surroundings. This gains entrance to the circulation of the calf, generally through the navel opening, but may enter by the mouth, especially if the teats of the dam be infected.

Symptoms.—The symptoms appear from a few hours, or even less, to a few days or possibly longer, after birth, and are largely the same as those of ordinary diarrhoea, but usually more acute, and often terminate fatally in a short time.



Typical Shorthorn and Hereford Bulls Recently Sent from England to The Argentine.

Treatment.—Again special attention should be given to preventive treatment. The premises in which the cows are to produce their young should be thoroughly clean. Where the germ is known or suspected to exist, the premises should be thoroughly swept and dusted, and then disinfected by thoroughly washing with a hot five per-cent. solution of crude carbolic acid, or given a thorough coat of hot lime-wash, with five per-cent. crude carbolic acid, or both.

In addition to this, the navel of the calf should be dressed as soon as possible after birth, and several times daily afterwards, until thoroughly healed, with a strong disinfectant, as a 10 per-cent. solution of carbolic acid or one of the coal-tar antiseptics, or a solution of corrosive sublimate, 20 grains to a pint of water. The writer prefers the latter lotion.

When a case appears, it is good practice to use lime water as for the common form, and if quite acute, to use opium as for the same. A mixture that is highly recommended is one made of 15 parts new milk and 1 part formalin, a calf to get 1 teaspoonful of this to each pint of milk taken. WHIP.

Cost of Pork from Packing-house By-products and Pasture.

Several tests with swine were conducted at the Ontario Agricultural College in order to determine the value of packing-house by-products and pasture in the ration for hogs. In all, three tests have been reported, one with pigs that had just been weaned to compare tankage and meat meal with skim-milk; another with pigs three months old at the beginning of the trial to compare the same by-products, and a third to compare rape and clover pasture with pen feeding. In all cases the cost of 100 pounds of gain has been moderately low. The accompanying tables will explain the results in less space than can be done otherwise.

Packing-house by-products are very concentrated, and consequently when they were used in a test they were sparingly fed, they constituted about 11 per cent. of the meal ration. The following table will indicate the values placed upon the feeds experimented with and from which the deductions were made. All commercial feeds purchased are set down at the retail price:

	Per Cwt.
Tankage (A).....	\$2.50
Tankage (B).....	2.40
Beef meal.....	4.00
Skim-milk.....	0.20
Barley (poor quality and unsalable).....	1.10
Wheat middlings.....	1.30

While these prices may not obtain at the present time, the cost of 100 pounds gain is calculated from these data, and by adding a certain percentage to the value of the feeds and the cost of gain the reader can adapt the experiment and its results to his own conditions. Very little barley was used in either test.

Results of Test No. 1.

Group	Av. wt. at beginning	Av. wt. at end of test	Av. daily gain per pig	Cost per 100 lbs. gain
	Lbs.	Lbs.	Lbs.	
I Tankage (A), meal and water	33.6	157.0	1.01	\$ 4.33
II Tankage (B), meal and water	31.4	160.4	1.06	4.10
III Beef meal, meal and water	32.8	146.4	0.93	4.48
IV Meal and water.....	32.8	156.8	1.01	3.61
V Skim-milk and meal.....	32.4	165.8	1.09	5.00

This table is self explanatory, and it will be noted that the cost of 100 pounds gain was reasonably low in all cases. The pigs fed on meal and water did exceptionally well under the circumstances, making cheaper gains than the others. It will also be noticed that the skim-milk group made the best gains, but the cost was higher when we consider the milk at 20 cents per cwt.

In the second trial pigs three months old were selected and fed similarly to those previously mentioned.

Results of Test No. 2.

Group	Av. wt. at beginning	Av. wt. at close of test	Av. daily gain per pig	Cost per 100 lbs. gain
	Lbs.	Lbs.	Lbs.	
I Tankage (A) meal and water	69.4	153.8	1.14	\$4.23
II Tankage (B) meal and water	71.4	159.4	1.19	4.07
III Beef meal, meal and water	73.8	155.2	1.1	4.76
IV meal and water.....	70.4	159.2	1.2	3.34
V Skim-milk and meal.....	7.30	171.2	1.33	4.32

In both these tests the pigs fed on meal and water made the cheapest gains. Possibly in the counties of Essex and Kent, where hogs are extensively

grown and skim-milk is not considered to any great extent, they have quite as economical a system of making pork as in other sections of the province where more milk is available. However, where skim-milk is a by-product on the place it can be turned to good account, as the results of these trials have shown. It is generally considered that, in the absence of skim-milk, young pigs should receive animal feed in some form or another. The groups fed tankage made cheaper gains than those fed on skim-milk, showing that the former product can safely be used as a substitute for skim-milk, but those allowed neither milk nor tankage outclassed all others in cheapness of gains, so one would naturally ask, "Why bother with the tankage?" The character and the amount of the gains made on skim-milk still commend that product as one of the best rations for swine, but these tests show that pork can be made reasonably cheap without it.

Pasturing Hogs.

Still more hogs were divided in groups to compare the value of rape and clover pastures, also to compare pasture with pen feeding. All groups were fed the same meal ration and each received an equal allowance of skim-milk, although the pigs on pasture were fed less meal than those in the pens. The values attached to these feeds were the same as in the previously mentioned tests. In valuing pasture, rent of land, cost of preparation, seed, etc., were all taken into account.

Results of the Test.

Group	Av. wt. at beginning	Av. wt. at end of test	Av. daily gain per pig	Cost of 100 lbs. gain
	Lbs.	Lbs.	Lbs.	
I Rape pasture...	97.1	163.1	1.01	\$ 4.40
II Clover pasture	95.5	171.1	1.16	4.08
III In pens....	96.3	173.5	1.19	4.26

It will be noted that the pigs on clover pasture made the cheapest gains, while those in pens made the most rapid gains, and more economical gains than those on rape pasture. By way of comment on these results Prof. G. E. Day writes: "To be pastured to advantage, hogs should not weigh much less than 100 pounds when turned out."

The English Shorthorn Situation.

EDITOR "THE FARMER'S ADVOCATE":

It is good to read and to realize the sound view taken by the editorial staff of "The Farmer's Advocate" as to the Shorthorn situation, a critical one, in all conscience, when thoroughly understood in England.

It has all arisen because the Royal Agricultural Society of England refused to elect judges for the great show at Palermo, in the Argentine, and because the Americans have taken full opportunity of the chance given them to drive deeper home the wedge, the thin end of which was got in when America sent to Argentina, a selection of Shorthorns chosen by Secretary Harding for some of the large estancias over there. The Royal Agricultural Society's view was that war conditions were against Englishmen going over, but Englishmen are now up in arms and declare that such conditions would not have barred English buyers from going over if the Breed Societies had been asked to nominate some judges, instead of an Agricultural Society.

Among the Breed Societies and the Royal there is a nice little bit of feeling engendered, and an enquiry into the whole thing is being demanded. Englishmen have heard the call to the Shorthorn Society to "awake". A publicity campaign is to be started and some breeders have gone so far as to set about the formation of a Co-operative Sales Association to deal with all foreign and colonial orders for Shorthorns. The British Shorthorn Society cannot sell and cannot exist as a profit-making association without getting its rules of association altered into that of a company, liable to make profits—or losses.

At the moment, the future of the British Shorthorn Society is in the making, and what will be the outcome of all the ideas and suggestions that are floating about, no one can say. Certain it is that the British are not going to lose the Argentine trade without a great fight. America has offered to "share" the trade of South America, but the Englishman says, "No—I'm going to have it all, or at any rate, all the best trade, as I have had it in the past and no half measures for me."

The idea appears to be in U. S. A., that we are short of tip-top-quality cattle in England. Such a state of affairs does not exist. We are not reduced to eating our pedigree cattle, not by a long chalk yet; and the country was never so full of tip-top cattle—beef and dairy Shorthorns—as it is at the moment. Our subsidized governmental schemes of aiding live stock improvement are doing great work among the farmers, who are investing in first-rate pedigree stock and selling off their grade stuff, which is commanding tremendous prices in the public markets. The English breeder is not going to give in to the American without first of all rousing his own Shorthorn Society out of its slumbers, and then very likely acting on his own initiative in the end. I

should not be surprised if an International Shorthorn Trading Association is started, for I hear there are a few breeders who have got their heads together and have "selected" an organizer already. He is a first-class salesman, one who knows where the "goods" are and can get them delivered.

The Dairy Shorthorn Question.

I must say I was rather startled to read the editorial comments in the Farmer's Advocate regarding the possibility of converting the dual-purpose, or dairy Shorthorn into a red and white Holstein, or a mere, milkmaking machine. We are not going to do that. We are not Record Gone Mad yet. We do not try out our milking Shorthorns on all kinds of stunts. We are quite satisfied with the knowledge that the Shorthorn will milk out better than most breeds, and can be converted into beef quicker than any other breed. There is no need for Canadians to fear danger ahead or breakers upon which the dual-purpose breed will wreck itself. Our leading men here have a clearly defined object before them. They are breeding dual-purpose cattle and not merely dairy cattle. Over here we know perfectly well the distinction between the two. Experts are working quietly but surely on the perfection of the dual-purpose, but you can take it from me they have not yet seen any good to be got out of a lot of records which can be twisted into any old shape.

Still the Farmer's Advocate's note of warning has not been lost upon the Dairy Shorthorn Association in England. It is composed of a body of men who are not likely to be led away by Records of Performances, run riot. They are not going either to lose the dairy Shorthorn's true character and convert her into

A hank of hair, and
A bag of bones.

That time is a long way off, yet.

ALBION.

[Note.—Of course our cautioning re going too far with milk records was particularly for Canadian breeders but we are glad it was read and heeded in Britain.—EDITOR.]

THE FARM.

What the Women of England Are Doing.

EDITOR "THE FARMER'S ADVOCATE":

Those soldier men, fighting for King and country the world over, who in time of peace belonged to the countryside and its industries, will be glad to know of the noble work their sisters are doing in assisting those left behind to win from the land the precious and bounteous harvests which Providence has given Britain this summer.

As I write, scenes are now being witnessed in the harvest fields the like of which have not been seen in some parts for centuries. They recall the days when everybody used to turn out to gather in the ripened corn. Womenfolk and school children are helping the farmers with a voluntary goodwill that shows the spirit of the old race predominant and determined. True, the Army Council decided to release 27,000 soldiers to assist with the harvest, but it was recognized from the outset that the number of soldiers released represented only a small fraction of the number of men normally employed in the fields at this time of the year.

On farms in the Eastern Counties of England women have proved adept at such occupations as mangel hoeing, weeding, hedge clipping, cleaning ditches, making hay, and, of course, at all phases of dairy work. Many farmers in the South of England have been sceptical as to the value of women's work on the land, but experiences this summer show that even women without previous experience, given some preliminary instruction and a fair trial, can be of great service to the farmer, and that practical proof of their usefulness is breaking down the old prejudices.

On a farm of 500 acres near Coventry, to which eight young women were supplied by the Birmingham Labor Exchange, it was found that at most kinds of farm work three unskilled girls can do the work of two ordinary farm men. The girls, as beginners, received fifteen shillings a week and a share of a cottage, and did their own housework and housekeeping. They side hoed and singled roots, topped and carted them, hoed, lifted and clamped potatoes, helped to thresh, helped with hay and harvest, whitewashed sheds, mended bags, harrowed before and after drilling, cut thistles, and carted manure, and their employer was more than satisfied with their work and their keenness.

The daughter of a country vicar has for over a year been doing all sorts of farm work, including ploughing, on a Warwick farm in a thoroughly satisfactory manner. In another case four well-educated, young women, who are housed in a cottage and do all their own cooking and housekeeping, are engaged in dairy work, which they now do as well as trained men. A large farmer who engaged five women reports that they are doing the dairy work well, and that the calf-rearing is better attended to than ever before. Another farmer with 200 cows, who employed two women as an experiment, is now employing five. In another case three educated girls, all between 17 and 20, do everything for twenty-six cows—milking, feeding, scouring milking utensils, even the "mucking out."

They also harrow, plough on light land, and use the horse-hoe.

Women of the industrial and of the well-educated classes have passed through the County Training Station at Elkington, in Lindsey, Lincs. It is found that farmers prefer the latter class, although all those placed have given satisfaction. Most farmers there require the women to do weeding and similar work. Instances have occurred, however, where girls who have a knowledge of horses have at once, by their own desire, been put to horse work. There is ample evidence to show that the example set by these women has been readily followed in the districts where they are placed. One farmer engaged a girl to work horses with his daughter. He had no women at work prior to this arrangement. Within two weeks he had ten women at work besides his daughter and the girl from the training centre.

The district was one of the worst in Lincolnshire so far as prejudice was concerned, yet the example set has been followed in a most surprising manner by many farmers and women.

In another area where women's work was unknown,

some of the Training Station students started work, and before long a farmer's wife organized a gang of ten women from the village (including two maids from the Hall) and works with them all day. Some demonstrations held at the Training Station resulted in a most unmistakable change in public opinion. Farmers took advantage of the register inaugurated by the Board of Agriculture for the employment of women. According to a statement by Miss Talbot, Organizing Inspector of the Board of Agriculture for Women's Employment on the Land, in the nine counties which had sent in returns in recent months, the total number of women registered was 19,955, and over 7,000 had actually been placed in employment.

These new farm "hands" have adopted quite their own style of dress—and as near the ab-original as possible. Conventional clothing was generally much too hot and cumbersome for strenuous work in warm weather. As a rule, it was found that a shirt something after the style of a cricket shirt, cloth or drill knickers, and a short, fairly full skirt, or a loosely-fitting, belted tunic reaching just below the knee, made the best working costume. The headgear

consisted of a straw sun hat or a 'light-weight felt slouch hat. The boots were stout in the sole without being too heavy, with broad toes, and at least a size larger than those worn in ordinary life. Either leather leggings, putties, or thick, woollen stockings were worn.

Ladies have been exceedingly useful in the Remount service of the country. Many ladies, particularly the daughters of hunting squires or of our enterprising and patriotic colonists, have given most valuable aid, and the manner in which they have handled horses which even those animals in the neighboring head-collars always give a wide berth, has won ungrudging praise.

It is an interesting commentary on this labor of love, as it is on that of the female farm workers, that where they have once taken to trousers and leggings and the loose shirt, they ever afterwards speak with scorn of the discomforts of the skirt. And, let it be said, nothing is enjoyed more by these ladies than, when it can be snatched, a gossip at the stable door, with hands in breeches pockets! Oh woman—lovely woman!

ALBION.

Harvesting, Storing and Marketing the Potato Crop.

Harvesting the potato crop in Ontario usually commences the last week in September and may continue until the middle of October, depending on the weather. Dry weather and dry ground are essential to storing and marketing the tubers in a clean condition. Late varieties of potatoes are mostly matured by this time, and if not, further growth is stopped by frosts which destroy the vines. The tubers may be left in the soil until the frosts are severe enough to freeze the ground an inch or two, but it is better to run no risk. The crop should all be harvested before there is danger of the weather becoming cold and wet. If there is no disease in the crop the sooner they are dug after the stalks die the better.

Where potatoes have been killed by the late blight, rot usually starts as soon as conditions are favorable. For this reason a diseased crop is better left in the ground as long as weather conditions permit, as the tubers which are diseased will usually show signs of rot before they have to be taken up on account of frost. Then, only the sound tubers need be handled. If a diseased crop is dug and stored either in pits or cellars as soon as the tops die, the disease will be almost certain to develop, and any healthy tubers may rot from contact with those diseased. As soon as dug the potatoes should be placed in a cool, well-ventilated place.

The potatoes should be allowed to dry somewhat after being dug, before picking them up, as less soil will stick to them, and they will market or go in the cellar in a cleaner and more attractive condition. However, they should not be left lying in the sun too long, as there is a tendency for them to take on an undesirable green tinge.

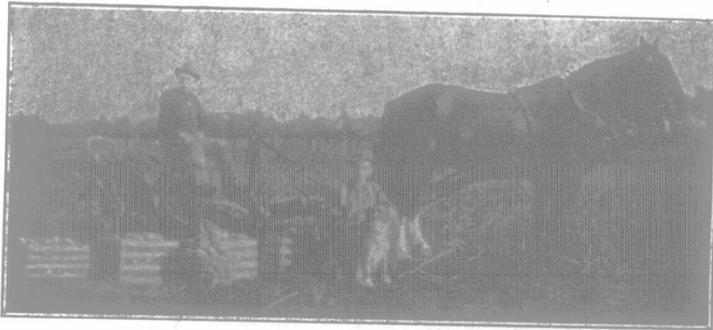
Digging the Crop.

On the average farm where a small area of potatoes is grown the tubers are lifted with a plow or fork. The ordinary plow brings the tubers to the surface and a fork or potato hook is used to loosen them from the earth, after which they are picked up and hauled to the place of storage. By this method a number of potatoes are damaged by being cut with the plow. However, on a dry, heavy soil where only a few potatoes are grown plowing them out is possibly the best method. On sandy soil a good many of the potatoes are dug with the fork. A man with an ordinary fork usually digs two rows, placing the tubers in one row to facilitate gathering. A man can dig one-half acre in a day and leave them free from injury, and in better condition than with any other method, but it would take too long to dig and store a large acreage if this method was resorted to.

The methods of digging mentioned are giving place to the potato digger where large acreages are grown. These machines all work on the same principle and give good satisfaction. A large, pointed share goes beneath the tubers, the depth being regulated by a lever at the hand of the driver. The potatoes are elevated on a revolving, open table, which allows the dirt to shake through. At the back of the machine the potatoes drop on a shaker which removes the tops to one side, leaving the tubers comparatively clean. They are then picked into a receptacle of some description and emptied into a wagon box, bags or crates. Digging machines usually require four horses to handle them satisfactorily, especially if the ground is inclined to be hard. On sandy soil one team may be sufficient if they are not worked continuously.

The accompanying illustration shows a half bushel wire basket, commonly used when picking, which is very satisfactory. It allows a considerable amount of soil to sift through. The wooden crate which holds a bushel of potatoes is found to be very handy for hauling the crop from the field to storage. It is more convenient than the sack. The size is 12 inches deep and 14 inches wide and 18 inches long. When made this size one crate may be placed on end inside another and another placed on top upside down, thereby getting three crates in the space of two. This is very handy in hauling them to the field or in storing them from one season to another. These crates can be made from slats ripped out of two-inch dry elm or basswood plank. The slats should be two inches wide and one-quarter inch thick. The corner pieces may be made from a 2 by 2-inch piece ripped diagonally.

With a potato digger it will cost about \$8.00 per acre for digging and picking the potatoes, that is, figuring at 20 cents per hour for man labor and 10 cents per hour for a horse. Plowing out the potatoes and picking them up will cost, figuring the labor at the same price as above, about \$12.00 per acre. These figures show that for the man growing several acres of potatoes, a digger will pay for itself in a short time. A common practice in potato-growing districts is for several neighbors to co-operate in harvesting the crop. In this way sufficient pickers are obtained to enable the digger to be kept going continually from morning till night, and also one team is kept hauling the tubers to storage. There is no loss of time with either men or teams.

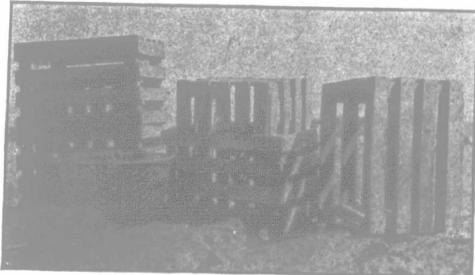


Digging Potatoes by Machinery.

Taking one year with another, there is usually more profit selling the potatoes as soon after digging as possible. Some years, if the crop is light, or disease destroys many of the potatoes in storage, the spring price is high, but frost and disease must be risked through the winter, and there is also the extra work of storing and again taking the potatoes from storage to market. Potatoes will shrink considerably in storage, which also lessens their value. The greatest shrinkage takes place the first two weeks after digging, and again when the tubers commence to sprout in the spring.

Requirements for Storage.

When potatoes are stored they should be put in a dry, cool, well-ventilated, dark place. The cellar



Crates and Wire Pail.

under the house or the basement of the barn is the usual place of storage, but they often lack the necessary requirements. Great loss occurs every year from potatoes stored while wet, in warm, poorly ventilated places, or piled in heaps, thus giving ideal conditions for development of disease if they are in any way infected. Where potatoes are stored in cellars, an effort should be made to have a circulation of air around them. A temporary floor of slats should be put down about six inches above the permanent floor, and a slat partition placed about six inches from either wall. This gives a free circulation around, beneath and over the potatoes. If the pile is large, square ventilators made of slats and running from

top to bottom of the bin should be placed every six or eight feet.

The storage place should be dark to prevent sprouting, and the best temperature is around 35 degrees. The cooler potatoes are kept without freezing the better. The value of the tuber for eating, as well as for seed purposes, is lessened by sprouting, and when the potatoes sprout there is a shrinkage in weight. Much can be done towards keeping the temperature low by leaving the storage place open at night and closed in the daytime during the fall months. In the spring it should be kept closed as late as practicable. A pit should only be opened at one end to see if the tubers are all right, until shipping time, or when the seed is required for planting.

When putting the potatoes in storage the earth should be removed as much as possible without bruising the tubers. This may be done by allowing them to pass over a long slat screen. Frequently the storage is filled from a hole in the top, and the crates or sacks are dumped directly down these holes. Under such circumstances considerable earth passes in with the tubers. In filling a large bin or pit each day's picking should be spread over the entire space as this permits the potatoes to cool better than if they are left in a pile.

Pitting the Tubers.

The ordinary style of pit is frequently used for storing potatoes. On a dry part of the field the potatoes are put in a pile about four feet wide at the bottom and tapering to the top. The pit may be made any length, but one that will contain from one hundred to one hundred and fifty bushels is preferable. When the crop is stored in one continuous pit there is danger of greater loss from disease, frost or heating than when stored in a number of small pits. Where the ground is high and dry some growers remove the soil to the depth of a furrow, as this saves considerable banking up. A layer of straw is placed on the tubers together with a light covering of earth as soon as the tubers are pitted. This permits of ventilation and prevents injury from early frosts. When the weather becomes cold, earth must be added to the thickness of a foot or even greater, if the pit is in an exposed place. When the weather becomes severe it may be necessary to add some strawy manure to this. A tile should be placed at each end for ventilation. The frost must be kept from the potatoes, but at the same time, they should not be allowed to heat. By lowering a thermometer down the ventilator the temperature may be ascertained.

Where there is indication of rot or disease at digging time, it is a good plan to pit the potatoes, even if one has storage room in the cellar. A light covering of earth will prevent frost injury, and, as winter approaches, the sound tubers may be removed to the basement.

Some dig a pit out of the side of a sand bank from four to five feet deep, depending on the height of the bank above the high-water level. No boards are used on sides, top or bottom. The pit is filled with potatoes to about six inches below the surface. A thick layer of straw and 10 to 12 inches of earth are placed on top. Potatoes must be dry when placed in the pit, and the soil must be dry to prevent heating and loss by rotting.

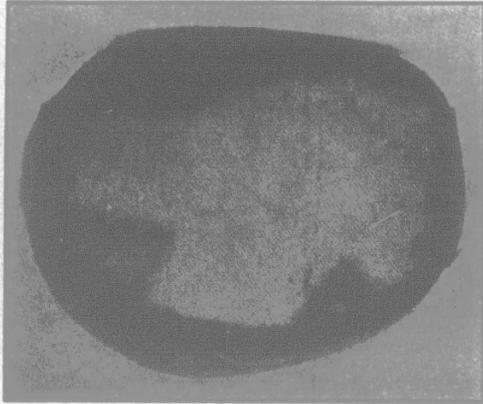
Next Year's Seed.

The potatoes for planting next spring should be carefully selected at time of digging, from the most productive hills. Only tubers free from any sign of disease should be saved. These should be handled to avoid bruising, and then placed under the most ideal conditions of storage, regarding ventilation, temperature, and moisture. Increased yields will be obtained by more care being taken in the storage

of the seed as well as in the selection and cultivation of the crop.

Destroy Diseased Tubers.

The late blight possibly causes heavier loss in potato fields than any other disease. As a rule the affected tubers either rot in the field or show indications of being diseased. Heat and moisture are conducive



Late Blight Rot.

From Pennsylvania State College Bulletin.

to the propagation of the disease in storage. Great care should be taken when putting potatoes in storage to discard all tubers showing any sign of the disease. Conditions in basements or pits are often favorable to increasing the loss if there are a few infected tubers to give the disease a start. Keep all suspicious looking tubers by themselves. Sometimes the potatoes look all right on the surface, but have a brown, watery discoloration extending in from the skin.

Common potato scab may not spread in storage, but care should be taken not to feed scabby potatoes to animals without cooking them, if the manure is to be spread on land where potatoes are to be grown in the near future. The disease organism survives the process of digestion and may be carried back to the field in the manure.

Powdery scab is a disease that should be guarded against in this country. While it is common in Europe it has not as yet gained a very strong foothold on this side of the Atlantic. It somewhat resembles common scab at first glance, but on looking closer it will be found that the scab spots start underneath the skin like blisters instead of on the surface. These blisters break open and show the interior filled with a dark, powdery mass.

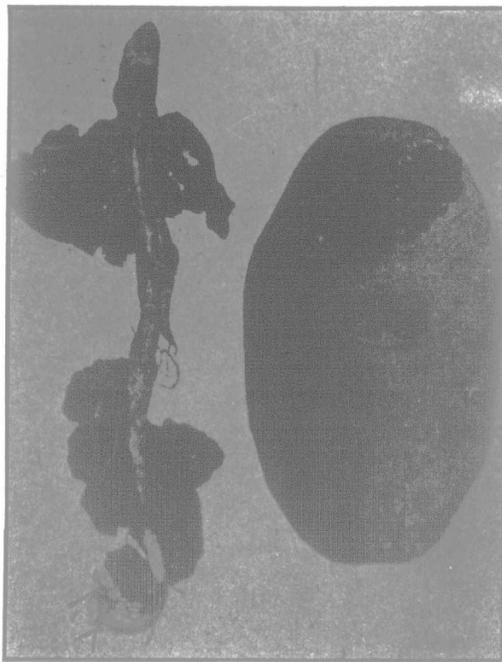
Potato canker or wart disease if neglected may spread over a farm and render the soil unfit for potato growing for several years. While this disease is not

common, every precaution should be taken to keep it out of Canadian fields. Warts or excrescences appear in the eyes of the young tubers and continue to enlarge until a large, spongy, brown scab is formed. In its advanced stage the disease is not difficult to identify, although tubers only slightly diseased might easily be overlooked and be a source of infection if planted.

Potatoes sometimes commence to rot about digging time or in storage without any appreciable cause. However, there is usually some disease associated with it, and a warm, moist storage-house is conducive to its spread. Potato growers must wage a continual fight against disease destroying their crops.

Marketing the Crop.

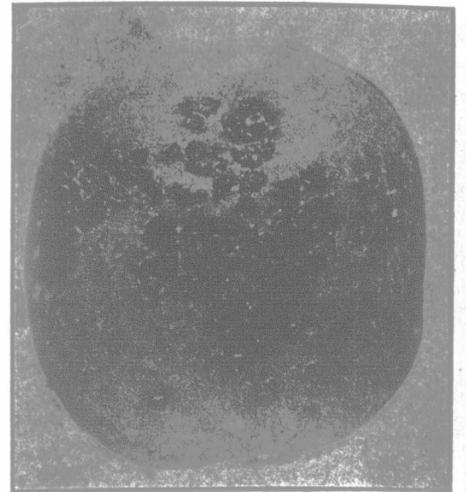
With potatoes, perhaps, more than any other crop the supply generally rules the price, as the demand is usually about normal. If for some reason there is a scarcity, the price soars and vice versa. However, regardless of the supply there are some districts that secure better prices than others, the reason being that all growers in the community have one variety, and place a uniform product, in regard to size, shape and color, on the market. There are far



Wart Disease or Canker on Stem and Tuber.

From "The Potato," by Grubb & Guilford.

too many varieties being grown. In some districts no two growers have the same variety, consequently when loading a car red and white, long, round or oval, little and big potatoes go into the same car, which gives a motley appearance, detrimental to the trade. The mixed cars are disliked by the dealers, and the producer suffers to the extent of ten cents or more per bag.



Powdery Scab.

Photo by H. T. Gussow.

Co-operation in the truest sense of the word is required. Have the community become noted for one variety of potatoes, then produce a good sample. When marketing, it will pay to sort the potatoes. This can be done by hand, by throwing out all small, poorly shaped or diseased tubers when filling the bags. Uniformity improves the appearance and incidentally the price. There are sorting machines on the market which grade the potatoes to different sizes, by the tubers passing over various sized screens.

Co-operative marketing has proved successful in districts where the growers held together. There is always opposition on the start, but if all interested support their organization and market only first-class produce, success is usually the result. With a good, reliable business man as manager, and sufficient cash to permit holding the potatoes for better markets, it seems reasonable that an organization of men with the same object in view should market their crop to better advantage than disinterested dealers could market mixed lots. The standard of quality must be high in order to satisfy customers and secure their trade in the future.

Canada's Young Farmers and Future Leaders.

Prepare for a Winter with the Stock.

The competition for boys and young farmers, which recently brought so many good articles before the readers of this department of "The Farmer's Advocate" proved one thing, that farm boys can do things well and can describe them intelligently for the help of other boys and older men. Particularly were we impressed with the results which the boys obtained with live stock and poultry, and these results should stimulate interest amongst other boys and encourage them to begin, this winter, to see what they can do as compared with their fathers' efforts in feeding some farm live stock. As a general thing, "Dad" is not a bad sort of a fellow if he is taken rightly. True it is that some boys find difficulty in getting to the point of ownership of any of the farm stock, and fathers who are not willing to give their boys a chance to have something their very own, and to feed, care for and pocket the proceeds from it, are standing in their own light. Nothing will encourage the boy more to do better all-round work on the farm than to give him a chance to show what he can do in the way of caring for some of his own live stock. A pig, a sheep, a calf or some poultry, is a good start.

The first difficulty the boy will run against, who has never had anything his own but who would like to try it this year, will be to get the stock. The first step should be a discussion with his father to find out whether or not arrangements can be made, and if so, the class of stock should be decided upon. The best place to get the stock is to select the pig, or sheep, or calf, or whatever may be decided upon from some of the stock in the father's possession. Pick one of the best, not necessarily the very best, but an individual

above the average of the lot; in fact, the father should be willing and anxious to give the boy the best in the pen. It would be wise and good policy to get the aid of "Dad" in selecting the animal with which the experiment is to be tried. If no suitable animal is to be found on the place, arrange some way to get the money to buy one. The boy may be interested in a pure-bred pig or a pure-bred sheep, or some pure-bred poultry, and, if so, he should get encouragement from his father and his help in the purchase of the same and in the feeding. We believe it would be better in most cases if the boy paid a fair price, even though the pig were taken from his father's pen. It could be arranged, if the lad had not the money, that the purchase price be returned to the father when the pig was disposed of for pork. By buying the pig, or the lamb, or whatever it may be, and feeding it through to the finished product, the boy has his operations on a business basis from start to finish. Of course, we believe that it is good policy for the boy to have some breeding stock of his own, but we are speaking now particularly of stock to feed through the winter, and not of breeding stock, a start in which the father should give the lad gratis, or we should not say gratis, but rather in consideration of his value on the farm, and of the fact that there is no better way of producing a stockman than by interesting the lad early in life.

We will assume, then, that no difficulty is experienced in getting the animal or animals with which to work. Now, what about the feed? Feed is going to be scarce this winter and the price will be high. To make the experiment a strictly business proposition all feed should be purchased at a price. Of course, the handiest and best place to get it is from father's bin, but it should be carefully weighed out and paid for at a fair market price at the barn. This will mean a little cheaper feed than when it is bought elsewhere, and the father will get the same price for it as if he sold it to someone else. Provided arrangements cannot be made, or that the boy thinks he can do better with some purchased feed, he should borrow the money if he has not sufficient on hand from his father, to be paid back when the animal being fed is disposed of. It will be seen that

it will be necessary to keep strict account of the transaction from the price of the animal in the first place to the cost of all feeds purchased and to the returns when finally sold. This is necessary, and will be a good lesson in farm bookkeeping.

We have the animals and the feed. The question, then, foremost in the mind of the boy is how to feed—how much and how often? Here again it is wise to consult father; but in some little things the boy may not agree with the older man, and he must, to a certain extent, map out his own plans of feeding. Whether it is done two, three or four times per day, regularity must not be overlooked. Besides, all feed troughs or mangers should be kept scrupulously clean, and watched carefully to see that the animal is getting just what it will clean up, and no more. Constant attention will be necessary if success is to follow the system of feeding practiced, whatever it may be.

When it comes to selling, it would be wise to have the pig or the fat lamb or the fat calf go with some that are being sold from father's pen, but if the boy's is a little better finished than the others, he should insist upon a premium in price. Always sell by the pound, as it is the fairest for both seller and buyer. Provided the weigh scales are correct (and here we might mention that it is well in the process of feeding to weigh at stated periods, to see just how the animal is doing) both parties to the transaction will get exactly what is coming to them. Watch the market reports carefully, and be sure to get all the animal is worth. The boy should make his own bargain, but, of course, it is no harm to get a hint or two from his father, who has had much more experience. Let the boy take all the responsibility in connection with the entire feeding and sale of the stock, and after the deal has been put through, all the business in connection with it should be straightened up, the stock paid for, the feed totalled up and settled for, and all expenses deducted from the sale price. All profits, of course, should go to the boy, and he should be encouraged to use them in a further transaction of a like nature.

After all is over, write the matter up in a short article to be published in these columns.

Automobiles, Farm Machinery and Farm Motors.

The Fair and the Motor.

The fall fairs are proving a valuable educational medium in more respects than one. Perhaps the biggest recognition they have given to any industry of recent development, has been accorded to the automobile trade. This compliment is based upon two convictions—one, that the automobile has passed the pleasure stage and the realm of restricted popularity, and the other that the agriculturist of the future cannot talk about a well-equipped farmstead unless his inventory shows a serviceable car of some standard make. It has well repaid the motor owner to visit a large exhibition, because under the most favorable circumstances he can acquaint himself with those problems of mechanical construction which have always created the greatest wonderment. For instance, the visitor sees the internal intricacies of a motor exposed in such a shape that the oiling of the cars does not prevent an accurate conception of its functions. At the Toronto Fair, several manufacturers cut away the housing of the differential in order that spectators might witness the workings of the little ring gear, the big ring gear, and the central movable gears, which allow the back wheels to receive power in inverse ratio to the amount of resistance; in other words, the value of the differential which allows one wheel to go slower than another around a corner, was exemplified so clearly that anyone could carry away an accurate idea. Other manufacturers cut out a part of a cylinder head, and by operating the engine

with electricity they revealed the system by which valves and pistons developed power through the combustion of gas. Clutches were also shown and the agriculturist took away with him more information, regarding multiple disks and cone types than he had been able to gather from reams of literature. If cars are exhibited this fall at any point in close proximity to your home, we would strongly recommend your attending the fair in question. Before doing so, it would be well to review your season's running and to jot down a memoranda of any mistakes you have made, and also a note or two regarding difficulties that arose under various circumstances. You will find the salesmen and expert mechanics willing and ready at all times to answer questions.

There are not many mechanical changes in the 1917 models. Some of the larger cars have adopted the two-unit system of ignition, starting and lighting. This idea is mainly attributed to the fact that a motor, separate from the generator, presents possibilities where machines of heavy horse power are used. Practically only one car is devoid of a self starter, but this model possesses other outstanding features that seem to compensate for the absence of one convenience. Electric-light systems are universal. Gas tanks are being moved to the rear in many designs, that previously housed them under the cowl or front seat. The closed bodies also show some interesting changes of minor importance. The door by the wheel, locks from the inside and the opposite door, from the outside. Dome lights give a dull radiance of extreme beauty. Slip

covers are being used in exquisite taste. Tire covers will soon be extremely common, for they not only add to the beauty of the automobile but protect the rubber from extreme changes of temperature, and particularly from the heat of the sun. Interior seat arrangements in touring cars and roadsters show a number of innovations. The clover leaf design has become popular. Some autos have divided front seats, and the seven passenger models have the auxiliary seats attached in such a shape, that when not in use, they do not look cumbersome or out of place. 1917 will not see a car with a body of rough, angular shape. The stream-line effect, even in the lowest-priced models, has come to stay. Of course, very expensive autos still expose the warning signal, door hinges, or odd accessories, but speaking generally, the trend is distinctly and decidedly towards smooth construction. The visitor at the fair will also notice that cellular radiators are winning unusual favor, that the flat fenders are a thing of the past and that easily manipulated tops have come to remain forever.

When the automobile was first introduced owners used it on fine summer days only, later on they gradually extended the field of its influence to all kinds of mid-year weather. Then there was a demand for side curtains, that would so inclose it that the early days of spring and the late days of fall might be included. Now the closed body has been introduced, and in practically every instance it is free of squeaks and rattles so that without inconvenience or annoyance, the motor car has become an all-season machine.

AUTO.

THE DAIRY.

Cream Cooling.

Necessary Features of Satisfactory Cream-Cooling Tanks.

The prime purpose of the cooling tank is to provide suitable, practical and convenient facilities whereby the cream may be set in cool water. Water is the cheapest, simplest and most efficient cooling medium available on the average farm.

SIZE OF TANK.—Since the cream of several separations is kept on the farm, the cooling tank should be of sufficient size to accommodate at least two cans, one to be used for the freshly separated, warm cream, and the other for the cooled cream of previous separations. This eliminates the mixing of warm cream with cold cream, which is a practice which cannot be too strongly condemned, as cream so mixed will ferment very rapidly, causing an inferior product. The tank should be deep enough so that the water on the outside of the cans at all times reaches the level of the cream on the inside of the can.

INSULATION.—The cream cooling tank is of value not only in the prompt cooling of the warm cream, but it makes possible also to keep the cream cool until it leaves the farm in summer and to prevent its freezing in winter. Its efficiency therefore is greatly enhanced by proper insulation, although a non-insulated tank is a great deal better than none. The lining of the tank with special insulating material such as corkboard, hair, felt, etc., adds greatly to the insulating efficiency of ordinary tanks. It has been experimentally demonstrated, however, by G. L. McKay and F. W. Bouska of the American Association of Creamery Butter Manufacturers, that a tank made from two-inch cypress boards is practically equivalent in insulating efficiency to a one-inch corkboard, and answers therefore all practical purposes.

Unless the cream cooling tank can be installed in a clean room, protected from extremes of heat and cold and reserved for the storing of cream exclusively, it is essential that it be equipped with a tight-fitting cover. This will add to its efficiency in controlling the temperature and it will protect the cream against contamination with diverse impurities and odors.

FACILITIES TO CHANGE WATER.—The cooling water even in the most perfectly insulated cooling tank will warm up some during the storage of the cream, partly because of the atmospheric heat in summer and partly because it absorbs the heat from the warm, fresh cream. It is therefore important to change this water as often as may be necessary in order to keep the cream reasonably cool at all times. In properly constructed cooling tanks a change of water once or twice in twelve hours is usually sufficient. The cooling tank should therefore have a drain that will facilitate the prompt removal of the warm water, while the fresh, cool water runs in. Time, labor and water may be economized if this drain is connected with the stock watering trough used on the farm; thus the cooling water, after it has served its purpose in cooling the cream is run into the stock trough, where it automatically takes care of the water supply of the stock. Inasmuch as the stock is watered at least twice in twenty-four hours, the changing of the water in the cooling tank every twelve hours calls for no labor additional to that required anyway for the watering of the stock. If running water is available,

or the water is pumped into an elevated tank, as is the case on many farms with wells and windmills or gasoline engines, the changing of the water in the cooling tank is further simplified by connecting the intake of the cooling tank with the water supply pipe from the water storage tank.

Spring and Well Water.

On farms with running springs the cooling and storage of cream may be readily solved by setting the cream cans direct into the spring. In order to guard against the tipping of the cans, especially those only partly filled, and to insure proper immersion of the cans so that the level of the water surrounding the cans is at least as high as that of the cream in the cans, an ordinary box or barrel may be set into the spring to accommodate the cans. In this case the spring water is allowed to continuously run through the box and to overflow at the proper level.

Dug wells with cold water may also serve as natural cooling and storing places for cream. The cans may readily be lowered into such wells by a windlass or on ropes with pulleys. Dry wells and pits, although cool, are usually not suitable for storing the cream. As previously stated, the mere exposure of the cream to cool air does not cool the cream rapidly enough to prevent fermentations. Then, again, such pits are usually damp and are prone to contain stale air, and often foul odors and gases, which may be absorbed by the cream, and which are favorable for contamination with and growth of molds and other undesirable microorganisms. Dry wells and pits are very similar in their effect on cream as cellars. Their chilly atmosphere is due to dampness rather than to low temperature, and their standard of sanitation is at best questionable. Running springs and dug wells with cold water on the other hand furnish ideal places for cooling and storing cream. These natural facilities are available on many farms, but are often not utilized. If intelligently used, these facilities may serve the purpose at practically no expense to the farmer, quite as effectively as especially constructed cooling tanks.

What Experiments Prove.

1. Quality is the fundamental factor that controls the condition of the butter market and that determines the price at which butter sells.
2. The quality of butter on the market depends more on the quality of the cream from which it is made than on any other condition incident to production, manufacture and transportation of the butter.
3. In order that the cream may arrive at the creamery in good condition, it must be cooled promptly and be kept cool until it leaves the farm.
4. Running springs and cold water wells serve as efficient natural facilities for cooling cream on the farm.
5. In the absence of these natural facilities, properly constructed cream cooling tanks should be used. These may readily be constructed by the cream producers or can be purchased ready-made and at low cost.
6. By pumping all water used for watering the stock through the cream cooling tank, the use of the cooling tank involves practically no extra labor.
7. The proper use of the cream cooling tank and keeping separate the warm cream from the cold cream retards the souring of the cream, checks undesirable fermentations, eliminates the animal heat from the cream and protects it from contamination with dust, foul odors, flies and other impurities.
8. In order to secure the best results from the use of the cooling tank, all utensils, cans, separators, strainers, stirrers, dippers, and the tank itself should be kept thoroughly clean.

—PURDUE BULLETIN, 188.

HORTICULTURE.

A Light Fruit Crop.

Since last report of the Department of Agriculture Fruit Branch was published, there have been some changes in the apple situation. Considerable fruit has fallen in many parts of Ontario, due to prolonged dry weather. This has been particularly noticeable in the Georgian Bay district, where a fair crop had been expected. Much of the fruit there will be of small size, and only about 20 per cent. of No. 1 quality. Elsewhere in Ontario the dry weather did not seriously affect the apple crop, which had already been very seriously reduced by heavy dropping and apple scab.

The general situation in Western and Northern Ontario can be obtained from the following table:—

Norfolk County—60 per cent. of standard crop and 15 per cent. No. 1.
Georgian Bay—60 per cent. of standard crop and 20 per cent. No. 1.
Burlington—40 per cent. of standard crop and 15 per cent. No. 1.
Niagara District—40 per cent. of standard crop and 15 per cent. No. 1.
Lambton District—45 per cent. of standard crop and 10 per cent. No. 1.
Western Ontario (inland)—50 per cent. of standard crop and 10 per cent. No. 1.

East of Toronto there will not be more than 20 per cent. of No. 1 fruit, and the crop is very light. Reports from the Annapolis valley remain favorable. The fruit is generally clean, and there will be a fair crop. A falling off in prospects is reported from British Columbia, and the crop will be slightly less than in 1915.

Peaches are estimated at from 50 to 60 per cent. of a normal crop.

The plum crop is reported light, as is also the pear crop.

There will be a medium to full crop of grapes.

Fall Selection of Potatoes Pays.

It pays to select next year's seed potato tubers from the field at digging time, better than to select them from the bin next spring. Here are reasons why seed selection is more easily taken care of now than when the potatoes are in the bin:

At digging time one can get a good idea as to the type and uniformity of tubers produced under individual vines which cannot be obtained after the crop has been put in storage. Seed should be selected only from vines producing several uniform, average-sized, true-to-type tubers. Such selection can not be practiced when the seed is selected out of the bin.

Tubers affected with scab, russet scab, late blight rot, black leg rot and brown ring discoloration due to wilt should be discarded. To avoid the possibility of getting tubers infected with black leg rot or brown ring discoloration, the field should be thoroughly inspected before the vines have dried up. Seed should not be kept from infected plants; in fact, wilted plants, together with what tubers have been formed on them, ought to be destroyed.

Plants affected with leaf roll, curly dwarf and mosaic should be destroyed and no tubers saved from them. Although these diseases do not cause any visible injury on the tubers, the use of infected seed will reduce the yield and finally cause the potatoes to "run out."

—A. G. TOLAAS, University Farm, St. Paul.

More on the British Columbia Fruit Situation.

EDITOR THE FARMER'S ADVOCATE:

There seemed to be a taken-for-granted feeling at the convention of the British Columbia Fruit Growers that to a very great extent the solution of their marketing problems was going to be had largely through thorough and efficient advertising arrangements. The President, and Mr. Winslow, though, and some of the other speakers mentioned other phases of the marketing problems that will not be reached by advertising.

The serious loss to the growers of the privilege of unloading express in carloads while in transit was announced. Some saw-off arrangement that the express companies get at by juggling the rates was made. As a compensation for this loss, they reduced the rates by \$60 per car to certain prairie points. The President asserted it was stifling the car-load business.

Mr. Abbott, the Coast Markets' Commissioner, spoke on the coast markets and also on the consumer's side of the question of fruit. Touching on market troubles, he was very emphatic on the point that there is a great lack of information from the producer's end of the business. Mr. Abbott has had to contend to a great extent with a lack of organization among the growers down at the coast, and this no doubt led to this statement of lack of information from the growers as to the quantity he might expect. Then, too, growers inland, along the main line of the C.P.R. and in the Okanagan, who would not unite with organizations and attempted to market for themselves, could give no reports of their expected crops or their plans nor can they expect to receive reports nor suggestions from the various markets. A case where the independence of the farmers when carried to extremes works for their downfall. He stated that often when the season is well advanced the coast markets do not know whether they are to get fruit and produce at all or whether it is going to land on them in carload lots. He asked the producers not to feel hurt when the commissioners from the various markets criticized their methods. The commissioners were not out with one idea only—that of criticizing—but they left that largely to the dealers. No one can know what impressions his goods are making unless he follows them to the market, or else is told by someone on the market, where they fall down in the consumer's eye. British Columbia growers are too far from their markets to be able, in most cases, to follow their goods to the retailers and consumers, and have to depend on those who are at the markets to tell them where they are behind in giving a good service and full value for the consumer's money.

He said, further, that up to now the coast people had been buying largely United States foreign stuff, but British Columbia and eastern growers are now coming on these markets, and if they wish to hold them, and they can, they must ship in only No. 1 stuff. The mainland (lands about Vancouver not on Vancouver Island) has enough of its left-over and seconds to supply all the demands there is for cheaper, poor-grade fruit. Hence, the inland places should ship on only their No. 1 stuff. When the increased production, which the estimates of the other speakers warned was coming, made itself evident, the inland places are going to need all Vancouver and the coast to market the increase. It is absurd to expect that any district can work up these markets in one year. It takes time to get acquainted with the consumer, and he will buy only when he has seen the brand on the market and is familiar with it from year to year. He gave a strong warning against shipping to the coast markets, immature stuff, in order to get the early markets, and the attempt to avoid loss from over ripening before a sale is made. One thing was certain in his estimation—that no fruit firm or grower could hope to make an impression at the coast unless he could equal or surpass the Western States grading. These growers kept the various sizes of fruits so well together and avoided mixing sizes, maturity, color and shape to such an extent that it was a perfected science among packers, and any one competing with them must beat or equal them at their own game if they hope for recognition.

Mr. McTaggart, the Prairie Markets' Commissioner from British Columbia, came from a part of our markets where there has been considerable hard feeling against Canadian growers, and British Columbia growers in particular, over the increase in tariff. The grain growers, he stated, had been pouring contempt on British Columbia and overlooking all the other provinces, and it has made it very hard to get the same consideration for British Columbia produce on the prairies that it has been accustomed to. He was very glad to say that the Grain Growers had a representative at the convention, and that being where he had been so impressed by the difficulties that the growers had to contend with, that he had promised his hearty support upon his return to the prairies.

He took up the advertising also, stating that the Western States, last year, had \$60,000, while we in British Columbia had \$1,500. Their work is clever and efficient, and this year, if they ship only one car, they will advertise in all the Western Provinces. Ontario started to advertise in the Prairies in June, and were then using half-page space in all farm papers on the prairies. The only advertising done by British Columbia was on soft stuff, and that largely was in the form of slips giving directions on "how to preserve without using sugar." Half a million of these had been distributed and were eagerly sought after.

The Dominion Fruit Commissioner from Ottawa seemed quite optimistic on the fruit markets because of the outlook of the crops on the prairie. The people there had stopped the speculation in land and were

spending on necessities. As a register of the degree of prosperity, he mentioned the large sales being made by automobile factories. Last season this was not the case.

He also stated that the quality of produce in British Columbia was considerably better than that of last year. Strawberries this year from British Columbia were the best pack ever seen on the prairies, and they came largely from Gordon Head, B. C. There is a good opportunity for expansion there, and this year, he was glad to note, that there were very few violations in pack.

He, like the rest, emphasized the fact that British Columbia would have to get down to business in advertising, if she wants to hold her present standing and work up the necessary market for her coming increased production.

He spoke in favor of co-operation in marketing, such as was to be found in the Okanagan Valley, and contrasted the results of that with the condition that exists where the apple buyers worked. They were no help; they established nothing of permanency in the industry. He thought it was time we got working to the ideal of never letting fruit sell for a price that will not pay the producer, and to do that we must put a stop to the senseless competition that is bound to exist where individuals attempt to solve their own markets single handed.

He had stopped on his way back from Washington, where the orchards are going back in every respect, due largely to over-planting peaches, and mildew on the apples, which is bound to cause a material decrease in competition on the prairies.

B. C.

WALTER M. WRIGHT.

POULTRY.

Preserving Eggs.

Recommendations for preserving eggs by the water glass method.

Selecting Eggs.—The eggs should be collected daily from clean nests only, and from healthy flocks. It is preferable to use infertile eggs and thereby eliminate the possibilities for embryonic development and subsequent spoiling. In no case should old, sun-baked, cracked or thin-shelled eggs be used. Cracks are usually detected by gently tapping the eggs or candling them.

Container.—Generally, glazed earthenware jars, galvanized tubs or buckets and wooden tubs or kegs are used. In case of wooden receptacles it is desirable to let them stand several days full of water, then empty and scald before using.

A gallon stone jar will hold 40 average eggs. One pint of water glass syrup mixed with 10 pints of water will cover 120 eggs in a three gallon stone jar.

Water.—Mix the water glass with water that has been boiled. The mixture should be kept covered at all times in order to prevent evaporation. When cold it is ready for use.

Water Glass.—Water glass can be purchased either in liquid or dry form. Most drug stores, however, carry in stock only the liquid form.

Strength of Solution.—Different proportions of water glass to water have been successfully used, but the higher strengths as for example: one pint of water glass to 9 or 10 pints of water have given better results.

Uses.—Eggs preserved in water glass can be used in place of fresh ones for frying, scrambling, cooking, and, if not kept too long, can be used for meringues, icings, angel cake, etc. A pin hole opening made on the blunt end of the shell makes it possible to boil the eggs without any danger of their bursting.

Commercial Packing.—A large number of persons have packed eggs in water glass successfully for commercial purposes. They should be labeled as water glass eggs when being offered for sale.—Agr. Exp. Station, Washington.

The Moulting Season.

The fall of the year is the natural moulting season. A hen's ability as a winter egg producer depends largely on how she passes this moulting period.

While the moulting period can be forced and shortened by the use of stimulants, it is usually best to allow it to take its natural course. As a general rule the hens that moult late and quick are the highest producers and the early moulter is seldom a winter layer.

To grow a new set of feathers is a severe drain on the birds, and the nature of the feed at this time is of the utmost importance. The common grains such as wheat, corn and oats, fed in sufficient quantities will keep the fowl warm and maintain the body weight, but these grains alone are not enough. The fowls need some real feather making food, rich in protein and mineral.

A mash composed of equal parts by weight of wheat, bran, ground oats or barley, shorts and meat scrap will make a very good supplement to the grain ration. The addition of one half part each of oil meal and sunflower seed to this mash will give the new coat of feathers a very sleek appearance.

FARM BULLETIN.

Another Book.

BY PETER MCARTHUR.

A book does not always have the effect intended by the author. Some months after the publication of Upton Sinclair's book, "The Jungle," in which he exposed the revolting conditions in the Chicago Stock Yards and aroused a wave of disgust that reduced the trade in canned meats by about \$300,000,000, the amazed young author exclaimed pathetically:

"I thought I was appealing to the intelligence of the people, and all I did was to turn their stomachs."

Some weeks ago a friend thought he would make an appeal to my intelligence by advising me to get a copy of Gustavus Myers' startling book, "The History of Canadian Wealth" (Albert Britnell, Toronto). He evidently thought it would rouse me to a fury of indignation and make me rage against the rich and powerful. The final effect of reading the book was just the opposite, and I am sitting down to tell about it in a frame of mind that is serene—almost exalted. Instead of reducing me to a state of hopelessness by its sordid record of extortion, fraud, embezzlement, theft, heartlessness, corruption, and all uncleanness, it flung my thoughts upward, even as a character in "Paradise Lost"—who shall be nameless, because I do not want to institute a comparison—was flung, when

"The strong rebuff of some tumultuous cloud,
Instinct with fire and nitre, hurried him
As many miles aloft."

This book is certainly "instinct with fire and nitre," and other high explosives of a financial, political and generally scandalous character, but it caused a revulsion of feeling such as the author would hardly expect. It turned my mind from the rich and powerful—and corrupt—to the decent, plain people of Canada whom I meet in my everyday life, and I exulted in the thought that this young nation has a foundation of honesty and uprightiness that is destined to withstand and outlive all the assaults of the powers of evil. The foundations of Canada were laid by the "wise, poor men" who cleared away the wilderness, and the multitude of wise, poor men who are to-day doing the work of the country will slowly build Canada into what it was meant to be by the God of nations. The progress that has been made already in this wonderful work is something that might well rouse us to song.

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The History of Canadian Wealth is about the most pitiless exposure to which any country was ever subjected. Backing up his statements with documentary evidence, Mr. Myers makes revelations that are enough to make any Canadian squirm. Honored names are handled in a way that must be hard for their respectable descendants to endure. Few of the older Canadian fortunes or public men escape unsmirched, and I am told that he has a second volume written, but not published, that brings the story right up to the minute and turns the light on the pleasant Captains of Industry a man is likely to meet when visiting the clubs in Toronto and Montreal. It is a strange form of public service that Mr. Myers has undertaken, and, such as it is, he is doing it well. But, in my present mood, I am not sure that it is very necessary. Of course, it is a good thing for us to learn how wealth is being organized and centralized into a few hands, and also to learn how little the men who control the wealth of the country deserve their power. But I doubt if it is by smashing that power in direct fight that Canada is to win her complete freedom. I incline to the belief that we will win with greater certainty by stimulating the good we find in the country rather than by fighting the evil. And, although he did not set out to do this, Mr. Myers really proves it. While men in place and power were robbing the public domain and oppressing the people, the people went on with their work, and, in spite of every thing, gave us the Canada we have to-day—the Canada of pleasant homes and boundless opportunities. While reading this book, it seems impossible that any country could survive such looting as Canada has endured. The emigrants who were dumped into the wilderness by the heartless selfishness of those who wanted to relieve the congestion of Old Country parishes—to make wider deer parks, or to rid the country of paupers—were forced by their necessities to make homes for themselves, and now their descendants are as prosperous and as highly placed in the service of the country as the descendants of those who claimed their aristocratic birth as an excuse for receiving favors from self-seeking governors and governments. The broken men of the old world touched the earth in Canada, and, like Antaeus, their strength was renewed and multiplied. While those who sought to acquire wealth were stooping to every kind of meanness and rascality, those who were struggling to get homes went on clearing the land, fencing, draining, tilling, building good buildings, raising flocks and herds, and doing their humble tasks. And now look at the results. Although the farmers and laboring men of Canada still have many wrongs to complain of, and must keep on fighting for their rights, the fact remains that their condition is better than that of the common people of any other country in the world, and even of any other part of the Empire. They have freedom of conscience and opinion. They are all educated and their children may aspire to the highest positions in the land. While we have much to complain of, we have much to make us rejoice, for no aristocracy or moneyed power has managed to get a strangle hold on us as they did in the older countries.

And if we chose to exert the powers that we possess, through the vote, we could right all wrongs as far as is humanly possible. We do not enjoy this power and freedom because our liberties were not attacked. Read Mr. Myers' book, and you will find that in few countries were they so ruthlessly attacked. But such was the vitality of the common people working in a new land that oppression has been thrown off like an evil dream. The only curse we lacked was the curse of militarism, and right there is a point to which we must give serious thought to-day. In doing our part to defend Canada and the Empire, we are running the danger of introducing militarism—the one thing that might possibly make the oppressors enduringly powerful. That danger can and must be avoided.

Abraham Lincoln said: "God must love the common people, He made so many of them." As I consider the

case of Canada, I am convinced that God loves the common people because they do His work—do it blindly, blunderingly, if you will, but still they do it. For many years I have been studying the history of Canada, but from another point of view. Mr. Myers has studied the rich, while I have been trying to unravel the short and simple annals of the poor. He has followed the working of parliaments, railroads, banks, great institutions, and great men, while I have listened eagerly to family traditions. To-day he has assembled a mass of evidence about befoiled fortunes, while I rejoice in having many tales of homely fortitude and simple heroism. As I look at it, the fortitude developed by the pioneers is a greater asset to Canada to-day than all the fortunes of all our money barons. Through their very necessities the common people developed a true ideal of what Canada should be, and that ideal is still our inspiration, though many of us may forget it.

And when a nation or a man has a true inspiration, it cannot be overcome.

"When the leaden world
Sets its hard face against his fateful thought,
And brute strength, like the Gaulish conqueror,
Hurls his huge mace into the other scale,
The inspired soul but throws his patience in
And slowly that outweighs the ponderous globe."

The true history of Canada is the history of a divine patience working against unimaginable odds, and that patience is bound to win in the end. Of course, we must fight the powers that prey on us, but even though we may fail to-day the victory is certain to-morrow. In spite of the revelations of this disquieting book, no one need fear for the future of Canada—if we do not lose the ideal and inspiration of our fathers. There is the only danger.

Big Crowds, Good Weather, and High-quality Stock at the National.

As is usual at the Canadian National, the largest crowd of both country and city people attended during the second week of the Show, which for the most part was favored by the best of weather. Larger crowds gathered around the stock-judging ring than is usually the case, which goes to show that there is a very keen interest in live stock at the present time, and that those really interested in the stock will spend, at least a part of their time at the Fair, watching the placing of the awards on their favorite breed. There was scarcely as much stock to be judged as was the case last year, but the quality of the entry left little to criticize, and all went away feeling that from a livestock viewpoint the Show was entirely successful. The draft breeds of horses were not quite so strong in number of entries as usual, but the quality was never better. The same may be said in regard to beef cattle. Stockmen generally had a good year at the Fair, making numerous sales. In fact, they made a record in this regard. The fruit and poultry show was fair and of good quality.

LIGHT HORSES.

Numerically the horse department was not up to the past records of the Canadian National, and the reason is apparent. The difficulties experienced in bringing animals across the Atlantic and the scarcity of men, combined to curtail the exhibit from the viewpoint of numbers. However, some newly-imported animals were shown, and these, with those bred in Canada or imported during previous years, made a show worth seeing.

HACKNEYS.—If ring-side spectators cannot become enthusiastic over a good exhibition of Hackney performance they are not admirers of the horse, for this breed can arouse a cosmopolitan audience when other classes of live stock fail. The Hackney has long been bred to "play to the gallery" or attract attention to himself while at his work, whatever it might be. True to the best traditions of the breed, its representatives at Toronto performed in noble style, and entertained, with symmetry, style and action, a goodly number of onlookers who gathered at the ring-side.

The aged-stallion class had much the same complexion as it showed last year, with the same three horses standing first, second and third. Colorito, which has been obliged to work his way up from the ranks, so to speak, at the Canadian National was first and champion in 1915, and the same tale must be repeated this year. He is a powerful horse, with good command of his feet and legs. Prickwillow Connaught and Spartan, both good horses, gave excellent exhibitions and stood second and third respectively as they did one year ago. De Wilton, by small odds, went into fourth place.

The female classes were better filled than were those for stallions. Model's Queen, a firmly-coupled mare of true Hackney type and a straight, trappy mover, won the three-year-old filly class from Minnie Derwent, a beautiful mare but not so good a mover as her competitor. The winner in this contest went through all subsequent contests until she was declared female champion.

Four two-year-olds competed, and the honors went to Brookfield Princess, a promising young mare with good conformation and a quality of action that can be developed to suit the fastidious Hackney admirer.

There was a close finish between Brookfield Queen and Dainty Spartan for honors in the yearling-filly class. The latter won, but by small odds, for both were good movers and were well put up.

The yearling-mare class called out seven choice females which constituted the best line-up of the breed. Only three prizes were given, so several deserving entries went unrewarded. Princess Winyard, a nicely turned mare and the best actor of the septette, was given the red ribbon. Next came Wild Agnes, good in hock action but going a trifle wider than the winner. Princess Eudora performed into third place, shutting out Grace Darling and three others, any one of which a horseman would be proud to own. Three mares with foals and the three foals in a group by themselves made two more line-ups which, with a mare and two of her progeny, concluded the Hackney classes, marked by quality throughout if their numbers were not large.

EXHIBITORS.—James Tilt, Brampton, Ont.; Graham Bros., Claremont, Ont.; Jas. M. Semple, Milverton, Ont.; Crow & Murray, Toronto; Jos. Telfer, Milton

West, Ont.; W. E. Jewell, Bowmanville, Ont.; J. F. Husband, Eden Mills, Ont.; Geo. M. Anderson, Guelph, Ont.; Dr. W. J. R. Fowler, Toronto; Geo. May, Toronto; B. Rothwell, Ottawa; G. H. Smith, Delhi, Ont.; Lieut. H. J. French, Toronto; J. M. Gardhouse, Weston, Ont.; Chas. Grimsley, Eglinton, Ont.

JUDGES.—H. M. Robinson, Toronto, and Andrew Little, Sewickley, Pa.

AWARDS.—Stallion, aged: 1, Graham Bros., on Colorito by Rosador; 2, Crow & Murray, on Prickwillow Connaught by Forest King; 3, Tilt, on Spartan by Polonius; 4, Semple, on De Wilton by Drumlanrig. Filly, 3 years: 1, Telfer, on Model's Queen by Warwick Model; 2, Tilt, on Minnie Derwent by Derwent Performer. Filly, 2 years: 1, Husband, on Brookfield Princess by Brookfield Laddie; 2, Jewell, on Lilly Denmark by Royal Denmark; 3, Tilt, on Miss Spartan by Spartan; 4, Anderson, on Play Girl by Warwick. Filly, 1 year: 1, Tilt, on Dainty Spartan by Spartan; 2, Husband, on Brookfield Queen by Brookfield Laddie; 3, Jewell, on Terrington Dora by Terrington Cetewayo. Yeld mare: 1, Husband, on Princess Winyard by Warwick Model; 2, Fowler, on Wild Agnes by W. P. K's Masterfield; 3, Telfer, on Princess Eudora by Vanguard; 4, Smith, on Grace Darling by Warwick Model. Brood mare and foal: 1, Gardhouse, on Whitegate Gertrude by His Majesty; 2, Jewell, on Rosaline by Ganymede; 3, Grimsley, on Wood Hatch Gold Flash by Evanthmus. Mare with two of her progeny: 1, Jewell, on Rosaline. Foal of 1916: 1, Gardhouse, on Nellie Spartan by Spartan; 2, Jewell, on Lady Jewell by Terrington Cetewayo; 3, Grimsley, on Spartan's Gold Flash by Spartan. Champion stallion, Graham Bros., on Colorito. Champion mare, Telfer, on Model's Queen. Best string of five, Gardhouse, on Talke Fire Alarm, Whitegate Queen Victoria, Berkley Swell, Whitegate Gertrude and Nellie Spartan. Best stallion and best mare, 14 hands 1 inch and under, Gardhouse, on Talke Fire Alarm and Whitegate Queen Victoria.

PONIES.—By way of diversion many people like, for a time, to get away from the heavy drafter and the speedy or stylish light horse to something that may be termed "a pocket edition" of those actually useful animals. In viewing the ponies the adult can enter into the spirit of the thing, and with the young enjoy the diminutive Hackney which has all the ambition, pride, style and action but not the substance of the real, grown-up animal of that name, while the docile, little Shetland has its place, and many a child is taught the ways of animal kind by driving and caring for these abridged editions of the carriage horse. If more boys and girls were allowed to handle ponies, they would, in later years, better understand the animals which may be their servants. The pony classes were not too well filled and several of the entries had appeared on previous occasions, but this in no way detracted from the interest taken in their exhibition. It is a treat to see Talke Fire Alarm, that Hackney stallion which has thrice been champion at Toronto, perform. He spends as much time in the air as any horse shown in the ring, and when he touches the earth he does so very lightly only to assure himself that it is still there. Whitegate Queen Victoria is also a splendid mover, and with her she brings, each year, a nice foal. These two Hackney ponies were champions of the male and female classes respectively. The best Shetland stallion was a black fellow and very much a horse despite his lack of size and substance. The champion pony mare, Alice Russell, showed well indeed and her little offspring attracted considerable attention by its lamb-like antics in the show-ring. A feature of the very young ponies was the duet of colts, one from Whitegate Queen Victoria, the other from Berkley Swell, and both by Talke Fire Alarm. Seldom can one see so much Hackney type and style in so few inches.

EXHIBITORS.—Jas. Creech, Lambton Mills, Ont.; Margaret Brown, Toronto; John Miller, Ashburn, Ont.; J. M. Gardhouse, Weston, Ont.; T. Cussion, Whitby, Ont.

JUDGE.—Senator Robt. Beith, Bowmanville, Ont.
AWARDS.—Stallion, 12 hands and under: 1, Margaret Brown, on Preece; 2, Creech, on Highland Laddie; 3, Miller. Stallion, over 12 hands and up to 13: 1,

Gardhouse, on Talke Fire Alarm. Filly, 3 years, over 12 and up to 13 hands: 1, Creech, on Netty Horce. Brood mare, with foal at side, 12 hands and up to 13: 1, Gardhouse, on Whitegate Queen Victoria; 2 and 3, Miller, on Alice Russell and Marhle. Brood mare, 13 hands and over, with foal at side: 1, Gardhouse, on Berkley Swell; 2, Cussion, on Indian Flower. Foal of 1916: 1 and 2, Gardhouse, on Lady Victoria and General Alarm; 3, Cussion. Champion stallion, Gardhouse, on Talke Fire Alarm. Champion mare, Gardhouse, on Whitegate Queen Victoria. Best Shetland stallion, Margaret Brown, on Preece. Best Shetland mare, Miller, on Alice Russell.

STANDARD BREDS.—Rather than "damn with faint praise" the exhibit of Standard breeds, we shall say frankly at the beginning that some classes were real good and others were only ordinary in quality, and quite below the standard in numbers. Unfortunately for those interested, in a practical way, in the breeding of horses, the aged stallion class was judged before the Grand Stand rather than on the line in the breeders' ring. The object of this we fail to understand, for if the public are to be educated in the selection of good sires to mate with their mares, they should be shown the desirable type, uncaparisoned with leather or burdened with vehicles. Stallions of this kind should be shown in the ring; then in any other place or manner the management may desire. Burt Axworthy, which won the aged stallion class, competed in the breeders' ring for the championship, which he captured easily. This beautiful chestnut has a wonderfully straight and easy gait and considerable size. While the younger stallions were well brought out, they did not, as a whole, give quite as good an exhibition of speed and action as one would like to see.

The aged mare class was the best line-up of the breed. Six were out in good fit and form. Mabee's Thesa Directly, a beautifully turned thing, set on good feet and legs, was one of the best movers of this and the other female classes. She stood at the top, and later won the female championship. Ideal Princess and Juliett McKinnay were next in order, and both were good specimens of the breed. They were excellent individuals and good mares. With the exception of three brood mares in one line-up, the other female classes contained only two entries each.

EXHIBITORS.—Wm. Hammall, Toronto; Thos. Maddaford, Pickering, Ont.; T. D. Elliott & Son, Bolton, Ont.; A. C. McMillan, Erin, Ont.; N. S. Goodison, Dixie, Ont.; Stuart A. Lister, Oakville, Ont.; Crow & Murray, Toronto; Ashley Stock Farm, Foxboro, Ont.; Paterson Bros., Agincourt, Ont.; Ira A. Mabee, Aylmer, Ont.; F. A. Heslop, Freeman, Ont.; Jno. Brown & Son, Galt, Ont.

JUDGE.—Robt. Graham, Toronto.
AWARDS.—Aged stallions: 1, Crow & Murray, on Burt Axworthy by Dale Axworthy; 2, Lister, on Haxshire; 3, Elliott & Son, on Eastwood Todd by Todd; 4, Hammall, on Victor Peters by Jim Todd. Aged stallion (pacer), 1, Crow & Murray on John R. Hal. Stallion, 3-years-old: 1, Paterson Bros., on Arley McKerron by Jack McKerron; 2, Ashley Stock Farm, on Judge Carmen by Peter Wilton. Stallion, 2 years old: 1, Paterson Bros., on Bob McKerron by Jack McKerron. Stallion, 1-year-old: 1 and 2, Ashley Stock Farm, on Jack Rayner by George Rayner and Winkle Boy by Alick. Mare, 4 years and over: 1, Mabee, on Thesa Directly by Jerry Directly; 2, Paterson Bros., on Ideal Princess by Prince Ideal; 3, Heslop, on Juliett McKinnay by Washington McKinnay. Filly, 3 years old: Brown & Son on Josephine Bingen by Bingen Pilot; 2, Ashley Stock Farm, on Lady McMartin by McMartin. Filly, 2 years: 1 and 2, Ashley Stock Farm, on Ella Bleecker by Ingara and Aunt Fanny by Noble Peter. Filly, 1 year: 1, Ashley Stock Farm, on Clara Gray by Alick; 2, Paterson Bros., on Jessie P. Goshen by Lord Goshen. Brood mare with foal by side: 1 and 3, Ashley Stock Farm, on Phillywinkle by McKintyre and Bessie Longwell by Noble W.; 3, Paterson Bros., on Lady Arley. Foal of 1916: 1, Paterson Bros.; 2 and 3, Ashley Stock Farm. Champion stallion, Crow & Murray, on Burt Axworthy. Champion female, Mabee, on Thesa Directly. Best string of five, Ashley Stock Farm.

ROADSTERS AND CARRIAGE.—A very commendable showing of roadsters was made in which a large ring-side audience was much interested. The classes were not large, but the entries were in splendid fit and staged a good show. There were eight mares, 4 years old and

over, from which Gladys, a beautiful dark-brown shown by N. M. Henry, was singled out for first place. Crow & Murray's Maggie McKerron won from three other three-year-olds. She is by Jack McKerron, and gives evidence of having inherited considerable of her sire's speed. The ribbon for best mare any age, went to Maggie McKerron.

The champion carriage mare was Princess Patricia, which won in a class of seven mares, 4 years old and over. Her knee action was good, indeed, and quite extreme enough for a serviceable carriage beast.

Exhibitors.—Thomas Bartrem, Toronto; Thos. Cowan, Orono; John Campbell, Georgetown; N. M. Henry, Millbrook; F. A. Heslop, Freeman; A. Le Chambers, Milton West; Crow & Murray, Toronto; T. E. Hopkins, Cooksville; H. W. Sharpe, Toronto; John Palmer, Richmond Hill; And. Cunningham, Toronto; Bell Bros., Scarboro Jct.; Thos. McMichael & Son, Seaford; S. A. Levack & Son, Toronto; Geo. A. Cameron, Alton; Paterson Bros., Agincourt; Ashley Stock Farm, Foxboro; H. J. Colvill, Arthur; Ira A. Mabee, Aylmer; Wm. C. Horbord, Rockwood; G. H. Smith, Delhi; W. F. Batty, Brooklin; Jas. Tilt, Brampton; W. E. Jewell, Bowmansville; Geo. M. Anderson, Guelph; Fred Ellis, Britannia; J. F. Husband, Eden Mills; N. Wigglesworth, Georgetown; Archie Gray, Don.

Judge—Robert Graham, Toronto.

Awards.—Roadsters—Mare, 4 years and over: 1 and 2, Henry, on Gladys and Connie; 3, Crow and Murray, on Temple; 4, Bartrem, on Daisy Model. Filly or gelding, 3 years: 1, Crow & Murray, on Maggie McKerron; 2, Palmer, on Mary Cruickston; 3, Hopkins, on Jim; 4, Cunningham, on Miss Binnie McCallen. Filly or gelding, 2 years old: 1, McMichael, on Miss Toddy; 2, Bell Bros., on Maud McKerron. Filly or gelding, 1 year old: 1, Cameron, on Belle C.; 2, Levack, on Hector Spartan; 3, Paterson Bros., on Lady Beatrice; 4, Bell Bros., on Lady Belle. Brood Mare and Foal: 1, Cowan, on Lyla; 2, Ashley Farm, on Emma Frasier; 3, Paterson Bros., on Iola Arley. Foal: 1, Paterson Bros.; 2, Ashley Farm; 3, Cowan. Best mare, any age: Crow & Murray, on Maggie McKerron.

Carriage.—Mare, 4 years or over: 1, Crow & Murray, on Princess Patricia; 2, Paterson Bros., on Easter Lily; 3, Smith, on Glory; 4, Horbord, on Princess Lyle; 5, Colvill, on Warwick Jessico. Filly or gelding, 3 years: 1, Batty, on Madge. Filly or gelding, 2 years: 1, Tilt, on Peril. Filly or gelding, 1 year: 1, Anderson, on Warwick Nellie; 2, Batty, on Flora Lynette; 3, Tilt, on Doctor Spartan. Brood Mare and Foal: 1, Wigglesworth, on Gladys; 2, Ellis, on Maud; 3, Husband, on Brigham Bell; 4, Gray, on Archie Gray. Foal of 1916: 1, Ellis; 2, Wigglesworth; 3, Gray; 4, Husband. Best mare, any age: Crow & Murray, on Princess Patricia.

THOROUGHBREDS.—Under this classification there were only two classes, and these were judged by Robt. Graham, Toronto. There was a fine turnout in the stallion class, and Wire Inn, Rosturtium, Ben Hodder and Plaudinore were placed in the order named. All were in fine mettle, and the winner in particular showed splendid advantage. Only three brood mares were brought into the ring, and Saintly received the red ribbon.

Exhibitors.—Jas. Bovaird, Brampton, Ont.; Wm. Hammall, Toronto; G. Beardmore, Toronto; Dale & Dalziel, Toronto; Jos. Doane, Toronto; J. B. Cowieson & Sons, Queensville; Geo. B. Elliott, Newtonbrook.

Awards.—Stallion, 3 years and over: 1, Beardmore, on Wire Inn, by Wickham; 2, Bovaird, on Rosturtium by Nasturtium; 3, Hammall, on Ben Hodder by the Commoner; 4, Doane, on Plaudinore by Plaudit. Brood mare with her foal: 1, Elliott, on Saintly by Deutschland; 2, Bovaird, on Bella Glen by Cormnant 3, Dale & Dalziel, on Heather Blend by Ayrshire.

GENERAL-PURPOSE.—The classes for general-purpose horses were not very well patronized. A few very good horses were out, but, generally speaking, the exhibit, as a whole, was mediocre in character. The awards were made by John A. Boag, Queensville.

Exhibitors.—N. P. Clarkson, Islington; Jos. Telfer, Milton West; Wm. G. Hill & Sons, Queensville; Firstbrook Bros., Toronto; I. M. Natrass, Millbrook; W. A. Dale, Brampton; T. Readman & Son, Streetsville.

Awards.—Mare or gelding, 4 years or over: 1, Telfer; 2 and 3, Clarkson. Filly or gelding, 3 years: 1, Firstbrook Bros.; 2, Natrass; 3, Dale. Filly or gelding, 2 years: 1, Clarkson. Brood mare, with foal: 1, Telfer; 2, Readman & Son. Foal of 1916: 1, Telfer; 2, Readman & Son. Best mare any age: Telfer on the aged mare.

HEAVY HORSES.

The Canadian National has long been the rendezvous for good horses. Importations from the Old Land have frequently landed just previous to the holding of Canada's greatest Exhibition, and have there made their debut in Canadian show-ring circles. This year was no exception as there was a very fine line-up of newly-imported Clydesdales. Some years the entries are larger than others and this may be termed an "off" year from point of numbers. The scarcity of help is partly to blame for this. Fewer entries than other years is no indication that interest in horse breeding is lagging. There was a good showing of Canadian-bred animals, and their splendid type, conformation and quality prove that it is possible to produce horses of merit in this country, that compare favorably with imported stock. The Clydesdales made a commendable showing in both the open and Canadian-bred classes. Percheron entries were not large, but the quality was good. There was an

exceptionally small entry in Shires, however, the breed was represented by several animals of merit. Although the excitement which used to prevail when various close classes were being placed was not so much in evidence this year, large crowds thronged the ring-side to see their favorite breed judged. John A. Boag, Queensville, Ont., placed the Clydesdales, and Robert Graham, Toronto, judged the Percherons and Shires.

CLYDESDALES.—In the Clydesdale classes several winners at the National in past years were able to hold their places against new comers; others were forced down the line by new blood. The majority of the entries this year were making their first appearance in a Toronto show-ring. Competition was keen in several classes, but the brood-mare and foal classes were strongest in point of numbers. Graham Bros. strengthened the showing with a line-up of newly-imported stock. Several of these horses had been successful in carrying off honors at Old Country shows and some commenced their Canadian show career by winning in strong classes at Toronto this year. The graceful carriage, splendid quality and snappy action tend to make the Clydesdales a popular heavy-draft breed. Canadian bred stock made a good showing, many individuals having fine quality along with substance. The art of the groomer was shown in the excellent form in which the majority of the animals were brought out.

Only four aged stallions were shown, and the battle was between Lord Gleniffer and Alert for first place. These stablemates have several times, in the past, graced show-rings with their presence, but the decision is usually in favor of the former. Lord Gleniffer is an attractive, well-balanced horse, possessing substance and quality. Although he may not move as gracefully as a younger animal, he stands on the kind of feet Clydesdale men like to see. Alert made a good second. He is much the same stamp of horse as the winner, and shows character and masculinity. His well-built body is supported on a good set of feet and legs. In third place was Dunnottar, a strongly-coupled horse with smooth shoulders and fine quality. He stands well on his hind feet and shows a springiness of pasterns when he moves. While he has good feet, they are hardly of as high quality as those of the previous two mentioned.

In order to give beginners, and less extensive breeders and dealers in horses, an opportunity to compete among themselves, importers were excluded from one aged class. A number of the right kind of animals were brought out. On Guard made a favorable impression the moment he entered the ring. He is a splendid-backed horse, with good quarters and heavy muscling. There is something attractive about his make-up that appeals to a horseman, and not much fault can be found with his action or quality of underpinning. Loyal Hero came in for the blue ribbon. Like most of the entries in this class, he carried plenty of substance, and was able to move in a satisfactory manner. From the standpoint of quality, he compared favorably with the winner. Knight of Barglass is rather a showy horse, with nicely-turned croup and good underpinning. He has a set of springy pasterns that give ease to his movements. If anything, he is a trifle more up-standing than the other two.

Graham Bros.' two horses, Bonnie Flisk and Diamond, were the only entries in the three-year-old class. Both are recent importations and have a show-ring record in the Old Land. They possess substance and excellent quality, with good, snappy action. Diamond is a little thicker animal than his stablemate, and is exceptionally strong over the loin.

Six horses from the Claremont stable made up the two-year-old class. These are also of recent importation and are bred in the purple. All are promising, thick animals, with well-sprung ribs, and should make good draft stallions. Their feet and legs are the right kind, and they move in an attractive manner. Peer was placed first in the class. He is a well-balanced animal, and gave the appearance of being more mature than the rest. He is heavily muscled, and stands on a set of deep, broad feet. Auchenharoie is a rangier horse, but is thick-bodied and is strong over the loin. He has fine quality of bone and travels well. Fyvie Pearl, much the same type of horse as the second, but with a trifle less quality, was placed third, and Reminder, fourth.

The yearling class was headed by Mendell Prince, a neatly-turned colt, and a splendid mover. From top to bottom it would be difficult to improve much on quality. Royal Malcolm was not far behind the winner in quality and action. If anything, his feet are a little smaller than those of the winner, but they are deep and good.

There were three fillies in the three-year-old class. It would be difficult to improve much on the conformation and quality of Lady Lister. She is a showy filly, good enough to win the championship in females. This mare has a beautiful body, supported by a splendid set of legs, under which are large, deep feet. Bessie Scott is by no means a plain mare. She would not be faulted much in any point, except when in comparison with very high-class company. In conformation and action she compared favorably with the winner, but the quality was barely as pronounced as that of Lady Lister. Daisy of Newcastle secured third money. While a good mare, she was in too strong company to go higher.

There was a good showing of two-year-olds, and Bell Baron and Fiana's Choice strove for first place. Both are thick-bodied fillies, well ribbed-up, and showing splendid legs and feet. The former is a particularly strong-topped mare, with quality throughout. She succeeded in standing first, with the latter a close second. There was no discount on the action of either.

Bessie May Gartly, a good-topped, thick mare, with quality, did not show the same snappy action as the previous two, and had to be content with third place. Sweet Peggy also showed very favorably in this class.

There was a close decision in the yearling filly class. Neither Margery Daw nor Mendell Queen could be faulted much in type, conformation, quality, or action. Both are showy fillies, with strong backs and loins. The latter is a particularly showy colt, but Margery Daw possesses the same desirable qualities and has the advantage of having a little more size, without in any way detracting from her trimness. Finally she secured the coveted ribbon. Jean Favorite, of nice quality, but hardly the scale of the other two, came third.

Eleven brood mares, with foals by their sides, made the strongest class of the day. They were all big, strong mares, heavily muscled, and many had splendid quality of underpinning. Some were a little out of condition, but it takes extra careful feeding to keep a mare in show fit when she is raising a foal and helping out the teams on the farm.

Seaham Bonnie, a showy mare of excellent type and conformation, had the honor of heading this strong class. She is a deep, thick, strong mare, with the quality desired in Clydesdales. The legs are of clean flinty bone, and, while the feet are large, it might be an improvement if they were deeper. Seldom does one see a mare of substance with such a fine, beautiful head. Tangy Maid is also a smooth, typey mare, with substance and quality. Very little fault could be found with her, and she was a close second to the winner. Newbigging Beauty, also a deep, thick, strong mare, with snappy action, stood third. In the past she has gone higher in her class, but, compared with the strong company she was in this year, she showed a little coarseness in hocks and ankles. She is a good kind of mare, able to put up colts superior in quality to herself. Nell McEachern, much the same build of mare with good quality, came fourth. The foals made a fine showing, and many will be heard from in the future. W. F. Batty won first, on a particularly well-built colt, out of Newbigging Beauty. In second place was a drafty colt from the stable of Goodfellow Bros.

There was no discount on the type of mares competing in the yeld mare class. All showed substance and quality. Queen Ida of Petty's place at the top was not disputed. She is an attractive mare, with strong back and loin, body well ribbed-up, and a smooth, nicely turned rump. The quality of bone and feet is of the finest, and her action is true and snappy. Sweet Mary is a mare with possibly more substance than the winner, and, being a couple of years older, she appeared more matured. The conformation and heavy muscling, together with quality right to the ground, made her a good second. Parkfergus Meg, a thick mare and with ability to move in a creditable manner, was third, with Jessie, a mare with splendid feet, in fourth place.

Exhibitors.—Adam Watson, Cobourg; R. Rothwell, Ottawa; Graham Bros., Claremont; M. McPhaden, Cresswell; Thos. McMichael & Son, Seaford; Jos. Telfer, Milton West; Sir H. M. Pellatt, Lake Marie Farm; L. J. C. Bull, Brampton; Robt. E. Maxwell, Newcastle; Alex. McCort & Son, Bolton; W. E. Jewell, Bowmanville; John Brown & Son, Galt; Geo. A. Cameron, Alton; Dymont Bros., Dundas; Goodfellow Bros., Bolton; W. F. Batty, Brooklyn.

Awards.—Aged stallion: 1 and 2, Graham Bros., on Lord Gleniffer by Sir Ronald, and Alert by Baron's Pride; 3, Rothwell, on Dunnottar by Glenshinock; 4, Watson, on Dunure Captain by Baron of Buckleyvie. Aged stallion (importers excluded): 1, Pellatt, on On Guard by Prince Sturdy; 2, McPhaden, on Loyal Hero by Revelanta; 3, Telfer, on Knight of Barglass by Hiawatha Godolphin; 4, McMichael & Son, on Lord Ronald by Baron's Luck. Stallion, three years: 1 and 2, Graham Bros., on Diamond by Dunure Diamond, and Bonnie Flisk by Bonnie Buckleyvie. Stallion, two years: 1 to 5, Graham Bros., on Peer by Baronette of Ballandoch, Auchenharoie by Auchenflower; Fyvie Pearl by Everlasting, Reminder by Dunure Diamond, and Examiner by Everlasting. Stallion, one-year-old: Graham Bros., on Mendell Prince by Mendell; 2 and 3, Bull, on Royal Malcolm by Lord Malcolm, and Gay Carruchan by Gallant Carruchan. Filly, three years: Graham Bros., on Lady Lister by Mendell; 2, McCort & Son, on Bessie May by Dux; 3, Maxwell, on Daisy of Newcastle by Montrev Imperialist. Filly, two years: 1, Jewell, on Bell Baron by Baron's Pride; 2, Graham Bros., on Fiana's Choice by Scotland Champion; 3, Cameron, on Bessie May Gartly by Baron Gartly; 4, Rothwell, on Sweet Peggy by Dunnottar; 5, Brown & Son, on Miss Topsy by Earl of Sanghar. Filly, one year: 1, Rothwell, on Margery Daw by Dunnottar; 2, Graham Bros., on Mendell Queen by Mendell; 3, Bull, on Jean Favorite by Golden Favorite; 4, Dymont Bros., on Lady Princess by Royal Prince. Brood mare: 1, Rothwell, on Seaham Bonnie by Bonnie Buckleyvie; 2, Jewell, on Tangy Maid by Thoredoal; 3, Batty, on Newbigging Beauty by Atahnalpa; 4, Bull, on Nellie McEachern by Thoredoal; 5, Dymont Bros., on Milton Nancy by Exchequer. Yeld mare: 1, Pellatt, on Queen Ida of Petty by Baron of Buckleyvie; 2, Rothwell, on Sweet Mary by Squire Ronald; 3, Batty, on Parkfergus Meg by Silver Cup; 4, Bull, on Jessie by Royal Favorite. Foal of 1916: 1, Batty, on Halma; 2, Goodfellow Bros., on Miss Jessamine by Baron Gregor; 4, Bull, on Leda's Lord Scott by Lord Scott. Mare and two of her progeny: 1, Jewell, on Tangy Maid; 2, Batty, on Newbigging Beauty; 3, Goodfellow Bros., on Judith. Champion stallion: Graham Bros., on Lord Gleniffer; Champion female: Graham Bros., on Lady Lister. Best string of five: Graham Bros. Best Canadian-bred Clydesdale stallion: Graham Bros., on Darnley Edward. Best Canadian-bred Clydesdale mare: Pellatt, on Lady Bydand.

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PERCHERONS.—The entries in Percheron classes were not numerous, although in all but one or two there was competition for all the prizes awarded. Importations are cut off, consequently the animals exhibited were mostly Canadian bred, and they proved that the right kind of Percherons can be raised on Canadian soil, as practically all the entries were of superior merit to what has been shown in the past. There was uniformity of type and conformation throughout. The entries at the National this year showed that breeders are meeting with a degree of success in breeding for quality of underpinning as well as to maintain substance. Wm. Pears, of West Toronto, had out an exceptionally good showing, practically all bred in his own stables.

Eight typical horses competed for honors in the aged stallion class. Irade, a horse with great substance, heavily muscled and supported on exceptionally high quality underpinning for an animal of his age and weight, was first in his class, and later was declared the best stallion of the breed in the ring. His stable-mate, Lampyre, a horse of much the same stamp, was put in second place. Third stood Lyon, a strong-topped, well-ribbed individual of high quality, right to the ground, but he is hardly as massive as the winning horse. Kahir, a big, strong animal, was fourth.

Eclipse and Major Cormier competed for the red ribbon in the three-year-old class. Both are the right kind, with good shoulders, legs and pasterns, but the former is a trifle heavier-bodied horse, and finally won out.

The two-year-old class was represented by Chieftain and Buhez Joffre. The former is a nicely turned colt of a little more substance than his competitor, and he secured the first honors, although he had nothing over him in quality. The latter is a good stamp of animal not to be despised.

Lloyd-George had things his own way in the yearling class, but his size and quality are such that it would be a colt out of the ordinary that would beat him.

The winner of the three-year-old filly class had a run for her money. Four useful mares, that should make good breeders, came before the judge. All had substance and quality, and, with the exception of one, were well fitted. Lady Impresse finally went to the head of the line. She is possibly a little heavier muscled than the others, and possesses oblique shoulders and pasterns, with strong, deep feet. Lady Julia, from the same stable as the winner and of much the same conformation nosed in second. Polly Patricia, a strong-topped mare with a good heart and splendid underpinning, went third. She appeared a trifle duller than those above her. The fourth mare looked as if she had gone through a lot of hard work this summer. A little more flesh might have placed her higher in the line.

In the two-year-old class, Lady Kate went first. She is a splendid-topped filly of good conformation, and showed excellent quality. Her feet might be faulted a trifle for being a little flat, but her legs and ankles are clean and flinty. Lady Kagnat lacks a little in quality of bone, but her substance and heavy muscling put her second, with May Flower a good-bodied mare, well-ribbed, up in third. There were only two yearling fillies in the ring, and Lady Kocarde, the heaviest built of the two, secured the red ribbon. Lady Lorraine has quality equal to the winner, but she is of a rangier type.

The brood mare class brought out some good individuals, but Lady Grey's place at the head of the line was not disputed. She is a stylish mare that carries herself in an attractive manner. Her smoothness, good conformation and quality, attracted the eye. That she is a breeder of her own kind, was shown in the colt at her side. She was considered the best mare of any age shown. Kalmonck, a mare of substance, but a little plainer in the quarters, was second. She is a heavily muscled mare, with as good feet and legs as any in the ring. Julia, a useful kind, worked into third place, with Kocarde, a stable-mate, in fourth.

The foals are all growthy, well-built colts, that are a credit to the breed. Lady Guedo, a beautiful colt out of Lady Grey, had little difficulty in winning the red ribbon. Although there were larger colts out, she has quality throughout.

In the yield-mare class were Lady Impresse and Lady Julia, which were first and second in the three-year-olds. The former was again first, but Zurnelle, a mare of more substance than Lady Julia, worked up to second place, with Karavane in fourth.

Exhibitors.—J. B. Hogate, Weston; Edwin Chapman, Brampton; T. D. Elliott & Son, Bolton; Wm. Pears, West Toronto; Wm. G. Hill & Sons, Queensville; Wm. A. Henry & Son, Keswick; Arthur G. Dobson, Weston; James Callander, North Gower.

Awards.—Aged stallion: 1 and 2, Elliott & Son, on Irade by Sahara, and Lampyre by Hound; 3, Hill & Sons, on Lyon by Takov; 4, Hogate, on Kahir by Galop. Stallion, three years old: 1, Hill & Sons, on Eclipse by Ecureuil; 2, Pears, on Major Cormier by Cormier. Stallion, two years: 1, Henry & Son, on Chieftain by Lion; 2, Elliott & Son, on Buhez Joffre by Buhez. Stallion, one year: Dobson, on Lloyd-George by Crade. Filly, three years: 1 and 2, Pears, on Lady Impresse by Cormier, and Lady Julia by Cormier; 3, Hill & Sons, on Polly Patricia by Ecureuil; 4, Henry & Son, on Queen Marion by Jendi. Filly, two years: 1, 2 and 4, Pears, on Lady Kate by Cormier, Lady Kagnat by Kagnat, and Lady May by Cormier; 3, Dobson, on May Flower by Buhez. Filly, one year: 1 and 2, Pears, on Lady Kocarde and Lady Lorraine by Cormier. Brood mare with her foal: 1, 3 and 4, Pears, on Lady Grey by Incivil, Julia by Agathon, and Kocarde by Campigny; 2, Dobson, on Kalmonck by Triolette. Foal: 1 and 2, Pears, on Lady Guedo by Guedo, and

Colonel Cormier by Cormier; 3, Henry & Son. Yield mare: 1 and 3, Pears, on Lady Impresse, and Lady Julia by Cormier; 2, Callander, on Zurnelle by Casino; 4, Dobson, on Karavane by Fur-a-Bras. Mare with two of her progeny: 1 and 3, Pears, on Julia and Kocarde; 2, Dobson, on Karavane. Best string of five: Pears, with Cormier at the head. Best stallion: Elliott, on Irade. Reserve: Henry & Son, on Chieftain. Best mare Pears, on Lady Grey. Reserve: Pears, on Lady Impresse.

SHIRES.—The Shire exhibit was not strong, as in all but one class Johnson Bros. were the only exhibitors. The Shire, being a draft horse, considerable substance is looked for in representatives of the breed. Practically all the animals brought out conformed to breed type and showed fine quality throughout. King Junior, and Verona Leader competed for the red ribbon in the aged stallion class. The former is the most typical of the breed and secured first place. He is a nicely-turned horse, in no way lacking in quality. Prince Charles of Lampton, a two-year-old, was alone in his class. He is a horse of quality and has particularly good feet and legs. If he had a little more middle, it might be an improvement for a draft horse. Johnson Bros. brought out two big, strong, typey mares, both possessing quality, and both were active movers. Their foals by their side were two growthy youngsters.

Exhibitors.—Johnson Bros., Croton, Ontario, and Jas. Callander, North Gower, Ont.

Awards.—Aged stallion: 1, Johnson Bros., on King Junior by Palterton Forest King; 2, Callander, on Verona Leader by Uncle Sam. Stallion, two years: Johnson Bros., on Prince Charles of Lampton by Prince Charles of Waresley. Stallion, one year: Johnson Bros., on Croton Forest King by King Junior. Brood mare: 1 and 2, Johnson Bros., on Grey Fuchsia by Proportion, Dewston Fuschia by Dinsmore Professor. Foal of 1916: 1 and 2, Johnson Bros., on Bluster Crow by King Junior, and May Queen by Prince Charles of Waresley. Champion stallion: Johnson Bros., on King Junior. Champion mare: Johnson Bros., on Grey Fuchsia. Best two mares or fillies owned by exhibitor: Johnson Bros.

HEAVY DRAFT.—Pure-breds of any breed, which have draft characteristics, may be exhibited under this classification, provided they are bred and foaled in Canada. However, representatives of the Clydesdale breed were the only ones out. This class gives breeders on a small scale a better opportunity to show their horses than do the open classes, where they come into competition with imported stock. The entries were fairly large, and there was not a poor animal out. Practically all were well built, typey individuals of excellent quality right to the ground. There was closer competition in several classes than there was in the open classes.

The aged stallion class was headed by Darnley Edward, a strongly-built horse of the right quality, with snappy action. He is a trifle rangier than other competitors, but his clean, flinty legs and deep feet could not be overlooked. International stood in the same place as he did last year. He is a nicely-turned, strong-topped horse, with fine quality, but was in too strong company to get higher than second place. Golden Dawn, a smooth animal of much the same conformation as the winner, was third, and Glen Rae, a thick, deep-bodied, drafty horse, lacking somewhat in quality of feet, was forced to fourth place.

The two-year-olds were fairly uniform in conformation. Tapsman, a thick, well-built colt, with excellent quality of bone, but not as free a mover as one likes to see, was first. Happy Jack, a rangier horse than the winner, but with desirable kind of feet, secured the blue ribbon, with Colonel Lumsden, a little plainer colt than the winner, but showing free, trappy action, in third place.

Only two yearling stallions were on exhibition. Royal Arthur, a showy colt, closely coupled and of splendid quality throughout, stood second to Prince Carruchan, a trifle plainer animal that has substance and is heavily muscled. The legs and feet of neither colt could be faulted much.

Lady Bydand is a show mare and had little difficulty in winning the three-year-old filly class. She is a well-balanced filly, with a strong top and an excellent set of clean, flinty-boned legs and deep, broad feet. Syringia is hardly as close coupled a mare as the winner, but if she was by herself, it would be difficult to pick many flaws in her make-up. In third place was Golden Crest, a strong-fronted mare, but a little plain in the quarters. She is a useful kind, but was in too strong company to stand higher in her class.

The judge lingered for some time before deciding on the two-year-old fillies. It was by no means an easy class to place. Hillside Ethel, a showy colt with the right kind of feet and legs, but a little more up-standing than some of the others, secured the red ribbon. She carried herself nicely and went straight and true. Woodside Rosalinda was a close second. She is not so close coupled a mare as the winner, but is neatly turned, and her conformation and quality attracts attention. Lady Betty Acme is a larger framed mare than the others, but was rather out of condition, which made her appear plainer than her company. She is heavily-muscled, with strong, clean legs and a deep set of feet. Nellie Carruchan, a nicely-made filly, went fourth.

The yearling fillies made a strong showing. It was between Sweet Marie and Molly May for first place. They are of much the same stamp and have excellent underpinning, with springy pasterns and deep, broad feet. Both showed fairly snappy action, but finally the former was accorded first place. Brampton Favorite, a strongly-topped, close-coupled filly, with full quarters, stood third. She was not lacking in either quality or

style. In fourth place was International First, a well-balanced filly, showing very few faults.

Golden Maggie, a splendid stamp of draft mare, of excellent quality, stood first in the four-year-old class of mares for exhibitors engaged solely in farming. The class for brood mares, with foals at their sides, was represented by two entries from the stable of Robt. Duff & Son. Both were big strong mares of much the same build. Fairview Queen was in a trifle better condition than her stablemate, and was put first, although she hardly travelled with the same ease as Nellie Queen of Scots.

Three colts competed in the class for foals of 1916. Prince Ascot, a very pretty colt and well-built, was placed first, with Fairview Gallant, a growthy colt, but hardly as stylish as the former, was made second.

Exhibitors.—Thos. McMichael & Sons, Seaforth, Ont.; J. F. Staples & Son, Ida; Graham Bros., Claremont; P. M. Boynton & Son, Dollar; Goodfellow Bros., Bolton; Robt. Duff & Sons, Myrtle; B. Rothwell, Ottawa; Sir H. M. Pellatt, Lake Marie Farm; John Brown & Son, Galt; W. F. Batty, Brooklin; Dymont Bros., Dundas; L. J. C. Bull, Brampton; Bates Bros., Oakville.

Awards.—Aged stallion: 1, Graham Bros., on Darnley Edward by Edward Darnley; 2, McMichael & Son, on International by Prince Romeo; 3, Staples & Son, on Golden Dawn by Golden Gleam; 4, McMichael & Son, on Glen Rae by Great Britain. Stallion, two years: 1, Boynton & Son, on Tapsman; 2, McMichael & Son, on Happy Jack by Lord Ronald; 3, Goodfellow Bros., on Colonel Lumsden by Baron Gregory. Stallion, one year: 1, Duff & Son, on Prince Carruchan by Gallant Carruchan; 2, Graham Bros., on Royal Arthur by Royal Baron. Filly, three year-old: 1, Pellatt, on Lady Bydand by Bydand; 2, Rothwell, on Syringia by Sir Spencer; 3, Staples & Son, on Golden Crest by Golden Gleam. Filly, two years: 1 and 4, Batty, on Hillside Ethel by Bydand, and Nellie Carruchan by Gallant Carruchan; 2, Pellatt, on Woodside Rosalind by Sir Spencer; 3, Brown & Son, on Lady Betty Acme by Day Dream. Filly, one year: 1, Pellatt, on Sweet Marie by On Guard; 2, Batty, on Mollie May by Gallant Carruchan; 3, Bull, on Brampton Favorite by Golden Favorite; 4, McMichael & Son, on International First by International. Brood mare (importers and dealers excluded): 1, Staples & Son, on Golden Maggie by Golden Dream; 2, Boynton & Son. Brood mare, with foal of the same breed by her side: 1, Duff & Son, on Fairview Queen by Baron Monagur, and Nellie Queen of Scots by Eastfield Laddie. Foal of 1916: 1, Batty, on Prince Ascot by Baron Ascot; 2, Duff & Son, on Fairview Gallant by Baron Ascot; 3, Bates Bros., on Lookout by Lovely Baron. Draft mare, with two of her progeny: 1, Duff & Son, on Nellie Queen of Scots. Best heavy draft stallion: Graham Bros., on Darnley Edward. Best heavy draft mare: Pellatt, on Lady Bydand.

DRAFTERS IN HARNESS.—Firstbrook Bros. won first in the class for single gelding or mare, any breed, with a grey horse named Claude. Britnell & Co., were second and third with Jim and King. In pairs Britnell & Co. were the only exhibitors.

In a class for single Clydesdales, mare or gelding, Firstbrook Bros. were first, with Britnell & Co. again second and third. In the team class Britnells were first with the same two horses, while L. J. C. Bull, Brampton was second with a pair, slightly less weighty, but very good in feather and at the ground.

J. Macdonald & Co., Toronto, had the best general-purpose mare or gelding hitched to a vehicle; Firstbrook Bros. were second, and Clarkson third. In teams Clarkson was first, and Firstbrook Bros. second. The harness classes were judged by John A. Boag and Robt. Graham.

BEEF CATTLE.

The beef cattle breeds made a splendid showing. In numbers they did not quite equal last year's exhibit, but they could come somewhat short of that and still constitute a very impressive display of the deep fleshing, type, conformation and character, which stockmen desire. There has been a keen demand and breeders have been tempted to part with some good individuals. These have either gone across the line or into herds whose owners did not see their way clear to fit and exhibit them. Help has also been scarce. These factors all influenced the live-stock department of the Canadian National in 1916, but even in this year of abnormal weather, labor and trade conditions there was a splendid exhibit.

SHORTHORNS.—Visitors to the Canadian National have been treated to some phenomenal exhibits of Shorthorns during recent years, and they were not disappointed at the Fair now past. It was an exceptional display of a time-honored and popular breed of cattle; but, taking everything into consideration, it was not quite so good as last year's event. There were some outstanding animals in the many classes, but the general character of the entire showing lacked the high tone of the Shorthorn exhibit of 1915. Our attitude with regard to this is not pessimistic. The comparison is only made to inform readers as to the trend of events and actual conditions. Labor has been scarce; and, above all, buyers from across the line have scoured the country from one end to the other, picking up, here and there, good ones from every herd. One "cannot eat his cake and have it, too." Many of the good ones are now across the line, and will probably appear at exhibitions held under another flag. Despite these two powerfully influential factors, six breeders were there who could lead out either a junior or senior herd (some both), while other exhibitors contributed one or more animals to the various classes throughout the program. The

younger generation are now making show-ring history of a very indelible character, but among the exhibitors at Toronto will be recognized the names of some men who have helped to make Shorthorns the popular breed they are in this country. Their reputations were maintained, but the laurels this year went to the herd of A. F. & G. Auld. Two grand championships and one junior championship went to the Auld herd, while the junior champion bull was chosen from a nice bunch of young stuff shown by Mitchell Bros. Auld's, furthermore, won all the graded herd prizes, which, together with their other winnings, constituted an achievement that seldom occurs more than once in the lifetime of an exhibitor. Speaking broadly, the aged classes were light in numbers, but there was some choice material in them. The junior line-ups were exceptionally strong in some cases, while a few classes were not so well filled, as we have seen them on some past occasions in the cattle ring at Toronto. It was a grand exhibit, and the herdsman deserve no small portion of the credit for bringing out well-fitted cattle and showing them properly before the judge and the ring-side spectators. The awards were made by F. W. Harding, Secretary of the American Shorthorn Breeders' Association, Union Stock Yards, Chicago.

Burnbrae Sultan and Lavender Sultan, both exceedingly good sons of that famous sire, Superb Sultan, were alone in the aged class. The first-mentioned bull, even after an undefeated tour of the Western Show circuit this season, never showed better in an Eastern ring. He is deep, compact, low-set, deeply, firmly and smoothly fleshed, and, in fact, possesses, almost to the extreme, if that were possible, the beef type characteristics of a typical sire. He won his ribbon and was made grand champion of the breed. Lavender Sultan is an exceptional bull, but the differences between him and his competitor were marked enough to make the decision unanimous.

Sea Gem's Pride was shown in the two-year-old class, along with three other bulls. This promising young sire is by Trout Creek Wonder, and his good conformation, quality and character should make him a valuable animal in the herd where he is doing service.

One senior yearling and four junior yearlings came forward. The latter class was won by Gold Finder, a bull of good conformation, but not endowed with sufficient Shorthorn character about the head to correspond with the qualities behind it.

The senior calf class, considering both numbers and quality, was the best line-up of males brought out. In all, there were fifteen excellent bulls to select from, and among the seven turned down were young fellows that breeders would pay good money to own. The Count of Selma had several qualifications that recommended him for first place. He was a thick, low-set fellow, well-fleshed and smooth. However, Escana Model, while perhaps not quite so thick a bull, but excellent in straightness of lines and in handling qualities, won the class. The winner was later made junior champion. Royal Triumph won third place by a small margin, for, compared with those above him, he was more upstanding and slightly plainer behind. Sailor Champion, in fourth place, was a thick, nicely-topped bull, while the fifth candidate was of similar type. A low-set fellow came in for sixth place, and the next honors went to Sultan's Commander, a large fellow with a good top.

A strong class of junior calves lined up, eight in number. This leet was won by Shenley Marquise on quality, type and character, for the young calf was exceptionally good in these respects. Other judges might have preferred the thicker Sultan's Choice, like the winner, a January calf. They stood first and second, respectively, and only time can prove which of such young stuff has the most outcome. Gold Mine, a good roan, stood third.

Four cows constituted the aged female class. Silver Queen, last year's sensational champion, won here, and, except for a little patchiness behind, she was the same blocky, typey Shorthorn she was in more popular days. While she won her class, a younger female, with youth on her side, from the same stables, captured the coveted championship ribbon. Broadhook's Rose 3rd, a breedy, useful and strong cow, was second, with Lady of the Valley 7th in third. The latter individual was a blocky, deep, well-fleshed cow, but, like the two above her, inclined to patchiness behind. The fourth-prize winner, Lily Archer, showed better in the dual-purpose class, where she won second place.

Countess 16th was the sensation of the two-year-old heifer line-up and champion of the female winners. She has a wonderfully good conformation, excellent constitution and wealth of fleshing. Except for a minor weakness about the thigh, she is a model of Shorthorn type and character.

Eight senior yearlings were brought out. Honors went to Queen Elizabeth and Countess Nursie, respectively. Both were similar type, straight in the lines, well-fleshed, and quite showy in front. Merry Mildred 2nd, a low-set, red heifer went third, and Countess Selma, fourth. The latter heifer would have shown better with a little more fleshing. The fifth candidate, Blossom's Fragrance, possessed a splendid constitution and good handling qualities.

The struggle in a class of nine junior yearlings was between Escana Beauty 2nd and Evelyn. While the latter heifer was slightly lower set and possessed a very sweet appearance about the head, the other heifer had a little more substance and was more thickly and evenly fleshed. The first-mentioned heifer was placed at the top, and seldom has one the opportunity to handle such a wealth of flesh so firm and even. Evelyn was very successful on the Western circuit, and she is, indeed,

a sweet heifer. Thelma 3rd, a smooth thing of good quality and well-fleshed, was third. Silver Queen, a strong heifer but thinner, was fourth, and Lady of the Valley 9th, with splendid quality, but a trifle smaller than her competitors, was fifth.

Britannia was considered good enough to win the class of nine senior calves and junior female championship. She was both smooth and typey. A deep-ribbed, stronger flanked calf, Escana Missie 3rd, was second, and a smaller individual, endowed with good quality, was third. Emmeline 23rd, which won fourth place, was well-grown, but not quite as compact and typey as the more successful ones. In fifth place again was found a younger and smaller calf with good quality. Some splendid junior calves were forward, and one of the small ones of the leet, Matchless 48th, was put at the top. This calf had straight lines and was a good handler. Escana Broadhooks, in second place, was a larger calf, but did not promise quite so much as the winner. Golden Lady was third, and Broadhook's Sweetheart, fourth. Good calves were still found in the money farther down the line.

There was nothing spectacular in the dual-purpose cow or heifer class. It was won by Cecelia Lavender, which comes of a good milking strain, but she is only a two-year-old heifer, and gives more promise of being a useful beef-type cow than she does as a producer of milk. The second-prize cow, Lily Archer, to the contrary, showed too great a tendency to yield the lactic fluid at the expense of Shorthorn conformation. It was not a good class of Shorthorns, for only the winner boasted of the primary qualifications, viz., Shorthorn type, character and conformation. Formerly good dual-purpose classes have lined up at Toronto, but the standards for the same are so vague and indefinite that different judges with different opinions will have difficulty in exerting any lasting influence in this regard.

Exhibitors.—A. F. & G. Auld, Guelph; John Gardhouse & Sons, Highfield; W. C. Edwards, Rockland; Jas. Leask & Sons, Seagrave; Peter Stewart, Guelph; Kyle Bros., Drumbo; T. A. Russell, Downsview; Mitchell Bros., Burlington; J. A. Watt, Elora; George Gier, Waldemar; J. Brown & Son, Galt; Cephas Sleep, Seagrave; Pritchard Bros., Elora.



Burnbrae Sultan.

Senior and grand champion Shorthorn bull at Canadian National Exhibition, Toronto, 1916, for A. F. & G. Auld, Guelph, Ont.

Awards.—Aged bull: 1, Auld, on Burnbrae Sultan; 2, Gardhouse, on Lavender Sultan. Bull, two years: 1, Kyle, on Sea Gem's Pride; 2, Leask, on Royal Sultan; 3, Edwards, on Maxwalton Coral; 4, Stewart, on Lord Lancaster. Bull, junior yearling: 1, Stewart, on Count Victor. Bull, senior yearling: 1, Edwards, on Gold Finder; 2, Leask, on White King; 3, Russell, on Royal Scot; 4, Mitchell Bros., on Rosemary Sort. Bull, senior calf: 1 and 6, Mitchell Bros., on Escana Model and Escana Commander; 2, Watt, on The Count of Selma; 3, 5 and 8, Auld, on Royal Triumph, Campaigner and His Majesty; 4, Gier, on Sailor Champion; 7, Gardhouse, on Sultan's Commander. Bull, junior calf: 1 and 5, Watt, on Shenley Marquise and Perfection Stamp; 2, Gardhouse, on Sultan's Choice; 3, Kyle Bros., on Gold Mine; 4 and 7, Auld, on Royal Favorite and Ambassador; 6 and 8, Edwards, on Butterfly's Duke and Silver Cup. Cow, aged: 1, Auld, on Silver Queen; 2, Gardhouse, on Broadhook's Rose 3rd; 3, Kyle Bros., on Lady of the Valley 7th; 4, Sleep, on Lily Archer. Heifer, two years: 1, Auld, on Countess 16th; 2, Gardhouse, on Sultan's Lady; 3, Kyle, on Golden Drop 20th. Heifer, senior yearling: 1 and 2, Auld, on Queen Elizabeth and Countess Nursie; 3 and 6, Stewart, on Merry Mildred 2nd and Matchless Belle 4th; 4, Watt, on Countess Selma; 5, Gardhouse, on Blossom's Fragrance; 7, Kyle Bros., on Jealousy 7th. Heifer, junior yearling: 1 and 6, Mitchell Bros., on Escana Beauty 2nd and Escana Blossom; 2, Auld, on Evelyn; 3, Watt, on Thelma 3rd; 4, Gardhouse, on Silver Queen; 5, Kyle Bros., on Lady of the Valley 9th. Heifer, senior calf: 1 and 6, Auld, on Britannia and Puslinch Dimple; 2 and 3, Mitchell Bros., on Escana Missie 3rd and Escana Beauty 3rd; 4, Gier, on Emmeline 23rd; 5, Gardhouse, on Roan Lady 9th; 7, Watt, on

Hillcrest Heires; 8, Kyle Bros., on Lady of the Valley 10th. Heifer, junior calf: 1, Gier, on Matchless 48th; 2, Mitchell Bros., on Escana Broadhooks; 3, Edwards, on Golden Lady; 4, Gardhouse, on Broadhook's Sweetheart; 5 and 6, Kyle Bros., on Golden Drop 23rd and Lady of the Valley 11th. Cow or heifer (Dual Purpose): 1, Gardhouse, on Cecelia Lavender; 2, Sleep, on Lily Archer; 3, Brown, on Royal Mysie Girl; 4, Watt, on Violet Belle; 5, Kyle Bros., on Golden Drop 14th. Senior and grand champion bull: Auld, on Burnbrae Sultan. Junior champion bull: Mitchell Bros., on Escana Model. Senior and grand champion female: Auld, on Countess 16th. Junior champion female: Auld, on Britannia. Graded herd: 1, Auld, on Burnbrae Sultan, Silver Queen, Countess 16th, Queen Elizabeth and Britannia; 2, Gardhouse; 3, Kyle. Junior herd: 1, Auld; 2, Watt; 3, Mitchell Bros.; 4, Gardhouse; 5, Edwards; 6, Kyle Bros. Junior herd, bred by exhibitor: 1, Auld; 2, Mitchell Bros.; 3, Gardhouse; 4, Edwards; 5, Kyle Bros. Three animals, get of one sire: 1, Watt; 2, Auld; 3, Mitchell Bros.; 4, Gardhouse; 5, Gier; 6, Edwards. Two animals, progeny of one cow: 1, Watt; 2, Mitchell Bros.; 3, Auld; 4, and 6, Gardhouse; 5, Edwards. Four calves, bred and owned by exhibitor: 1, Mitchell Bros.; 2, Gardhouse; 3, Auld; 4, Gier; 5, Watt; 6, Kyle Bros. Steer, two years and under three, sired by registered Shorthorn bull: 1, Russell; 2, Leask; 3, Pritchard Bros.; 4, Brown. Steer, yearling: 1, 2 and 3, Russell; 4, Kyle Bros. Steer, under one year: 1, Russell; 2, Brown; 3, Kyle Bros.; 4, Stewart.

ABERDEEN-ANGUS.—Five Ontario breeders of the Aberdeen-Angus are to be commended for the exhibit of the black, polled cattle they took to Toronto. Although the classes were not large, the quality was very good indeed. Patrons of this breed could increase their business and the popularity of their cattle if they would turn out in greater numbers and show the public what they have.

The real test in the aged bull class was between Young Leroy and Jock of Glencairn. The judge, A. C. Binnie, Alta, Iowa, favored the low-down type and in this character Bowman's bull was superior. Lowe's bull, Jock of Glencairn,

was a deep-ribbed sire of good quality, straight in his lines and was shown in good form, but his competitor was a trifle nearer the ground and perhaps a shade more compact. The latter won. Ernesto, in third place, was a good bull, but not in such good fit as the other two. Young Leroy was ultimately made grand champion male, and given the medal for the best individual of the breed.

Bravo's Prince was the better of two two-year-olds. He was a straight-lined bull, sappy and well covered. There were four senior yearlings and at the top was placed Elm Park Kelso, a typey, well-built fellow of good size. Brigadier of Larkin Farm was second, and possessed the good qualities of the winning candidate, only

to a slightly less degree. The third prize winner, Defiance of Larkin Farm, showed a typey head, but was not so good in the body, while Elm Park Puck, in fourth place, was a young sire with a body that would recommend him, but he was rather plain about the head. Beauty's Leroy out-classed his stablemate, Earl of Larkin Farm, in the junior yearling form and went on for the junior championship. He was a splendid young bull, straight, low-set, well-fleshed, smooth and typey. Three senior calves and one junior calf completed the show of bulls.

The cow classes were better in numbers and quality than were those for males, the winning aged cow, Pride of Glen Rose, was rather difficult to beat in any form. She is an exceedingly typey female and was shown in grand fit. Her arch of rib and low-set form covered as it was with a wealth of flesh, gave her an excellent appearance in the ring. She had two weaknesses, however, one was in the way she stood on her feet and the other was a slight flatness in the back. In spite of this she was outstanding in her class. Glen Aberdeen Rose, second, presented the appearance of being a trifle larger than the winner, but she was not quite so typey and went second. Elm Park Rosebud 17th was third, and Middlebrook Pride 9th, fourth. The latter two were not quite so well developed.

Six splendid two-year-old heifers lined-up with Middlebrook Beauty 6th at the head. This heifer was brought out in excellent bloom and her type and conformation made her an exceedingly strong candidate for champion. From the viewpoint of the critic she did not carry her width back to the quarters quite so well as did some others, and it was this slight weakness that lost her the high honors. Beside Pride of Glen Rose, for the senior championship she showed well. She stood up splendidly and was strong in

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constitution and straightness of line. The aged cow, as stated, was a trifle down in her feet as compared with the heifer, but the judge decided in her favor. The good and weak points must be balanced in all placings and these were two good individuals. So close were the animals in merit that the decision could have been reversed without leaving any grounds for complaint. Primrose stood second in the heifer class, and Elm Park Keepsake third. They were two of the good kind. The fourth place winner, Balmedia Pride 4th, was a thick, well-fleshed kind. There was nothing outstanding in the class of three senior yearlings. Better individuals came out in junior yearlings, and the red went to Elm Park Pride 15th, a smooth, low-set kind. The junior and grand champion female was found in the senior calf class, where Pride of Larkin Farm 13th won from three others of similar age. This calf gives all the promise of developing into an adult champion, for she is a very sweet, thick and typey heifer; even as a calf she won the grand championship and was considered one of the best of the breed. Four junior calves came forward, and first place was given to Middlebrook Pride 17th, a very nice January calf.

Exhibitors—John D. Larkin, Queenston; John Lowe, Elora; Jas. Bowman, Guelph; J. D. Maitland, Queenston; L. M. Davies, Toronto.

Awards.—Aged bull: 1, Bowman, on Young Leroy; 2, Lowe, on Jock of Glencairn; 3, Larkin, on Ernesto. Bull, 2 years: 1, Larkin, on Bravo's Prince; 2, Bowman, on Elm Park Wizard 4th. Bull, senior yearling: 1, Bowman, on Elm Park Kelso; 2, Maitland, on Brigadier of Larkin Farm; 3, Larkin, on Defiance of Larkin Farm; 4, Davies, on Elm Park Puck. Bull, junior yearling: 1 and 2, Bowman, on Beauty's Leroy, and Earl of Larkin Farm. Bull, senior calf: 1, Bowman, on Elm Park Rare Goods; 2, Lowe, on Middlebrook Prince 5th; 3, Larkin, on Prince Bravo. Bull, junior calf: 1, Lowe, on Middlebrook Rover 7th. Aged cow: 1 and 2, Larkin, on Pride of Glen Rose, and Glen Aberdeen Rose 2nd; 3, Bowman, on Elm Park Rosebud 17th; 4, Lowe, on Middlebrook Pride 9th. Heifer, 2 years: 1, Lowe, on Middlebrook Beauty 6th; 2 and 5, Larkin, on Primrose, and Stumpie; 3, Bowman, on Elm Park Keepsake 17th; 4, Davies, on Balmedia Pride 4th. Heifer, senior yearling: 1, Bowman, on Emmeline of Larkin Farm; 2 and 3, Larkin, on Rosalind and Lady Cheerful. Heifer, junior yearling: 1 and 3, Bowman, on Elm Park Pride 15th, and Elm Park Witch 6th; 2, Lowe, on Middlebrook Pride 17th; 4, Larkin, on Primrose 2nd. Heifer, senior calf: 1, 2 and 4, Larkin, on Pride of Larkin Farm, Her Majesty and Rosalind; 3, Bowman, on Elm Park Emmeline. Heifer, junior calf: 1 and 3, Lowe, on Middlebrook Pride 17th, and Middlebrook Pride 18th; 2, Bowman, on Elm Park Rosebud 26th; 4, Larkin, on Pride of Larkin Farm 14th. Senior and grand champion bull, Bowman, on Young Leroy. Junior champion bull, Bowman, on Beauty's Leroy. Senior champion female, Larkin, on Pride of Glen Rose. Junior and grand champion female, Larkin, on Pride of Larkin Farm 13th. Graded herd: 1, Bowman, on Young Leroy, Elm Park Rosebud 17th, Elm Park Keepsake 17th, Elm Park Pride 15th, and Elm Park Rosebud 26th; 2, Lowe; 3, Larkin. Breeder's junior graded herd: 1, Bowman; 2, Larkin. Best 3 animals, get of one sire: 1 and 2, Bowman; 3, Larkin; 4, Lowe. Best 2 animals, progeny of one cow: 1 and 2, Bowman; 3 and 4, Larkin. Best 4 calves, bred and owned by exhibitor: 1, Larkin; 2, Lowe. The medal for best animal of the breed went to the champion bull, Young Leroy.

HEREFORDS.—The broad, deep, low-set, white-faced Herefords contributed to the wonderful display of beef cattle. The aged classes were fairly strong in numbers and quality, but the junior line-ups would have benefited by a little more fitting. Four breeders were out with a goodly number of their chosen animals.

Lord Fairfax, Clifford's champion of the Western show circle, was obliged to take second place to the low-set and massive Bonnie Brae 31st in the aged class of bulls. While little can be said in criticism of Lord Fairfax, the winner was lower set, better finished and more massive. Bonnie Ingleside 7th was not quite so blocky or so thickly fleshed as the two successful competitors. Brendo Boy, which went fourth, was a trifle more up-standing.

Only two two-year-olds were forward. There were no senior yearlings, and only one junior yearling bull. This latter animal, Brae Real 6th, was a typey young sire and won the junior championship. Five senior calves lined up, with Rosemark Ingleside 58th in the lead. He is a nice handling calf. Reliance, a promising young bull, but not quite so good as the winner, was placed second. Mark Fairfax was placed first in a leet of five junior calves.

The splendid Hereford cow, Miss Armour Fairfax, by that famous sire, Perfection Fairfax, won the aged cow class, and went on for the senior and grand championship. This was a repetition of her accomplishments in the West, with the exception of Brandon fair, where her stablemate and half sister, Della Fairfax, won the high honors. Miss Armour Fairfax showed splendid Hereford type. She was straight in her lines, low-set and well fleshed, and she did not lack in quality. Miss Brae 50th, another typey cow, was second, and May Queen 3rd, a little larger cow, but not quite so smooth, was third.

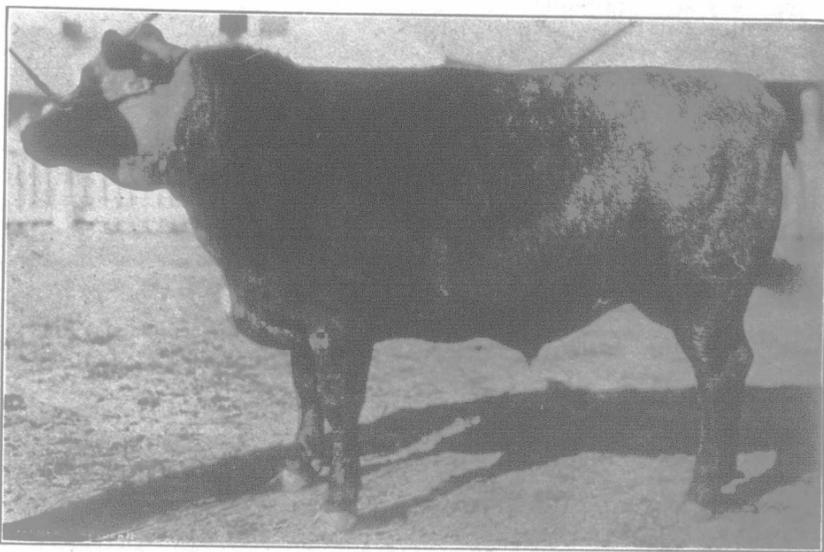
There were five two-year-old heifers forward, and first place went to Della Fairfax, a smooth thing of splendid dimensions. Miss Brae Real 2nd, in second place, was not so deep as the winner. Miss Brae Real, which won third, was not quite so even along the back. Four senior yearlings and five junior yearlings were out.

The former was a fairly strong class, while the latter showed many good characteristics, but they were not in any too good fit. Amy Fairfax and Queen Fairfax won the senior and junior calf classes respectively.

The Hereford awards were made by Thos. Clark, Beecher, Ill.

Exhibitors—G. E. Reynolds, Elora; L. O. Clifford, Oshawa; W. Readhead, Milton; James Page, Wallace-town.

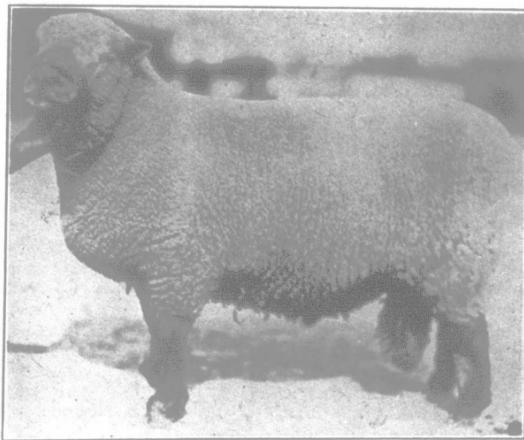
Awards.—Aged bull: 1, Page, on Bonnie Brae 31st; 2, Clifford, on Lord Fairfax; 3, Readhead, on Bonnie Ingleside 7th; 4, Reynolds, on Brendo Boy. Bull, 2 years: 1, Clifford, on Alvin Fairfax; 2, Reynolds, on Brae Real. Bull, junior yearling: 1, Page, on Brae Real 6th. Bull, senior calf: 1 and 3, Readhead, on Rosemark Ingleside 58th, and Rosemark Ingleside 34th; 2, Reynolds, on Reliance; 4 and 5,



Blue Gray.

Champion fat steer at Canadian National Exhibition, Toronto, 1916, for Jas. Leask & Sons, Seagrave, Ont.

Clifford, on Ronald Fairfax, and Donald Fairfax. Bull, junior calf: 1, Clifford, on Mark Fairfax; 2, Page, on Brae Real 8th; 3, Readhead, on Brookdale Lad 2nd; 4, Reynolds, on Reliance 2nd. Aged cow: 1 and 3, Clifford, on Miss Armour Fairfax, and May Queen 3rd; 2, Page, on Miss Brae 50th; 4, Readhead, on Rubella Ingleside 33rd; 5, Reynolds, on Durham Beauty. Heifer, 2 years: 1 and 4, Clifford, on Della Fairfax, and Miss Brae 81st; 2, Page, on Miss Brae Real 2nd; 3, Reynolds, on Miss Brae Real; 5, Readhead, on Laura B. Heifer, senior yearling: 1 and 2, Clifford, on Bell Fairfax, and Miss Brae 56th; 3, Page, on Miss Brae Real 6th; 4, Readhead, on Ruby 3rd. Heifer, junior yearling: 1 and 3, Page, on Miss Brae Real 8th, and Miss Brae Real 10th; 2, Reynolds, on Twin; 4, Readhead, on Rubella of Brookdale Heifer, senior calf: 1 and 2, Clifford, on Amy Fairfax, and Blanche Fairfax; 3, Reynolds, on Miss Reliance; 4, Page, on Miss Brae Real 11th. Heifer, junior calf: 1, Clifford, on Queen Fairfax; 2, Reynolds, on Miss Reliance 4th; 3, Readhead, on Gladys of Brook-



A Winning Southdown.

Champion Southdown ram at Canadian National Exhibition, Toronto, 1916, for Robt. McEwen, Byron, Ont.

dale; 4, Page, on Miss Brae Real 13th. Senior and grand champion bull, Page, on Bonnie Brae 31st. Junior champion bull, Page, on Brae Real 6th. Senior and grand champion female, Clifford, on Miss Armour Fairfax. Junior champion female, Clifford, on Belle Fairfax. Graded herd: 1, Clifford, on Lord Fairfax, Miss Armour Fairfax, Della Fairfax, Belle Fairfax, and Blanche Fairfax; 2, Page; 3, Readhead; 4, Reynolds. Junior herd: 1, Clifford; 2, Page; 3, Readhead. Breeder's junior herd: 1, Page. Three animals, get of one sire: 1 and 3, Clifford; 2, Page; 4, Readhead, 5, Reynolds. Two animals, progeny of one cow: 1, Clifford; 2, Page; 3, Readhead. Best 4 calves, bred and owned by exhibitor: 1, Clifford; 2, Reynolds; 3, Page.

MORE AND BETTER FOWL AT TORONTO.

The poultry building was filled to its capacity, there being between five and six hundred more entries than last year. The standard of quality set in the past was maintained this year in every class, and a marked improvement was noticed in some. On account of the prolonged period of excessive heat the past season has been a particularly trying one on both old and young fowl. However, the young stock exhibited was well-developed and most of the mature fowl showed to good advantage, although in a few cases the appearance was somewhat marred by their being in moult. All breeds of both utility and fancy stock were represented. The entries in the class for pens of utility birds were twenty-eight in excess of last year's. In the single classes the single-combed White Leghorns led in numbers, closely followed by the Barred Plymouth Rocks, White Wyandottes, Rhode Island

Reds and Orpingtons. The Leghorns continued to hold a high position owing to egg production. Barred Rocks were a particularly strong class, but there was also a fair showing of other varieties of the breed. Of the Wyandotte breed the White variety is the most popular, if the number of entries is any criterion. Rhode Island Reds and Orpingtons are gradually gaining in favor. The showing of both these was better than usual. Houdans, Anconas, Campines, Minorcas, and other special breeds were less numerous than the utility birds, but some fine specimens of each were to be seen at Toronto this year. All classes of Bantams were well filled and the Pigeons and Pet Stock exhibit

surpassed previous years. Water fowl made a great showing. Ducks were particularly strong in numbers, and the entries of geese were in excess of other years. There was also an increase in the number of turkeys, and the quality was never better. In fact, the entries in all classes of fowl showed quality to a marked degree.

The egg exhibit was in the dairy building. Although the entries in the various classes were considerably smaller in number than last year the eggs were well graded and made an instructive exhibit. They were put up in single-dozen lots and in the various sized commercial packages, and graded into specials, extras and number one's. The improvement in appearance over the way eggs are ordinarily marketed demonstrated the importance of grading not only for quality but for size and color. Individual producers, egg circles, and commercial firms competed in the various classes. Owing to the large field to draw from, egg circles were successful in winning many of the prizes. They certainly have advantage over the individual when putting up a case, or number of cases, of eggs of first quality. Even commercial firms complain that they were unable to secure eggs that would compete favorably against the egg circles. This was a reason given why the entries were so small this year. Individual poultrymen found it impossible to compete against the circles and believed that the entries would be greatly increased another year if separate classes were made for individuals, egg circles, and commercial firms. All would then be on a more equal footing in regard to supply from which to select their exhibits.

FRUIT AND VEGETABLES.

Despite the conditions in the country and the quality of the fruit crop generally, the exhibit at the Canadian National was superior to that of recent years. A little additional prize money and a re-arrangement of the building resulted in a vast improvement. Four exhibitors competed for the display prizes. Tables having an area of 124 square feet were to be decorated with different varieties of fruit. This innovation very much improved the appearance of the fruit wing of the Horticultural Building. The first prize was awarded to Dalhousie Farm, Port Dalhousie, Ont. Their table was very tastily decorated with an exhaustive variety of apples, pears, plums, grapes and cherries. In the centre was built up a pyramid of fruit of good quality. W. J. Furninger, St. Catharines, Ont., had the second prize table, which was decorated in much the same manner as the winning display, but the surface did not show such a great wealth of fruit. The third-prize table was arranged by Wm. Armstrong, Niagara-on-the-Lake, and the fourth by W. H. Bunting, St. Catharines. It would be hard to criticize from casual observation the quality or character of these two latter displays. Another great feature of the fruit wing was the plate exhibit. Ten hundred and twenty plates in all were counted, in addition to the great quantity used on the display tables. Never have we seen such a beautiful exhibit of plums, which were displayed in four basket crates, in veneer baskets and on plates. One plate of Climax plums, which were very large and

well matured, was an attractive feature of the plum exhibit. Besides the plates, there were forty-two boxes of apples, nineteen baskets and seven boxes of peaches, forty-two boxes and twenty-two baskets of pears. As previously stated, the whole exhibit was of excellent quality, in spite of the prevalence of scab throughout the country. Cones and other methods of showing apples were also in evidence. Grapes of many varieties, peaches, cherries, plums, and other kinds gave the fruit wing a distinctly semi-tropical appearance.

The unfavorable weather conditions of the past season influenced the vegetable exhibit very unfavorably. As a whole, it was not up to past standards, and at the middle of the second week the exhibit had a somewhat wilted appearance. Vegetable culture is becoming a very important industry, and our exhibitions should do all in their power to promote it. It is evident, that in a season such as this, that two weeks is too long for the vegetables to lie on the tables, and the management would do well to consider some way of improving the prize list and the arrangement. If displays could be erected for the first week, to be replaced by the regular classes during the second week, we feel sure the department would present a much more attractive appearance throughout the Fair.

THE BUTTER MAKING COMPETITION.

Following are the winners in the butter-making competition at the Canadian National Exhibition and their scores:

Section 1, open to farmers' wives, sons or daughters, or hired help, residing on the farm in Canada or United States, except those who have won prizes in this section in previous years, or those who have worked in the factory or creamery, or students or ex-students of a dairy school: 1, Mrs. Walter Hill, Parkhill, 94.65; 2, Mrs. R. W. Dove, Pottageville, 93.43; 3, Miss Effie Dove, Pottageville, 93.11; 4, Mrs. R. C. Young, Belmont, 93.00.

Section 2, open to all who cannot compete in Section 1, except those who have taken two first prizes in this section in previous years: 1, Miss L. B. Gregory, Ilderton, 97.33; 2, Miss R. Patton, Richmond Hill, 97.02; 3, Miss Mary Jayne, Baltimore, 96.91; 4, Miss Isabelle Cole, Tavistock, 96.76; 5, Miss Margaret Bryden, Puslinch, 96.74; 6, Miss Alice Barber, Guelph, 96.65.

Section 3, free for all: 1, Miss L. B. Gregory, Ilderton, 97.46; 2, Miss Isabelle Cole, Tavistock, 97.17; 3, Miss Alice Barber, Guelph, 97.12; 4, Miss Margaret Bryden, Puslinch, 96.47; 5, Miss Mary Jayne, Baltimore, 96.40.

"Sandy Silenced "Jean."

EDITOR "THE FARMER'S ADVOCATE":

I had been thinkin' o' payin' a visit tae some o' ma auld cronies, oot the way o' Dunvegan, for sometime past, an' sae the ither day I says tae the auld wumman, "Jean", says I, "the hayin' is done, an' the grain is pretty nearly a' in the barn, an' I think we'll tak' a run west to see the friends in Kenyon. Juist giv' me a help wi' ma collar an' necktie an' then ye can be pittin' on yer bonnet an' shawl, while I'm hitchin' up the horse."

It wisna' lang before we were ready tae start, for the auld wumman is aye as willin' tae gang gossipin' as the majority o' her sex, but as the day wis fine we let the auld mare tak' her time an' juist jog along at a rate that gave us a chance tae inspect the farms that we passed, an' tae dae a wee bit o' criticizin' on the side. They say that ye can tell a mon's character

by his surroundings, an' I suppose it's true tae a certain extent onyway. Gin it is, there's a lot o' different characters in this country. Ilka farm we passed seemed tae be rin on a system a wee bit different tae a' the ither. There wis guid, bad an' indifferent, maistly the latter. One farmer we noticed must hae got a permanent set-back by the late spring as he hadna' been able tae catch up on ony single line o' his farm operations. Ye could see juist enuch o' his turnips above the weeds tae ken that they were turnips. The bugs had got a' his potatoes, but the heaviest o' the stalks, and his corn had apparently got discouraged an' started tae gae back tae where it cam' from. He wis startin' tae cut his grain an' sow-thistle when we passed, but he hadna' feenished his hayin' an' had a field or twa tae cut that looked as though it might be left oot till next year wi'oot takin' ony further damage. "Weel," says I tae Jean, "the Highlander never wis a farmer, an' it looks as though it wad tak' an unco' lang time tae mak' him one. These chaps round here ought tae gang tae the war. Fightin' wis aye mair tae their taste than farmin'." "Hoot," says Jean, "juist bide a wee an' ye'll see a change before mony years. Twenty years back there wisna' muckle word o' telephones an' rural mail an' automobiles among the farmers hereabouts, an' look at them noo. A' we need in this world is someone tae set the example

"Aye," she replied, "an' somebody is gaein' nae see it some time, sae why should'nt it be us. As 'I said, it wouldna' tak' muckle tae set things gaeit in the richt direction, an' once that wis done there wad be no stoppin' them in this age o' invention an' energy. An' wha kens but at the end o' a' this fightin' some one may turn up tae show us the way oot o' the woods an' get us on tae the highway o' progress once mair. It's juist as likely tae happen as was onything that has happened in the past twa years, ye canna' deny that. When that time comes ye'll no' be able tae drive through the country an' find fault wi' yer neebors style o' farmin', as ye're daein' the day. Ilka farm will be a model farm because the owner will hae the education an' incentive tae mak' it that."

"An' I suppose," says I, that when that day comes sic things as the rural telephone an' mail delivery will be oot o' date, along wi' a' oor ither twentieth century inventions an' improvements." "That might easily be," replies Jean; "what's the matter wi' haein' a wireless telephone apparatus in ilka hoose in the country an' all o' us carrying a wee receiver wi' us wherever we went. An' as for rural mail delivery, it wouldna' be hard tae improve on that as we hae it the noo. Instead o' gettin' oor mail delivered at oor road-gates, that may be half a mile or mair frae the hoose, why could we no' hae it carried by aeroplane an' dropped intae a receiver that wad carry it direct tae oor sittin-room or library? That wad be what ye micht call mail delivery. An' anither great improvement will take place, when we invent something that will dae awa' wi' the necessity o' spendin' sae muckle o' oor time in providing food tae keep us alive. I wis readin' somewhere or ither lately that the air is full o' nitrogen, an' that it wad support life gin we could extract it frae the atmosphere in some way. Why could ye no' invent a machine to dae this Sandy?" says she, "Think o' all the time ye waste sowing yer grain an' reaping an' threshing, to say naething o' mysel', wi' cooking an' dishwashing till I'm fair played oot sometimes."

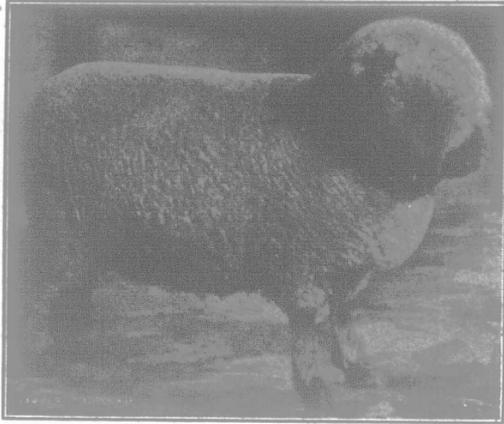
"But what," says I, "wad keep ye oot o' mischief gin ye had na' tae wark. Ye'd hae a slow time, I'm thinkin', gin ye cut oot baith the eatin' an' workin'."

"We wouldna' cut oot the work," says Jean pretty short, "ye dinna' get the idea. There's plenty o' wark in the world besides cooking an' washing dishes."

"I ken it," says I, gettin' roused up a wee bit, "but there's na mair honest way o' makin' a livin', an' gin ye ever get tae the place where ye can tak' hault o' a better job it will be by makin' the best o' the one ye're on the noo. Ye may see the day when a' these things ye hae been talkin' about may come tae pass, though I'm thinkin' that by that time we'll no' be able tae tell ye're age by yer teeth; but for the present it's up tae us tae tak' things as we find them an' pit the best o' oor mind an' muscle intae oor work o' to-day an' leave to-morrow for those that will see it. Gin that chap that we passed a while back had warked on this plan it isna' likely that his turnips wad be playin' hide-an-seek among the weeds, nor his hay be still waitin' tae be cut. There's juist one method that I ken aboot that warks oot richt ilka time in a case like this Jean," says I, "an' that is tae stop worryin' over what happened yesterday an' tae quit dreamin' aboot to-morrow. That will gie ye a chance tae get yer cooking done an' yer dishes washed to-day, wi' maybe a little time left in which tae invent a way o' feeding babies wi' a bicycle pump, or somethin' o' the kind," says I.

Juist here we cam' in sight o' Dunvegan an' Jean made na reply, but by the look in her e'e I'm thinkin' she has a word or twa tae say tae me yet on the subject.

SANDY FRASER.



Typical Canadian Shropshire.

an' ye'll find plenty ready tae follow it. Wi' a few men tae lead the way there's naething could stap the wheels o' progress on this auld airth. It took juist aboot half-a-dozen fire-eatin' cranks tae start the present war, an' noo the best pairt o' the world is engaged in tryin' tae smash doon a' that has been built up wi' sae muckle labor an' cost in the last hundred years. An' it wad be na different gin we had leaders tae show us a better way. The crowd wad follow them juist as fast, an' wi' a better will too, I'm thinkin', for it's mair in line wi' common sense tae be warkin' for the welfare o' humanity than tae be killin' ane anither for we dinna' ken what. Na doot we had tae hae the lesson, but it's an unco' expensive one, an' the wheels o' progress are draggin' pretty hard these times, no mistak' aboot that. But I'm lookin' for the compensation for a' this waste o' life an' property, an' though I'm no' as young as I was I'm hopin' tae live tae see the day when men will be as anxious tae improve society as they noo seem tae be tae destroy it."

"People hae been lookin' for the millenium for some time noo, Jean," says I, as she stapped for a meenute.

Toronto, Montreal, Buffalo, and Other Leading Markets.

Toronto.

Receipts of live stock at the Union Stock Yards, West Toronto, from Saturday to Monday last, numbered 171 cars, comprising 3,029 cattle, 1,876 hogs, 941 sheep, 191 calves, and 1,578 horses. Cattle of all grades steady to strong; calves, sheep and hogs steady; lambs 25c. to 50c. higher. Good, active market all through.

The total receipts of live stock at the City and Union Stock Yards for the past week were:

	City	Union	Total
Cars.....	73	548	621
Cattle.....	959	6,081	7,041
Hogs.....	1,566	6,983	8,549
Sheep.....	970	3,815	4,785
Calves.....	33	777	810
Horses.....	18	662	680

The total receipts of live stock at the two markets for the corresponding week of 1915 were:

	City	Union	Total
Cars.....	25	508	533
Cattle.....	111	5,552	5,663
Hogs.....	400	4,981	5,381
Sheep.....	1,416	6,364	7,780
Calves.....	28	651	679
Horses.....	41	2,884	2,925

The combined receipts at the two markets for the past week show an increase of 88 cars; 1,378 cattle; 3,168 hogs; 131 calves, and a decrease of 2,995 sheep and 1,245 horses compared with the corresponding week of 1915.

Packers quote hogs for next week \$11.15 f. o. b. \$11.75 to \$11.85 fed and watered. \$12.00 to \$12.10 weighed off cars.

The quality of cattle generally was about the poorest on the market for many months. Very few loads of real choice butcher cattle were offered. The great majority consisted of light-weight, unfinished steers and heifers, medium cows and canners, and off-color, badly-bred stockers. What good cattle arrived found a ready market at fairly satisfactory prices, but the inferior grades of cattle were very slow of sale. There was a good demand for choice,

heavy butcher steers at from \$8.50 to as high as \$9.

Stockers and feeders.—There is a steady demand for stockers and feeders of good breed and color. The common kind are very slow. Canners and cutters were steady and found ready sale. Bulls were also steady, especially Bologne bulls, which sold at \$5 to \$5.50. Milkers and springers were steady all week, and found a ready market, especially the better kinds. Lambs.—Real choice spring lambs sold as high as 10 3/4c. per lb., but the great majority sold at 10c. to 10 1/2c. per lb. The market weakened somewhat on Thursday. The most of them being sold at 10c. to 10 1/4c. Common lambs and culls sold at 7c. to 8c. per lb. Choice, light, handy sheep were active, and sold readily at 7c. to 7 1/2c. per lb. Choice veal calves were strong and sold at 10c. to 12c. per lb. A few extra choice sold at 12 1/4c. per lb. Common calves were steady and sold at 6c. to 9c. per lb. Hogs.—The demand for good hogs continues. The market was steady to strong all week. Packers tried to lower prices without success. The following quotations tell the story: Butcher Cattle.—Choice heavy steers,

\$8.40 to \$8.65; good heavy steers, \$8 to \$8.25; choice, \$7.80 to \$8; good, \$7.40 to \$7.70; medium, \$6.75 to \$7.25 common, \$6 to \$6.50. Cows.—Choice, \$6.25 to \$6.50; good, \$5.85 to \$6.10; medium, \$5.50 to \$5.75; common, \$4.75 to \$5.25. Canners and cutters, \$3.50 to \$4.75. Bulls, best heavy, \$7 to \$7.25; good, \$6 to \$6.75; common, \$5 to \$5.50. Stockers and feeders, \$5 to \$6.50. Milkers and springers, \$55 to \$100. Spring lambs, choice, 10c. to 10 3/4c. per lb.; common, 7c. to 8c. per lb. Light, handy shecp, 6 1/2c. to 7 1/2c. per lb.; heavy, fat sheep; 4c. to 5 1/2c. per lb. Veal calves, 6c. to 12c. per lb. Hogs, \$11.15, f.o.b., \$11.75 to \$11.85, fed and watered; \$12 to \$12.10, weighed off cars. Less \$3.50 off sows, \$5 off stags, \$2 off light hogs, and one-half of one per cent. government condemnation loss.

Breadstuffs.

Wheat.—Ontario, No. 1 commercial, \$1.22 to \$1.24; No. 2 commercial, \$1.18 to \$1.20; No. 3 commercial, \$1.14 to \$1.16; No. 2 new crop, \$1.28 to \$1.30. Manitoba (track, bay ports)—No. 1 northern, \$1.73; No. 2 northern, \$1.71; No. 3 northern, \$1.66.

THE ROYAL BANK OF CANADA

Capital Authorized - - \$ 25,000,000
 Capital Paid Up - - - 11,785,000
 Reserve Funds - - - 13,236,000
 Total Assets - - - 214,000,000

HEAD OFFICE: MONTREAL

Branches throughout every Province of the Dominion of Canada

Accounts of Farmers
 Invited
 Sale Notes Collected

Savings Department at all Branches

Oats.—Ontario, No. 3 white, new, 52c. to 54c.; No. 3 white, 51c. to 53c.; Manitoba oats (track, bay ports)—No. 1 C. W., 58c.; No. 3, 57c.; extra No. 1 feed, 57c.; No. 1 feed, 56½c.
 Barley.—Malting barley, 85c. to 90c.; nominal, feed barley, 80c. to 83c., nominal.
 Peas.—According to freights outside; No. 2, \$2 to \$2.10, nominal.
 Buckwheat.—Nominal.
 Rye.—No. 2, new, \$1.15 to \$1.17; No. 1 commercial, nominal.
 Corn.—American (track, Toronto), No. 3 yellow, 98½c.
 Flour.—Manitoba first patents, in jute bags, \$8.40; second patents, in jute bags, \$7.90; strong bakers', in jute bags, \$7.70. Ontario, new, winter, according to sample, \$5.60 to \$5.70, track, Toronto; \$5.50 to \$5.60, nominal, bulk, seaboard.

Hay and Millfeed.

Hay.—New, No. 1, per ton, \$10 to \$12; No. 2, per ton, \$9 to \$9.50.
 Straw.—Car lots, per ton, \$6 to \$7, track, Toronto.
 Bran.—Per ton, \$28.
 Shorts.—Per ton, \$29.
 Middlings.—Per ton, \$30.
 Good Feed Flour.—Per bag, \$2.25.
 Beans.—Beans are very scarce; prime whites selling at \$5, and hand-picked at \$5.50.

Country Produce.

Butter.—Butter was quite firm, but remained about stationary in price on the wholesales during the past week. Creamery, fresh-made lb. squares, 35c. to 36c.; creamery, solids, 34c. to 35c. per lb.; separator dairy, 30c. to 33c. per lb.; dairy, 26c. to 28c. per lb.
 Eggs.—New-laid eggs also firmed on the wholesales during the past week; the case lots are now selling at 34c. per dozen, and 37c. to 39c. per dozen.
 Cheese.—Old, 24c. to 25c. per lb.; new, 20c. to 21c. per lb.
 Poultry.—Poultry came in fairly well during the past week. Live weight—Spring chickens, 18c. per lb.; spring ducks, 12c. per lb.; turkeys, young, 20c. Fowl, 4 lbs and over, 15c. per lb.; fowl, under 4 lbs., 14c. per lb.; squabs, per dozen, \$3.50 to \$4 (dressed).

Hides and Skins.

Lamb skins and pelts, \$1 to \$1.50; sheep skins, city, \$2.50 to \$3.50; sheep skins, country, \$1.50 to \$3; city hides, flat, 20c.; country hides, cured, 18c.; country hides, part cured, 17c.; country hides, green, 16c.; calf skins, per lb., 25c.; kip skins, per lb., 22c.; horse hair, per lb., 40c.; horse hides, No. 1, \$5 to \$6; horse hides, No. 2, \$4.50 to \$5.50; tallow, No. 1, 7c. to 8c.; wool, washed, 42c. to 46c.; wool, rejections, 35c. to 38c.; wool, unwashed, 32c. to 35c.

Wholesale Fruits and Vegetables.

Tuesday and Wednesday of last week had the heaviest markets so far this season. In fact the crowded appearance of the fruit market late in the day made one think one of the more fruitful seasons had returned.

Peaches predominated, and there were some choice quality—they opened strong, but the large quantities gradually weakened the price, and they closed as follows: 6-qt. flats, 15c. to 30c.; 6-qt. lenos, 25c. to 50c.; 11-qt. flats, 25c. to 50c.; 11-qt. lenos, 40c. to 75c., with a few at 85c. to \$1.

Pears were a very slow sale at 20c. to 25c. per 6 qts., and 25c. to 60c. per 11 qts., with a few choice at 65c. to 75c.

Plums were shipped more lightly at the beginning of the week, but came in freely towards the end and declined slightly, selling at 25c. to 40c. per 6 qts., and 35c. to 60c., with a few extra choice bringing 75c. and 85c. per 11 qts.

Black currants came in in small lots, and brought \$1.40 to \$1.50 per 11 qts., and 75c. per 6 qts.

Melons were shipped very heavily and declined materially in price—Tuesday shipments only bringing about half as much as the previous Saturday—they closed at 25c. to 50c., with a very few bringing 60c. to 75c. per 11 qts., and 50c. to 75c. per 16 qts.

Grapes began to come in fairly well—the Champions selling at 20c. per 6 qts., and Moore's Early at 25c. to 30c. per 6 qts.

Lawton berries are just about over, selling at 12½c. to 13c. per box.

Tomatoes came in freely at the beginning of the week and remained low priced—decreasing in quantity towards the end of the week and firming in price, selling at 15c. to 25c. per 6 qts, and 25c. to 35c. per 11 qts., with a few choice ones in 11-qt. lenos bringing 50c. to 60c.

Beans.—Wax beans of choice quality came in last week and brought 75c. to \$1 per 11 qts.; the green ones selling at 50c. to 75c.

Beets remained about stationary at 40c. per 11 qts.

Cabbage also kept about the same price—selling at \$1 per dozen, and \$3.50 per case.

Carrots declined slightly, selling at 40c. to 50c. per 11 qts., and \$1.35 per bag.

Celery came in more freely, and sold at 30c. to 50c. per dozen bunches.

Onions continued to be scarce and were quite firm in price—Spanish selling at \$4.75 to \$5 per case; Californias, \$3.75 to \$4 per 100-lb. sack; Canadian dried selling at 40c. to 50c. per 11 qts.

Potatoes also firmed a little—Ontarios selling at \$2.35 per sack; New Brunswicks at \$2.35 to \$2.50 per 90-lb. sack.

Montreal.

Supplies of cattle on the local market have been fairly large of late, while consumption has been somewhat stimulated by the cooler weather. The feature of the trade was the weaker feeling in the market for cattle, and prices eased off 25c. per 100 lbs., with the exception of canning stock, which was steady, this being attributed to the increased offerings. The supply of really choice steers was somewhat limited, and only odd lots changed hands at \$8 to \$8.25; fair to good steers ranged from \$6.50 to \$7.75. Sales of bulls were made freely at \$4.75 to \$5, and cows at \$4 to \$4.50 per 100 lbs. There was a good demand for lambs, and prices held firm. Ontario stock sold at \$10 to \$10.50, and Quebec brought \$9 to \$9.50 per 100 lbs. A strong feeling in sheep carried the price up 50c. per 100 lbs. under a good demand. The market for hogs showed practically no change, prices being steady. Selected stock sold at \$11.75 to \$12.15; medium lots at \$11 to \$11.50, with rough and heavy weights at \$10 to \$10.75, while sows sold at \$9.25 to \$9.65 per 100 lbs., weighed off cars.

Horses.—There was no change in this market. Heavy draft horses, weighing 1,500 to 1,700 lbs., were quoted at \$200 to \$250 each; light draft, weighing 1,400 to 1,500 lbs., \$150 to \$200 each; small horses, \$100 to \$125 each; culls, \$50 to \$75 each; fine saddle and carriage horses, \$200 to \$250 each.

Dressed Hogs.—A fair trade continued to be done in the market for dressed hogs, and sales of abattoir, fresh-killed stock were made at 16½c. to 17c. per lb.

Potatoes.—The poor outlook for the potato crop this year is responsible for a great scarcity, both local and from New Brunswick, and the price advanced 5c. per bag. Quebec stock sold at \$1.90 to \$1.95 per bag; Green Mountains, \$1.90 to \$1.95.

Honey and Syrup.—There was no change in the condition of the market for maple products, with prices holding steady, selling at 85c. to 90c. per 8-lb. tin; \$1 to \$1.10 for 10-lb. tins;

and \$1.25 to \$1.30 per 13-lb. tin. Sugar was 9c. to 12c. per lb. The tone of the market for honey was steady, and prices showed no change. Prices were 15c. to 16c. per lb. for white clover comb, and 12c. to 12½c. for extracted. Brown clover comb was 12½c. to 13c., and extracted 10c. to 11c., while buckwheat honey was 9c. to 10c. per lb.

Eggs.—A firm tone prevailed in this market, and the tendency of prices was upwards. The demand continued good for domestic account, and an active trade was done. Strictly new-laid eggs brought 36c. to 37c. per dozen; No. 1 selected, 34c. to 35c.; No. 1 candled, 29c. to 30c., and No. 2 candled, 26c. to 27c. per dozen.

Butter.—There was no actual change in the condition of this market, although prices were well maintained. Business was rather quiet, owing to the fact that English importers have fallen out of the market for the time being at present prices. Finest creamery was quoted at 34½c. to 35c. per lb., while fine ranges ½c. under these figures. Undergrades brought 33c. to 33½c., with finest dairy butter at 27½c. to 28c., and fine, 26½c. to 27c. per lb.

Cheese.—At the auction here No. 1 white sold at 19½c.; No. 2 at 19c.; No. 3, at 19½c., and No. 2 colored at 19½c. Finest eastern colored brought 19½c. to 19½c., with white at 19½c. to 19½c.

Grain.—There was a firm tone to the market for oats, with prices fractionally higher. No. 1 Canadian Western were 60½c.; No. 2, 60c.; No. 3, 59½c.; extra No. 1 feed, 59½c.; No. 1 feed, 58½c., and No. 2 feed, 58c. per bushel, ex-store.

Flour.—There was practically no change for this market last week. Manitoba first patents selling at \$8.50; seconds, \$8, and \$7.80 for strong bakers, per barrel, in bags. The tone of the market for winter wheat was also firm, 90 per cents. selling at \$6.90 to \$7.20 per barrel in wood, and at \$3.25 to \$3.40 per bag.

Millfeed.—This market was practically unchanged. Bran was quoted at \$25 per ton; shorts, \$27; middlings, \$29; pure grain mouille, \$33 to \$34, and mixed mouille, \$31 to \$32 per ton, including bags.

Baled Hay.—Prices were steady, with No. 2 hay at \$13; No. 3 at \$11.50; clover, mixed, at \$10.50 per ton, ex-track.

Hides.—Lamb skins were up to \$1.30 each; horse hides being \$1.50 for No. 3; \$2.50 for No. 2; \$3.50 for No. 1; beef hides were 21c., 22c. and 23c. per lb. for No's. 3, 2 and 1, while calf skins were 31c. for No. 2, and 33c. for No. 1. Tallow was 8c. per lb. for rendered, and 2½c. for rough.

Buffalo.

Cattle.—Trade last week was the most unsatisfactory for a long time back. Monday's run reached around 130 cars, and it was a very sluggish trade, with prices on steers standing anywhere from a quarter to fifty cents under the previous Monday. The class of shipping steers, of which there were eight or ten loads, ran mainly towards the fair kinds, majority being Canadians, and the best price secured was \$9.25. Eastern killers, who loaded up the latter part of the previous week, in anticipation of the railway strike, were out of the deal, and sellers had to depend upon country buyers for an outlet. Four or five loads of yearlings sold to the best advantage of anything offered, range on the best being from \$9.00 to \$9.85. Local killers acted badly on the butchering steers, taking these only after a big quarter to fifty cents had been taken off, and they bought sparingly at that. Females above the \$6.50 line, of which there were not many, looked about steady, and while rates on some of the fairish kinds of cow and heifer stuff were little changed, canners were slow and, if anything, a shade lower. Bulls were generally steady, stockers and feeders, which were slow to find sale, were quoted steady to a shade lower, and fresh cows and springers showed a decline from \$2.50 to \$5 per head. After Monday and right up to the close of the week the trade was in a demoralized condition. Sellers were willing to make further concessions of a quarter on most butchering grades, however, the

take-off was no inducement to buyers, and the big end of the crop went over unsold from day to day, Friday's receipts including thirty-five cars of stale stuff. Offerings last week were 4,700 head, being against 5,225 head for the week previous, and 4,800 head for the same week a year ago.

Shipping Steers.—Choice to prime natives, \$9.50 to \$10.50; fair to good, \$8.75 to \$9.25; plain, \$8.25 to \$8.60; very coarse and common, \$7.60 to \$8; best Canadian, \$8.50 to \$9.35; fair to good, \$8 to \$8.50; common and plain, \$7.50 to \$8.

Butchering Steers.—Choice heavy, \$8.50 to \$9; fair to good, \$8 to \$8.50; best handy, \$8.50 to \$9; fair to good, \$7.25 to \$8.25; light and common, \$6.75 to \$7.25; yearlings, prime, \$9.25 to \$10.05; fair to good, \$8 to \$8.75.

Cows and Heifers.—Best handy butcher heifers, \$7.50 to \$7.75; common to good, \$6.50 to \$7.25; best heavy fat cows, \$7 to \$7.50; good butchering cows, \$6 to \$6.50; medium to fair, \$5.25 to \$5.75; cutters, \$4.50 to \$4.75; canners, \$3.25 to \$4.25.

Bulls.—Best heavy, \$6.75 to \$7; good butchering, \$6.25 to \$6.50.

Stockers and Feeders.—Best feeders, \$7 to \$7.25; common to good, \$6.25 to \$6.75; best stockers, \$6.75 to \$7; common to good, \$5.50 to \$6.25.

Milchers and Springers.—Good to best, in small lots, \$80 to \$100; in carloads, \$70 to \$75.

Hogs.—Prices held well above the \$11.25 mark last week. Monday the best grades sold from \$11.35 to \$11.50, with pigs \$10.65 to \$10.75. Tuesday pigs were steady and best grades sold up to \$11.50; Wednesday the range was wider, top being \$11.85, with pigs dropping to \$10.50; Thursday the spread was from \$10.50 to \$11.75, and Friday the best grades sold from \$11.65 to \$11.75, and pigs, which were offered as low as \$10.00, were hard to sell at that. Common hogs that weighed from 160 to 190 pounds undersold the better quality hogs of the same weight by from twenty-five to fifty cents per cwt. General price for best roughs was \$10.00, and stags ranged from \$8.50 down. Last week receipts were 14,200 head, as compared with 20,487 head for the week before, and 23,500 head for the same week a year ago.

Sheep and Lambs.—Last week started with top lambs selling from \$11.50 to \$11.75, with culls mostly from \$9 down; Tuesday no lamb sales were made above \$11.50; Wednesday tops again reached \$11.75, with culls fetching up to \$9.50; Thursday best lots sold from \$11.75 to \$11.90, and Friday the general market for tops was \$11.75, with culls bringing as high as \$10. Top yearlings are quotable around \$9 and \$9.25. Sheep were strong all week, top quotation for wethers being \$8.25, while ewes sold from \$7 to \$7.50, as to weight. Receipts last week aggregated 8,000 head, being against 9,730 head for the week previous.

Calves.—Prices were on the jump last week, new records being made. Monday and Tuesday top veals sold at \$14; Wednesday the top was \$14.50; Thursday a bunch of choice Canadian veals made \$14.75, and Friday, which was the high day, bulk of the top, handy, native veals changed hands at \$15. Good handy culls reached as high as \$13 and \$13.50. Friday's supply included 200 head of Canadians running from a grasser to tippy veals, and they sold from \$6.50 to \$14.00, some heavy fat ones going at \$9.25 and \$9.50. Receipts last week were 1,700 head, as compared with 2,102 head for the week before and 1,700 head for the same week a year ago.

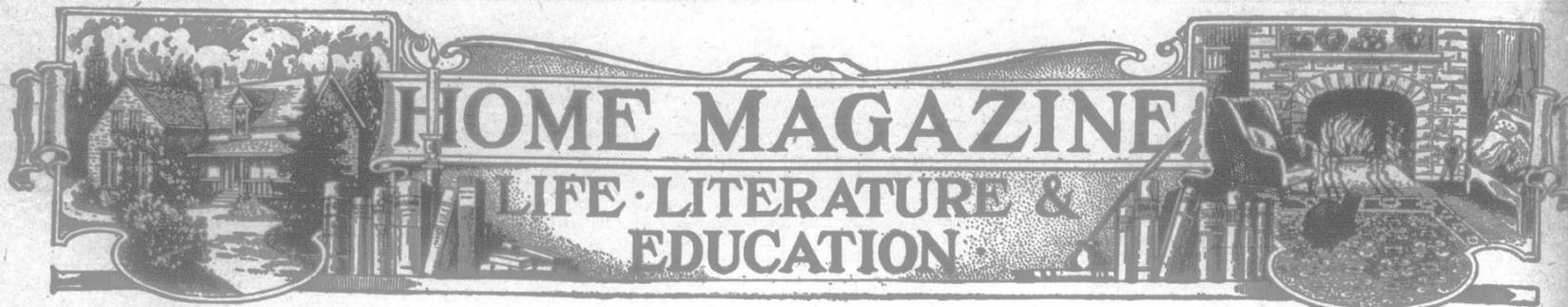
Chicago.

Cattle.—Beeves, \$6.60 to \$11.35; stockers and feeders, \$4.75 to \$7.70; cows and heifers, \$3.65 to \$9.40; calves, \$8.75 to \$13.

Hogs.—Light, \$9.90 to \$11.25; mixed, \$9.70 to \$11.25; heavy, \$9.65 to \$11; rough, \$9.65 to \$9.85; pigs, \$6.50 to \$9.50.

Sheep.—Native, \$6.75 to \$8.35. Lambs, native, \$7 to \$11.25.

Attention is directed to the advertisement of John Hallam, Limited, manufactured furs, in this issue.



The Canadian National Exhibition.

What a Tourist Thought of It.

Miss Ruby Morrison concludes her account of the Big Fair.

Dear Margaret:

Again I am in my room on Jarvis Street, shoes off, kimono on, ready to finish my account to you of our visit to the great Fair.

This was Children's Day, and the whole place overflowed with boys and girls and small mites almost down to long dresses. They say no less than 143 were lost during the day and rounded up at the police station on the grounds, where some young girls volunteered to help the big policemen out in taking care of the wailing strays. I think, if I were in the place of some of the mothers I should tether "the family" to me with clothesline, and run the risk of being transformed into a maypole that could be unwound with difficulty.

The Horticultural Building.

At nine o'clock sharp Mollie and I went again through the fine main gateway and made our way to the Horticultural Building. Mollie says the arrangement was more beautiful this year than ever, and how she raved over it! She has such a mania for ferns and palms, and the chief display was made up of them, two great banks all interspersed with brilliant crotons, orchids, red-flowered callas, and other plants that looked like callas, but whose leaves were variegated in a score of designs in pink and yellow and silvery white, quite as though Dame Nature had been trying to see what she could do in the line of paint and embroidery. Along one side of the building a miniature stream ran from a grotto between banks of foliage, while just beyond a garden had been arranged with larkspurs and other flowers arranged as though growing in a border.

Elsewhere in the building was a fine collection of Indian things—pottery, bead work, totém poles, etc., even skulls of the various tribes. There were a few pieces of pottery taken from the mounds of the Mound-builders, how ancient no one knows; a few, more decorated and better shaped, which had been made in early days by Indians in Ontario, and a few more, beautifully formed and decorated, from the hands of the advanced tribes of Arizona. The woven grass baskets from British Columbia, close enough to hold water, were very beautiful. We quite wanted to carry some of them off.

Someone told us afterwards that there was a flower-maze in one section, but we did not see it. And we had been flattering ourselves that we were missing nothing!

Applied Arts Building.

In the Applied Arts Building were many paintings for which room had not been found in the Art Gallery, some mural decorations, including two by your Ontario artist Fred S. Haines, the photo display, architectural drawings, and some cases of decorated china, and hand-wrought and hand-enamelled jewelry. The latter was for sale, some of the trinkets at very high prices. I wonder if the Arts and Crafts Societies which are trying so hard to promote a general taste for hand-made furniture, rugs, fabrics and jewelry, will ever succeed to any great extent. If they could, how interesting all such work would be for the workmen! How delightful it would be for a man to think out his own design, then carry it out from start to finish! How much

more interesting than eternally turning out just one little part from a stupid old machine!—By the way, did you ever read the life of William Morris? He was really the father of the modern Arts and Crafts movement, a very wonderful and interesting man.

The Munitions Building.

From the Applied Arts Building it was but a step to the Munitions Building. "A whole building at our Toronto Fair given over to munitions!" exclaimed Mollie, "what is the world coming to!" And then and there the horrible old war, which we had forgotten for a little in the interest of looking at things, came back in full force. There were shells and explosives of all kinds, thousands upon thousands of them, guns taken from the Germans and a model of an airship fitted up with cannon, but what interested us most was a big brass, "real live torpedo, a 'whitehead' model—Whitehead, I understand, was the inventor. What an absolutely fiendish thing it is, cigar-shaped, with a little gyroscope affair at its nose. Inside it is divided into three compartments, one filled with explosives, one with a mechanism to control the depth, and the third with one to control the direction. In looking at it one could quite understand how such a thing could sink a ship, and one remembered the Lusitania, the Hesperian and the Royal Edward. Speaking of the last, a letter came to-day, from Kit, who is now in France. She was in Alexandria, you will remember, this time last year. "Just a year ago to-day," she wrote, "the Royal Edward went down. How well I remember the day she steamed out of Alexandria Bay. She was loaded right down to the water's edge, and as she passed us we could hear the boys shouting, 'Are we downhearted?' followed by a big 'No!' How many many things have happened since then."

quickly back, and the whole scene was lighted to represent, alternately, day and night. A model of the Bassano dam, east of Calgary, also attracted attention. This great dam, it is stated, irrigates half a million acres of land.

The G. T. R., in the third compartment, chooses to illustrate the continent rather by a series of photos. In this department an interesting detail was a model of the Twin Screw Coast steamers, "Prince Rupert" and "Prince George."

The Manufacturers' Building.

Peeping into the Dairy Building, where bright-cheeked young folk enter with zest into the butter-making competitions which show how butter of the best quality may be made quickly, daintily and deftly, we passed on to the Manufacturers' Building where everything one could possibly need seems to be on exhibit. Of course, the whole place is just one vast advertisement of the various firms, but one "gets on to" many new ideas in going through it. Now that hydro-electric power is becoming so general, an electric heater at \$7 to \$12 was interesting, along with the other electric appliances which make housework so comparatively easy. Doubtless it will not be long before these things are possible to the majority of you farmers.

In the furnished rooms we saw little that was very practicable for plain folk who have to think of money. "Marble tops" seem to be becoming popular again in bedroom pieces, but they are inlaid, as it were, with a border of wood. We liked the Japanese grass-cloth wall covering in the Murray Kay drawing-room very much, also a fitted table arrangement at the back of a big Davenport—Davenport backs are usually so unattractive when exposed, as they sometimes need to be in a large room. The Simpson Company scored in showing a modern

sight one would think the war was exercising an effect in economizing on cloth—the skirts are so short. But don't you ever believe it! Every inch taken off the bottom is put on at the sides, and, however much we may read in the fashion papers of an approaching "slenderness of silhouette," every model shown is as billowy and bouffant as in the wildest epoch of the Victorian age—wildest in extravagance, I mean, of course. One would think that, in war time, with "thrif" urged on every side, waists should be demure as those of Puritan maidens, skirts narrow even to the splitting stage as they were three years ago. But never a bit of it! And to make matters worse fur is cut up and used as trimming, not only on suits but on the sheerest of evening dresses. I do think that wicked, don't you? . . . Speaking of fancy dresses, we saw one wedding gown (I suppose you'd call that fancy) in which the skirt was barely ankle length, but—there was a train that trailed on the floor! And the veil reached to the end of the train. It was certainly a funny combination, but altogether too tail-like to suit me.

The long coats, however, barring rather too much waste in the skirt portion, were rather nice and sensible, most of them provided with big sensible storm-collars. And the hats, too, I liked, of all sizes, graceful in shape and very simply trimmed, with just a touch to relieve the plainness. They look as though they should be cheap enough for war-time, but you never can tell. I priced one dear simple thing in a down-city store and it was just sixty dollars! I gasped—and turned away.

An exhibit that interested us very much was that of rag rugs, shown by the Toronto Carpet Mfg. Co. Here were some lovely rag rugs with "rose" borders actually woven in at the ends. A quiet green one and a gray one, both with pink roses across the ends, were particularly beautiful. All the rugs used, we noticed, were cotton.

The Women's Building.

I love fancywork, but I always wonder, when I see so many fine stitches, whether eyesight will not have to pay in the long run. Of course, the things in fancywork exhibits are usually much the same from year to year, but we noticed a few new things. A filet crochet nightdress top with bell sleeves, also of the crochet, was very pretty, the work being chiefly of the plain filet, with a bit of design across the front and at the edge of the sleeves. The card announced that the work had been done by Mrs. McNab, Drayton Ont. We also noticed particularly some lovely Maltese lace collars made by Mrs. Thornley, Toronto, and some very pretty bags made of pumpkin seeds and steel beads, with satin lining. Other items were a lunch-cloth of linen decorated with embroidery and punchwork; a luncheon set done in blue cross-stitch; scrim curtains with lovely crochet insertion; a pique quilt trimmed with crochet; and a patchwork quilt embroidered with the names of soldiers—an interesting souvenir of the war. Among the prettiest quilts shown were two woven ones in blue and white, and gray and white.

Mollie, teacher that she is, was very enthusiastic over the art work, needlework and cookery contributed by children.

* * * *

September 3th heigh-ho! and my letter to you not off yet. Well, it's all over, the Big Fair, and I am home again. They tell me there were about 50,000 people on the grounds on Farmer's Day, and an "unspeakable jam" on Labor Day, so I'm glad we took your advice and went "the first week." It



Girls in a Great London Store Who Have Formed a Fire Brigade.

Photo International Film Service.

The Railway Building.

Again, in this building, I was impressed with the great range and resources of your country. With walls tapestried with designs worked out in grains, hay, clover and wild peas, the C. N. R. shows the agricultural possibilities of the great West. In the department allotted to the C. P. R. we found a great pyramid of fruits from British Columbia in the center, with grains and animals about the walls, and, in one place, a pictorial representation of a trip across the continent from Quebec city across the central plains to the mountains of the Pacific Coast. At Quebec moving boats met moving trains which sped

kitchen, completely equipped with labor-saving appliances, the whole room sanitary as a hospital operating room, and so easily cleaned, with its gray tiled floor and washable walls. A children's "bluebird" play-room was also a feature of this exhibit. The Eaton Company's living-room ran wholly to oriental effects.

And now you will want to know about the ready-made clothes exhibit, what woman doesn't? Of course there were dresses and dresses—dozens of them—in every conceivable color or combination of color, with sheer effects predominating wherever possible, Georgette crepe being still, evidently, as much in favor as ever. At first

was such a lovely day, that on which we left Toronto. On the way to Hamilton where we had to change cars, we watched the blue lake as far as we could see it, and at one point an aeroplane, looking exactly like a big dragon-fly came from over the water and passed directly over our train. A gentleman kindly explained that they were to be seen there at any time, because of the aviation training school near Port Credit somewhere.

Aviators training for the war! Margaret, dear, I so often think of your brave, brave lads in khaki. Bless them every one! And when you and I meet at "Toronto Fair" next year, as you have promised, may the great glory of peace, peace over all the world, hang over it and over us all. Write very soon to your little "foreign" friend. R. B. V.

Hope's Quiet Hour.

The Wonder of God.

Justice standeth afar off: for truth is fallen in the street. . . and the LORD saw it, and it displeased Him that there was no judgment. And He saw that there was no man, and wondered that there was no intercessor. —Isa. 59: 14-16. He marvelled because of their unbelief.—S. Mark 6: 6.

In the chapter from which our text is taken the prophet speaks of the horrors of wickedness and injustice, which make men grope for the wall like the blind, in the thick darkness of despair. Yet, he says, "the LORD'S hand is not shortened, that it cannot save; neither His ear heavy, that it cannot hear."

God is now, as then, a sure Refuge in the time of trouble. We know this—are we keeping our eyes and hearts fixed on Him? He looks down on His distracted children, who profess to believe in Him and yet seek His help only when all earthly hopes fail. We say that a sick person is in a "precarious" condition when he is very ill, but that unusual word only means that he should be prayed for. It comes from a Latin word meaning "to pray". Is it a fact that we only pray for our friends when they are in extreme peril?

God knows what is in man, yet even He—the prophet has declared—"wondered" that there was no intercessor, when the darkness of awful sin and misery had blotted out the light.

So our Lord, when He came into His own country, among the people who knew Him best, "marvelled" because of their unbelief, and was hindered in His works of mercy by that unbelief. "He could there do no mighty work."

A few days ago a young girl told me that her soldier brother, who is in a hospital in an English city, is well enough to go out every day. He writes often about going to church and the Holy Communion, and says that only about half a dozen people usually come to that service in the church he attends. A city church in England, and nearly every family has dear ones in a "precarious" position! Don't you think such evidence of unbelief must amaze the angels?

Our Lord has said: "He that eateth my flesh, and drinketh my blood, dwelleth in me, and I in him.—S. John, 6:56. He is the Great Intercessor, who ever liveth to make intercession for us. He is the "Righteous Man!" whose effectual, fervent prayers avail much (S. Jas. 5:16.) Are we going to refuse His offer to let us share that glorious intercession? Don't we want to dwell in Him and have His Life abiding in us, so that our weak prayers may also prevail mightily as His Life-blood pulses in our veins?

In the eighth chapter of the Revelation of St. John we are told of the angel who offers the prayers of all saints upon the golden altar before the throne. But those prayers do not stand alone. The angel was given "much incense" to offer with them, and the smoke of the incense ascended up before God with the prayers of the saints.

Our Great High Priest has provided the "much incense"—His own mighty intercession—is He still marvelling

over our unbelief, still wondering that there is no intercessor?

Do we want to rouse Divine wonder? Then let it be by our faith rather than our unbelief. A Roman soldier showed such absolute trust and humility that Jesus "marvelled at him." It was outside His own chosen people that this unshaken confidence in His power to heal was found. Sometimes such wondrous faith is seen to-day. One day this week I visited a woman who is helpless and blind. She can move one hand a little, but has no expectation of ever being any better

us that our soldiers are beseeching us to pray for them—to pray unceasingly—that they may be restored to us the sooner. "When we have prayed enough the war will end. But let us who believe in prayer see to it that it is not prolonged by our neglect."

In the church I attend we have had a daily service of intercession for our soldiers ever since the war began. Is the church crowded? Well, our Lord has promised to be "in the midst" when two or three are gathered together in His name. He—the Great Intercessor—is there. Is He marvelling

This is a secret service. Only you and God know whether you are interceding for those who need your prayers. You may kneel in the attitude of prayer and yet your mind may be engaged in very earthly pursuits—thinking about the crops, perhaps, or considering the important subject of "clothes." On the other hand you may be ploughing a field or scrubbing a floor and your intercession may be rising, in conscious union with the "mind incense" of the Great High Priest, to the Throne of God.

But perhaps you are thinking: "Oh, I am dreadfully busy just now. When harvest is over, and the threshing done, there will be time for things of that sort. Why, I have no time in the morning to pray even for myself, and I am too dead tired at night."

Then it is evident that you consider prayers of little consequence as compared with other work. Other business must be done first, and then you will pray if you feel like it. Yet the great business of everyone is to bring this horrible slaughter to a righteous and lasting finish. Unless our faith is founded on a lie we can help the cause of righteousness by our prayers. If we fail to use the mighty power offered to us, we are like millionaires who will not use their money to help the starving. "The Lord's hand is not shortened, that it cannot save; neither His ear heavy, that it cannot hear: But your iniquities have separated between you and your God, and your sins have hid His face from you, that He will not hear," said the prophet Isaiah.

It is not enough to speak words of prayer. It is the fervent prayers of the "righteous" that avail much. We must worship God; instead of setting our hearts on riches or comfort, on human praise or earthly pleasure. We must leave earth for beneath our feet and climb the Ladder—Christ Himself, who is "The Way"—to kneel before the Throne.

As for "having no time to pray," God doesn't demand long prayers. It is quite possible to pray while running a machine, peeling potatoes or washing dishes. "Stonewall" Jackson said: "I never raise a glass of water to my lips without a prayer for God's blessing. I never seal a letter without putting a word of prayer under the seal. I never change my classes in the section room without a minute's petition on the cadets who come in"

At the foot of the Throne you can win help and protection for those who are laying down their lives for you. God's treasury is open and you can bring out spiritual and physical blessings



Armenians Rescued from Turkish Massacre and Now in the United States. Underwood and Underwood.

in this life. Her face is as full of gladness as the face of a happy child. She talks joyously of the life after death, and the "land of far distances" which her blind eyes can already see. Her life is hidden with Christ in God, and it shines with unearthly beauty.

That case is rare. I am afraid very few of us are causing our Lord to marvel and say: "I have not found so great faith, no, not in Israel."

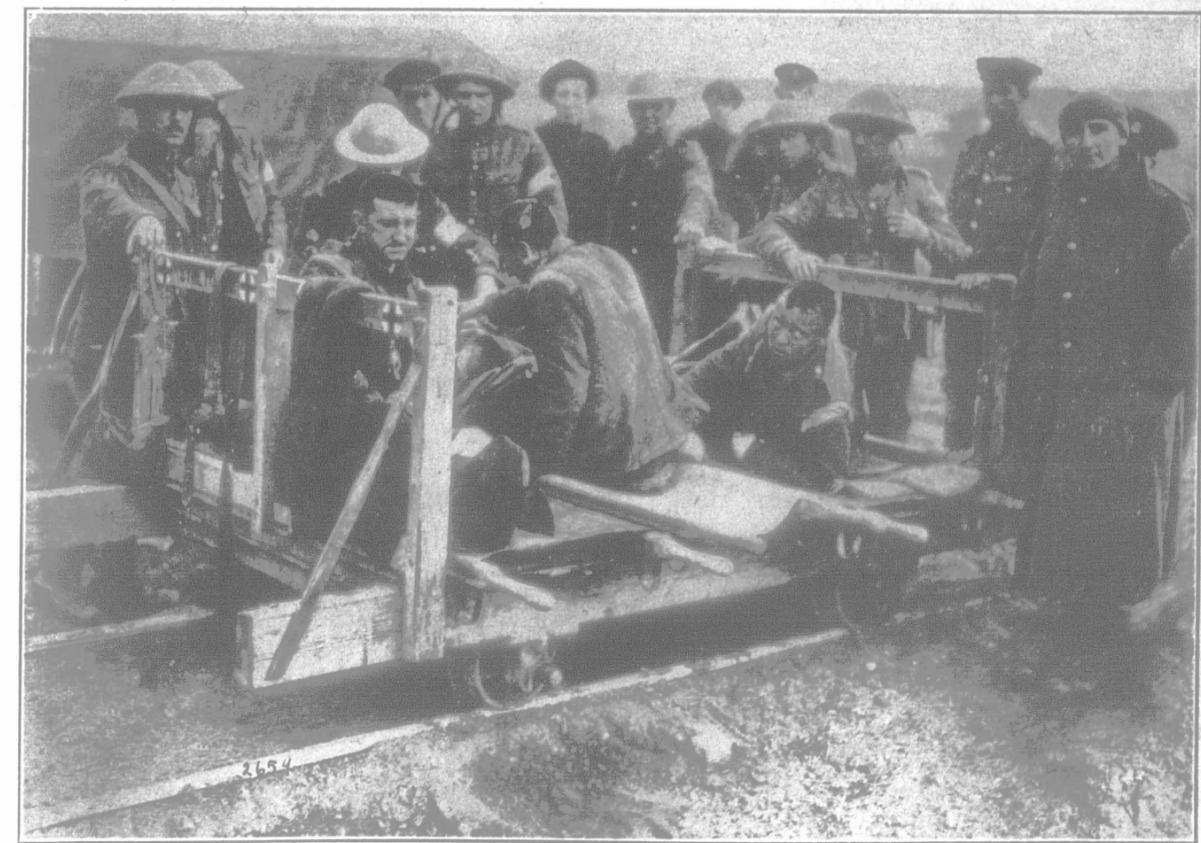
The writer of the Epistle to the Hebrews said: "Pray for us. . . I beseech you to do this, that I may be restored to you the sooner."

Sir W. Robertson Nicoll reminds

that so few are gathered together to pray for those in peril on the earth and in the air, on the sea and under the sea?

We hear that Russia, France and Italy are "on their knees." Can anyone say that of England?

"Yes, pray for whom thou lovest; if uncounted wealth were thine, The treasures of the boundless deep, the riches of the mine, Thou couldst not to thy cherished friends a gift so dear impart As the earnest benediction of a deeply prayerful heart."



British Wounded Arriving at a Dressing Station on a Trench Railroad. International Film Service.

or them. You can kneel there and try to climb to the heights of intercession reached by our Leader, when He prayed for those who were torturing and mocking Him. It is a grand and noble thing to pray in kindly fashion for those who are injuring us. Are we satisfied to refuse the opportunity offered to us by the King who holds in His hand the destinies of the nations. How wonderful it is that we are so slothful in spirit, so lazy about prayer! Our Lord said to His disciples: "Hitherto ye have asked nothing in My Name." Is He saying that to us—marvelling because of our unbelief? He is waiting for us now, in the secret chamber of the soul. Are we going to disappoint Him to-day, as so often before?

"Lift up your hearts!" I hear the summons pealing
Forth from the golden altar where
He stands;
Our Great High Priest, the Father's
love revealing
In priestly act, with pleading, out-
spread hands."

DORA FARNCOMB.

For the Needy.

I acknowledge, with thanks, "Irene's" gift of two dollars for the needy. One dollar of this has gone to help a poor mother whose little babies (twins) both died in one day. Part of the other dollar was spent in comforts for a woman who has been sick for more than three years. The remainder is waiting in "The Advocate" purse—for the present.
HOPE.

Fashions Dept.

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.

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

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



8805—Coat for misses and small women, 16 and 18 years.
8628—Two or three-piece skirt for misses and small women, 16 and 18 years.



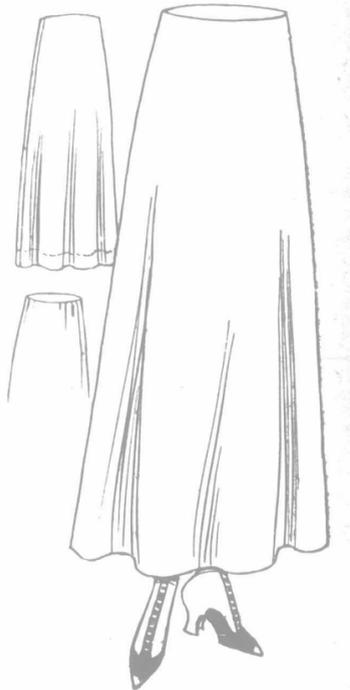
8929—Coat, 34 to 42 bust.
8926—Four-piece skirt, 24 to 34 waist.



8760—Blouse, 34 to 42 bust.
8774—Skirt, 24 to 32 waist.



8845—Girl's Dress, 8 to 14 years.



8571A—Two-piece Skirt, 24 to 34 waist.



8813—Norfolk coat, 34 to 42 bust.
8796—Plaited skirt with yoke, 24 to 32 waist.



8920



8854—Girl's Coat, 8 to 14 years.

The Windrow

Great Britain's total appropriation for war purposes during the past two years has been \$14,160,000,000. Part of the amount was advanced to her Allies and overseas dominions.

In no former war have the animals played so large a part as they have in this now raging. Besides the horses, mules and oxen, there are the dogs serving in many ways, the cats ridding the trenches of rats and mice, the carrier pigeons, and even the white mice of the submarines, which are taken aboard to give warning of any escape of gas.

During the past two years Great Britain has made great acquisitions in territory. With the French and Boers, she has taken all the German colonies in Africa except a part of German East Africa; with the Japanese and Australians, she has taken all the German islands in the Pacific; Egypt, the Soudan and Cyprus, formerly nominally belonging to Turkey are now a part of the British Empire; the southern part of Persia and a considerable part of Arabia are now acknowledged to be under British rule.

Miss Flora Sandes, an Irish woman, is serving as a soldier in the Serbian army. At the beginning of the war she enlisted as a nurse, but afterwards went into the ranks as a private. She has been made a sergeant.

Scientists have determined by careful computation, study and investigation that the farmers and fruit growers over this country are losing over \$1,000,000,000 a year by reason of the reckless and senseless destruction of birds during the past thirty years, says Colonel G. O. Shields.

The cotton growers of the South are suffering a loss of \$100,000,000 a year by reason of the ravages of the boll weevil, an insect that bores into the cotton stalk and kills it. Why? Because the quails, prairie chickens, meadow larks and other birds, which were formerly there in millions, have been swept away by thoughtless, reckless men and boys.

The grain growers are losing over \$100,000,000 a year on account of the work of the chinch bug. They are losing another \$200,000,000 a year on account of the work of the Hessian fly. Both of these are very small insects, almost microscopic in size. It takes 24,000 chinch bugs to weigh an ounce, and nearly 50,000 Hessian flies to weigh an ounce.

Scientific men announce that there is no way on earth by which these insects can be destroyed except for the people to stop the killing of birds, absolutely and at all times, and let them come back and take care of the insects.—Our Dumb Animals.

"I have just emerged from the slough of despond," said a young man to me not long ago. "For more than a month I was forced to loaf, and if there is anything worse than that I don't know what it is. Now I have work. Every morning when I wake I know that I am needed at the office. It is great to be needed—even by an office." When he passed on I thought of what Charles Kingsley said. "Thank God every morning," said he, "that you have something to do that day, whether you like it or not. Being forced to work, and forced to do your best, will breed in you temperance and self-control, diligence and strength of will, cheerfulness and content, and a hundred virtues which the idle will never know." —Character.

Prof. Elie Metchnikoff, who died this summer in Paris, will be remembered in the scientific world for his discovery of the reason of inflammation, also for his theory—now generally accepted by physicians—that the white corpuscles of the blood are useful in overpowering dangerous microbes. Of late years he spent much time investigating the poisons engendered in the intestines, and believed that "old age" is due to the putrefaction of matter in the large



8725—Gown with Three-piece Suit, 34 to 42 bust.



8532—Military Waist, 34 to 42 bust.



8615—8528
8528—Blouse, 36 to 46 bust.
8515—Skirt, 24 to 32 waist.



8857—Dress for Misses and Small Women, 16 and 18 years.



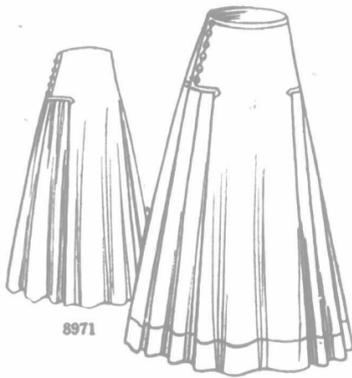
8843
Gown, 34 to 44 bust.



8671—Jumper Dress, 34 to 44 bust.

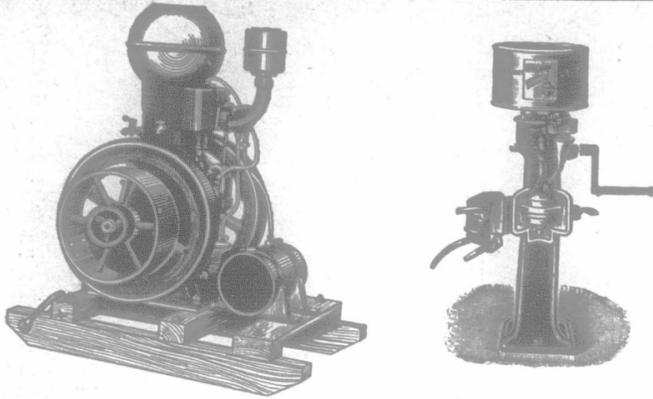


8735 Girls Norfolk Suit, 8 to 14 years.



8971
Skirt, 24 to 32 waist.

LISTER The Name That Stands for QUALITY in Farm Machinery



Lister Engines Famous all over the world for their superiority in design, workmanship and construction. British built throughout.

Lister Threshers Thousands of farmers are threshing their own grain this fall. Call and see the Lister Thresher, operated by 5 to 12 horsepower.

Lister Silos and Ensilage Cutters The best silo and silo-filling outfit that money can buy. Ten-inch and 13-inch fillers, with blower operated by 5, 7 and 9 horsepower engines.

Lister Milkers Are in use all over Canada. Either single or double can system.

Spraying Outfits We have the simplest and most compact Spraying Outfit—price within the reach of every farmer or orchardist.

Melotte Separators Used by over 50,000 Canadian farmers.

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R. A. LISTER & CO., Limited, TORONTO
WINNIPEG QUEBEC ST. JOHN, N.B.

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THE FAME OF A NAME INVITES SUBSTITUTION—
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**THE FAMOUS
OSTERMOOR
MATTRESS**

which has the name "OSTERMOOR" woven in the binding, as in the border of this advertisement, to protect you against mistakes.

\$18 for 50 years of restful sleep

Ask your dealer for the "OSTERMOOR" or write us for the name of your nearest agent.

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Successors to **The Alaska Feather and Down Co. Limited**
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Winnipeg MONTREAL Vancouver
"ALASKA on an article means High Grade Every Particle."

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Milk up to Standard**
Other Cities Will Fall in Line.
You can easily meet this demand if you have Ayrshire blood in your herd. Now is the time to buy a pure-bred Ayrshire sire or a foundation female. We'll gladly send you information.

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Can. Ayrshire Breeders' Assoc.

HONEY

Gathered from the clover fields of Ontario; thick and clear, with that delicious clover flavor. Shipped direct from beekeeper to consumer in securely crated tins, at 12½ cents a pound. Sample by mail, ten cents.

H. D. McCULLOCH, R. R. A, North Bruce, Ont.

THE FARMER'S SEEDSMAN FIFTY YEARS SERVICE

Timothy

Freight paid on two or more bus. Gov't Standard, No. 2, No. 1 for purity. **\$4.85 bus. Bags 30c. each.**

Write for quotations on any other seeds you may require. We are in the market for Alsike & Red Clover. Send samples. Dawson's Golden Chaff Fall Wheat, \$1.70 per bus. (Bags free.)

GEO. KEITH & SONS SEEDS 124 KING ST. E. TORONTO

FOR SALE
1915 THREE-SPEED INDIAN
With side-car. Complete electric equipment.
Box "E". **FARMER'S ADVOCATE, LONDON**

Lincoln Sheep—Shearing lambs and ram ewe lambs; also some registered Shorthorn bulls, reds and roans. Prices reasonable.
C. A. POWELL, R.R. No. 1, Ettrick, Ontario

intestine. The use of sour milk, he held, would help to hold such damage in check.

Sir Rabindranath Tagore, the famous Hindu poet, to whom was awarded one of the Nobel prizes for literature is lecturing in the United States. He is said to be one of the most handsome men in the world, and comes with a distinct message from the East to the West. Our materialism, he says, is preventing us from really living or sounding the true depths of life.

The largest commercial water-lily "farm" in America is near Washington, D. C., and is managed by a woman, Mrs. Helen Fowler. She ships 2,500 water lilies every morning in midsummer. Mrs. Fowler is an expert hybridizer, and has originated several new varieties.

It is waste to light a big or little cigar when none at all will do, and the extreme ease with which the tobacco user may abandon his habit is insisted upon by Dr. Robert Abbe, senior surgeon of St. Luke's Hospital, New York, in a paper read before the Practitioners' Society of this city and printed in The Medical Record (New York, January 29). Dr. Abbe strongly opposes the use of tobacco. We live, he says, in a temperate climate, where the weed's stimulating effect is not needed, and the familiarity that we have gained with it during the last three centuries is responsible for much of the "nervous over-activity," as he terms it, for which Americans are becoming noted. Its use he classes as a harmful habit, with "drinking, treating, spitting, chewing gum," and other usages, incidental to life, but not essential to it. We had better all give it up, he believes; and fortunately we shall have no trouble in doing so. —Literary Digest.

No nation can long be called efficient which fails to advance the general life of humanity. As the war drags on, with its ever-increasing wake of ruin and irreparable loss, Germany is fast losing her 'place in the sun,' and stands as the 'horrible example' of utter failure along the avenues of real world service. That she is powerful none can deny; but that her strength is of the eternal type is daily becoming more doubtful. In a sense she has been efficient, but for fundamentally wrong purposes; and, unless the unexpected happens, she is bound to undermine her own foundations and find herself less respected and both morally and physically weaker than before the conquest of Alsace-Lorraine. —The Outlook, N. Y.

Radium's Tremendous Energy.
Sir Ernest Rutherford, the distinguished scientist, has been pointing out, in Manchester, the tremendous energy locked up in radium. If it were only let loose! Speaking of the intense energy contained in these substances, Sir Ernest said that what scientists wanted to ascertain was how we could release at will the energy contained in radium and utilize it for our own purposes. If that energy could be made available we should enter upon a new era in the supply of cheap energy, because it had to be borne in mind that in releasing such energy at any rate we desired, it would be possible for one pound of the material to obtain as much energy practically as from one hundred million pounds of coal.

Fortunately at the present time we had not found out a method of so dealing with these forces, and personally he was very hopeful we should not discover it until man was living at peace with his neighbor. There was no doubt if it was once discovered that we could accelerate these influences. A few hundredweights of such material would shake, if not rend, the earth.

Sir Ernest Rutherford said the ordinary atoms with which we were familiar had the property, as far as we knew, of being permanent and indestructible, but the atoms of which he proposed to speak might be taken as atoms of unstable elements—elements which did not last forever, but had a certain defined and limited life, disappearing and giving rise to a series of other substances. In radium and other radio-active substances we were witnessing, for the first time in

nature, the actual cause of the transformation of matter. It was not a cause we could influence at all; it had always been going on in nature and in the history of this planet. Radium was several million times more active than the mineral from which it was derived. Enormous improvement had been made in the study of the properties of these radio-active substances, and the separation of radium had entered on a very large commercial scale.

Sir Ernest gave demonstrations of the intensity of the radio-active emanations, and showed their action on a photographic plate, and the phosphorescence they occasioned when brought into the close neighborhood of certain salts. Radiation from radium, he said, was ten times more penetrating than any penetrating influence we knew of. Radium and radio-active substances had an enormous interest from the scientific point of view, and recently they had been utilized greatly from the medical standpoint in the treatment of certain diseases.—Manchester Guardian.

Current Events

Brantford, Ont., druggists have decided not to handle liquor even on prescriptions.

On September 6th fifteen Allied aeroplanes bombed Brussels. Only one was brought down.

At time of writing the only reports from the Western war-front are of incessant artillery bombardments, with the Allies holding their own and even making some advances along the Somme. It is believed that the British Division may, at an early date, push an offensive into the Lens-Lille district, with the intention primarily of occupying a large number of Germans there, and so helping to prevent the Teutons from sending reinforcements to the Balkans. Following their usual tactics, the Teutons and Bulgars have thrown a strong offensive into Roumania and have captured Turtukai and Dobric, meeting with an inefficient resistance because of the fact that the greater part of the Roumanian army is engaged in Transylvania; but the Russians are rapidly landing on the Black Sea coast of Roumania and are also sending down assistance from Bessarabia; hence the enemy in Roumania may soon find plenty to do to hold its own. At time of going to press the Bulgars have taken Silistria, an important town on the lower Danube.

The Dollar Chain

A fund maintained by readers of THE FARMER'S ADVOCATE and Home Magazine for (1) Red Cross Supplies; (2) Soldiers' Comforts; (3) Belgian Relief; (4) Serbian Relief.

Contributions from September 1st to September 8th

Mrs. J. E. Miller, Iroquois, Ont.	\$ 1 00
Mrs. Delbert Hoover, R. 3, Bothwell, Ont.	1 00
"Reader"	3 00
Amt previously acknowledged,	\$2856 70

Total to Sept. 1st \$2861 70
Kindly address contributions to THE FARMER'S ADVOCATE and Home Magazine, London, Ont.

If you can't go to the Front, Give.

A Strange Chinese Custom

Among the many extraordinary customs of the Chinese is that of banding years together in groups of twelve, called "cycles," and naming each year of the series after some animal. Thus, the first year of a new cycle is the year of the rat, the second the year of the ox, the third the year of the tiger. Every Chinese born in the year of the rat belongs to the Order of the Rat, and so on. The animal class of every Chinese man and woman is thus recorded, and is held to be of great importance in foretelling the future.—London Tit-Bits.

WAR LOAN

DOMINION OF CANADA

Issue of \$100,000,000 5% Bonds Maturing 1st October, 1931.

PAYABLE AT PAR AT
OTTAWA, HALIFAX, ST. JOHN, CHARLOTTETOWN, MONTREAL, TORONTO, WINNIPEG,
REGINA, CALGARY, VICTORIA.

INTEREST PAYABLE HALF-YEARLY, 1st APRIL, 1st OCTOBER.
PRINCIPAL AND INTEREST PAYABLE IN GOLD.

ISSUE PRICE 97½

A FULL HALF-YEAR'S INTEREST WILL BE PAID ON 1st APRIL, 1917.
THE PROCEEDS OF THE LOAN WILL BE USED FOR WAR PURPOSES ONLY.

The MINISTER OF FINANCE offers herewith, on behalf of the Government, the above named Bonds for subscription at 97½, payable as follows:—

- 10 per cent on application;
- 30 " " 16th October, 1916;
- 30 " " 15th November, 1916;
- 27½ " " 15th December, 1916.

The total allotment of bonds of this issue will be limited to one hundred million dollars exclusive of the amount (if any) paid for by the surrender of bonds as the equivalent of cash under the terms of the War Loan prospectus of 22nd November, 1915.

The instalments may be paid in full on the 16th day of October, 1916, or on any instalment due date thereafter, under discount at the rate of four per cent per annum. All payments are to be made to a chartered bank for the credit of the Minister of Finance. Failure to pay any instalment when due will render previous payments liable to forfeiture and the allotment to cancellation.

Subscriptions, accompanied by a deposit of ten per cent of the amount subscribed, must be forwarded through the medium of a chartered bank. Any branch in Canada of any chartered bank will receive subscriptions and issue provisional receipts.

This loan is authorized under Act of the Parliament of Canada, and both principal and interest will be a charge upon the Consolidated Revenue Fund.

Forms of application may be obtained from any branch in Canada of any chartered bank and at the office of any Assistant Receiver General in Canada.

Subscriptions must be for even hundreds of dollars.

In case of partial allotments the surplus deposit will be applied towards payment of the amount due on the October instalment.

Scrip certificates, non-negotiable or payable to bearer in accordance with the choice of the applicant for registered or bearer bonds, will be issued, after allotment, in exchange for the provisional receipts.

When the scrip certificates have been paid in full and payment endorsed thereon by the bank receiving the money, they may be exchanged for bonds, when prepared, with coupons attached, payable to bearer or registered as

to principal, or for fully registered bonds, when prepared, without coupons, in accordance with the application.

Delivery of scrip certificates and of bonds will be made through the chartered banks.

The issue will be exempt from taxes—including any income tax—imposed in pursuance of legislation enacted by the Parliament of Canada.

The bonds with coupons will be issued in denominations of \$100, \$500, \$1,000. Fully registered bonds without coupons will be issued in denominations of \$1,000, \$5,000 or any authorized multiple of \$5,000.

The bonds will be paid at maturity at par at the office of the Minister of Finance and Receiver General at Ottawa, or at the office of the Assistant Receiver General at Halifax, St. John, Charlottetown, Montreal, Toronto, Winnipeg, Regina, Calgary, or Victoria.

The interest on the fully registered bonds will be paid by cheque, which will be remitted by post. Interest on bonds with coupons will be paid on surrender of coupons. Both cheques and coupons will be payable free of exchange at any branch in Canada of any chartered bank.

Subject to the payment of twenty-five cents for each new bond issued, holders of fully registered bonds without coupons will have the right to convert into bonds of the denomination of \$1,000 with coupons, and holders of bonds with coupons will have the right to convert into fully registered bonds of authorized denominations without coupons at any time on application to the Minister of Finance.

The books of the loan will be kept at the Department of Finance, Ottawa.

Application will be made in due course for the listing of the issue on the Montreal and Toronto Stock Exchanges.

Recognized bond and stock brokers will be allowed a commission of one-quarter of one per cent on allotments made in respect of applications bearing their stamp, provided, however, that no commission will be allowed in respect of the amount of any allotment paid for by the surrender of bonds issued under the War Loan prospectus of 22nd November, 1915. No commission will be allowed in respect of applications on forms which have not been printed by the King's Printer.

Subscription Lists will close on or before 23rd September, 1916.

DEPARTMENT OF FINANCE, OTTAWA, September 12th, 1916.

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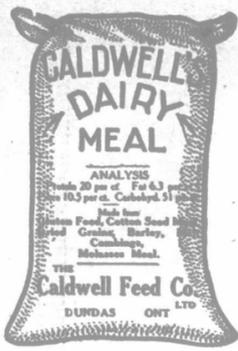
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CALDWELL'S



A Fully Balanced Meal-Ration For Milking Cows

Dairymen have found that Caldwell's Dairy Meal increases the milk flow of their herds (both winter and summer) and at the same time keeps them in good physical condition. They have found our meal to give uniformly good results ton after ton and year after year. Here is the reason—

Caldwell's Dairy Meal

is prepared by Canada's foremost feed analysts—men who know from experience both the practical and scientific feeding value of foods. They blend into Caldwell's Dairy Meal the proper quantities of the different foods. The result is that our meal is pure, palatable, balanced in its food content and easily digested. Caldwell's Dairy Meal (when fed the year around) supplies the "missing link" between an unbalanced and a balanced ration.

ANALYSIS—Protein 20%, Fat 6.3%, Fibre 10%

Secure CALDWELL'S DAIRY MEAL from your feed man or write direct to us and we will supply you promptly. Shipped in 100 lb. sacks or ton lots.

The Caldwell Feed & Cereal Co., Limited
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MAKERS ALSO OF
 Cream Molasses Meal, Substitute Calf Meal, Molasses Horse Feed, Poultry Feeds

STANDARD FEEDS

Homeseekers' Fares FROM TORONTO

To Winnipeg and Return.....	\$35.00
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EVERY MONDAY TO OCTOBER 30TH
 Proportionate Fares from and to other Points
ELECTRIC LIGHTED TOURIST CARS
 For our Booklet, "Homeseekers' and Settlers' Guide," tickets and information, apply to nearest Canadian Northern Agent, or write to
 R. L. Fairbairn, General Passenger Agent, 68 King Street E., Toronto, Ont.

Keep Your Live Stock Healthy
 and in prime condition by supplementing the feed with
LINSEED OIL CAKE, "Maple Leaf" Brand
 With a trial ton order, we will send you free, "The Veterinarian," a valuable book about the diseases of cattle.
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Harab-Davies Fertilizers Yield Big Results
 Write for Booklet.
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Women's Institute Convention, Prince Edward Island.

The third annual convention of the Women's Institute of Prince Edward Island was held in Charlottetown, July 27th and 28th.

The attendance was large as there were delegates present from all the institutes. After enrollment the proceedings opened with the singing of "O Canada." An address of welcome was then delivered by the Commissioner of Agriculture who referred to the work done by the institutes for the Red Cross and other patriotic societies and for the schools, and was replied to by Mrs. C. L. Barnes, of Georgetown, who spoke of the close connection between the institute work and the Red Cross work. So many husbands and brothers of the members are enrolled in the service of the country that the work naturally becomes one and part of the same, and it is hard to tell where it begins or ends. "Home and Country" is the motto of the institutes, and the endeavor is to live up to this slogan. The reports of the Secretaries of the different institutes were then read after which the delegates were photographed and adjourned to the Experimental Farm.

At the evening session Professor S. B. McCready gave an address on "How Country Life May Be Better Served in our Schools," supplementing his remarks with lantern views showing schools in Ontario as well as in Prince Edward Island. Miss E. J. Guest of Belleville, Ontario, spoke on "The Mother—What she Owes to Herself, Her Home, Her Community." She spoke under the following heads: 1, Full Development of the Mother's Natural Powers; 2, Rest; 3, Recreation, 4, Respect. The last speaker of the evening was the American Consul, whose graphic description of the Southern States was a masterpiece of scholarly diction.

On the following morning Mrs. Walter Simpson of Bay View read an excellent paper on "The Influence of Flowers," which was much appreciated. Miss Hunt, Secretary of the Handicraft Guild of Summerside, gave a pleasing talk of the work done along the different handicraft lines in Quebec, and illustrated it with an excellent display of mats, table covers, bed spreads, etc. This proved one of the most interesting talks of the whole convention.

Miss Guest then led a discussion on the "Work of Institutes" which was taken part in by Mrs. (Premier) Mathieson, Miss Dutcher, Teacher of Household Science in Prince of Wales College, Mrs. (Col.) Ings and others.

The singing of the National Anthem brought to a close an interesting and highly profitable Convention.

Aunt Priscilla, N. D.

BY ALICE MARGARET ASHTON.

The "year-old housekeeper" called her husband to read the letter with her.

"Dear Housekeeping Lady:

"If there is anything in your house that needs mending, will you not get it together and let me fix it? I shall esteem it a favor to spend a day in your sewing-room, for I am an old lady with nothing to occupy my time.

"AUNT PRISCILLA, N. D."

"Well, did you ever?" gasped the housekeeping lady. "She certainly will be welcome." And a few minutes later she read aloud her reply:

"Dear Aunt Priscilla, N. D.:

"You most assuredly will be welcome. How will the day after tomorrow do?"

"What does N. D. stand for, anyway?"

"Your delighted niece, D. K."

Next morning brought this card: "I shall be with you by nine o'clock. N. D. stands for—Doctor of Needles!"

The housekeeping lady looked apologetic when Aunt Priscilla arrived. "This seems like a dreadful lot of things, and I expect most of them are past all mending. There are always so many things to see to which are more important, that the mending has to go, lots of times. But it is certainly dear of you to offer to help."

Aunt Priscilla opened her bag and took out her spectacles and thimble with a smile. "I am an 'N. D.," and

I suppose it is natural for me to believe in my profession, but I think there is hardly anything about the house-keeping that is of more importance than the mending.

"I have been mending for years and years, dear, or I wouldn't dare appear as a practicing 'N. D.'"

"Teach me about it if you can," offered the niece, with a laugh, "I have always thought mending very far removed from a profession!"

"To begin with," began the Doctor of Needles cheerfully, "always divide a pile of mending into two classes—the garments that are still so good as to deserve the most careful mending, and those in which there is still some wearing quality, but no beauty. Careful handling of the first class will make them practically as good as new; like attention to garments in the second class would be a foolish waste of time and patience.

"Here, we will take these two petticoats, for instance. This one is perfectly good and new except where the lace is torn on the flounce. With thread of the same size weave in the pattern, using your embroidery hoops to keep the work flat. It may take half an hour, but the skirt will then be as good as new; otherwise it is a 'ragged' garment, and soon past mending. Now this other petticoat with a torn band is several years old, and is not right for present-day fashions."

"Yes, it's always hanging below my skirt when I sit down," sighed the housekeeping lady.

"And the material is old and tender all over. It would be a waste of time to replace the band and take out the unnecessary fullness; so we will simply piece out the torn band and you can wear it mornings under your house-dresses or in taking country walks."

"And save my good ones—that is an idea, certainly. This mended place in the lace isn't going to show; I thought I'd have to get a new petticoat for 'best.' You've already saved me three dollars and fifty cents, dear 'Doctor of Needles.'"

"My motto," continued Aunt Priscilla "is a very old and trite one, with variations, but I wish you would bear it in mind. 'A stitch in time saves money, time and patience.'"

"Here are some applications. Use wash ribbon in your gauze vests and underwear, so that it need not be removed for laundering, and after adjusting it, tack securely in place at the front or back as the case may be; it never gets pulled out or lost then, and the garment will never be destroyed by using pins.

"Your husband wears out the heels of his socks; when getting new ones darn the heels with a single thread of cotton before letting him wear them. This will not show and they will wear much longer.

"Always re-sew the buttons on ready-made garments before wearing them; they are never fastened strongly, and there is seldom a button to match when one comes off."

"I've a drawerful of old shirt waists I have a mind to bring out," hesitated the little housekeeper. "They are not fit to wear, and I've hated to throw them away."

Aunt Priscilla received them eagerly. "Here are two lovely, sheer ones," she said after some study, "where the material has given way under the arms, which will mend beautifully. Place a piece of very thin material under the thin place and then stretch it in your hoops. Now darn back and forth on the right side, with a fine thread, going through both materials; cut away the new cloth at the back close to the darning, and when it has been laundered the mend will hardly be noticeable.

"This pile of waists are worn out in collars and cuffs; cut away the worn portions, finish the sleeve bottoms and the round or square neck you have cut, with odd lengths of lace or embroidery, or even plain muslin bands, and you have pretty and comfortable waists for morning wear, for only a few minutes' work.

"Now these waists are worn too far on the shoulder to be of further use as waists. If you will try them on, however, I will cut them low and cut out the sleeves, leaving just a strap on the shoulder, attach to each one of the nearly worn-out skirts, and

How to Increase the Production of Food During the War

In June, 1915, the Secretary of State for Scotland appointed a committee to consider how the present production of food could be increased.

This committee duly met, and in their report the recommendation that was strongly put forth was:

That BASIC SLAG should be more generally used for the improvement of grass lands

Testimony was borne by many practical witnesses to the **increased numbers and improved quality** of the stock that could be carried after the application of SLAG to old grass and hill pastures, and the Board of Agriculture recommended very strongly

that farmers should greatly increase their use of this fertilizer. They also recommended that application should be made as early as possible in the autumn and winter to get the best results on the following year's pastures.

BASIC SLAG is equally needed on Canadian pastures, and will amply repay the outlay

Send us your name and address, and we will post you our literature, or if you think you could place a car load of 20

tons among your neighbors, our representative will give you a call. Don't delay, as it takes time to get matters arranged.

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

you will have convenient little slips for morning wear."

"You fill me with wonder," sighed the young woman, hastening to remove her dress for the fitting. "I begin to see, now, how I have wasted my good things by wearing them mornings and on every sort of occasion."

"That is true, my dear. And you have also purchased cheap things for morning when you had plenty of articles in the house that could have been mended and would have looked better. This little waist that I've just finished from one of those old ones looks much better than the cheap lawn one you are wearing this morning, and you might have saved—"

"Seventy-five cents," meekly. "Why do you not, also, have for a motto 'A penny saved is a penny earned'?"

Aunt Priscilla laughed. "Let me give you some working rules:

Spend less time in making new garments and more in caring for what you already have.

Have a special mending place, with materials of all kinds convenient.

Mend whenever possible before sending garments to the laundry.

Repair in time.

Watch out for new ideas—I saw a girl the other day who darns places at the top of her fine stockings where she fastens her garters, to prevent the stitches from breaking and 'running' the length of the stocking. This not only saves actual time, but money as well.

"Your linen is still good. But when you notice a thin place appearing, darn it carefully; do not wait for it to wear through. I'll come every week, if you wish, and help you."

"No," said the housekeeping lady, "you have given me a great many ideas and I must work them out myself—I'll know now where to go for help, if I need ideas or assistance. Do go and start some other young person toward becoming an 'N. D.'—American Cookery.

What Bird Life Means to Us

Bird life, meaning the common wild birds with which every country boy is familiar, from the old black crow to the meadow-lark, blackbird, bobolink, and all the rest of the song-birds, is of much more value each year than the biggest railroad system in the country. That may seem to be a pretty broad statement, yet it falls far short of stating the actual facts.

The agricultural department of the United States Government has kept tab on the birds, what they do, what they eat every day in the year, and what their habits are, until now their lives are an open book. This work, done by the biological survey, has brought our some very astonishing things besides natural history, for it has been so thoroughly and so painstakingly done that not only is the list of foods for each bird for the entire year accurately tabulated, but the average bulk amount of each kind of food is known so closely that values in dollars and cents can be reckoned, and thus the actual live value to the nation of each individual bird be easily computed.

For forty years I have made it a part of my daily life to watch and to study all nature, and especially to study our common song-birds. This has given me a great volume of accurate information, so that I have for years had a very good working idea of the value of birds as insect and weed seed destroyers.

It remained for the biological survey, however, to get these things down to scientific accuracy because, where I was only one man, they put hundreds of observers into the field, and thus were able to carry on a system of espionage that covered every State in the Union simultaneously. In addition to this they were able to bring in expert scientific observers and laboratory men whose life-business is the study of bugs, good, bad, and indifferent. This system was organized, and the laboratory men began to examine the crops of birds sent in by hunters from all over the country.

Immediately things began to happen;

certain insects were found (in whole specimens and fragments) in the crops of many birds; certain other insects were found only in the crops of certain birds. Some crops contained only weed seeds of one kind or another; others contained a great mixture of seeds of various weeds, and many others contained both seeds and bugs.

The strangest thing developed by this work was that robins and certain other birds, long accused of being fruit eaters, and therefore detrimental to mankind, were absolutely cleared of the charge because their diet is almost entirely insects with only here and there a cherry! Every robin is entitled to the few cherries he eats because without him there would be no cherries for anybody, for he destroys the insects that destroy cherries, and when he is in cherry tree he is eating more insects than cherries.

Many other supposed-to-be-harmful birds were found to be just as helpful, and there is no guesswork about it now!

The common Bob-White quail, killed all over the country for sport, is worth each year considerably more than his own weight in pure gold because he destroys harmful insects (like the potato bug, chinch-bug, and others) enough to save more than the value of his own weight in gold in crops for the farmer. Remember that each and every quail is worth that for bug destroying alone, to say nothing of the weed seeds he destroys on top of that, so the farmer with a flock of quails on his land should protect them because in doing so he is saving money for himself and the crop supply for all.

If it were not for the common forked-tail swallow we could not raise a cotton crop in the United States, simply because the food of the swallow in its migrations over the cotton belt is the cotton boll weevil, and the bird eats the insect in the moth or egg laying state, so he strikes at the weevil in his weakest spot.

There is not one single wild bird of any species (not even excepting hawks and owls long killed on sight

by everybody) but what is of very great value to man, and every man, woman and child should protect every bird because it means a tremendous crop increase to us all.—Our Dumb Animals.

Ladybugs, the Gardeners' Friend.

The ladybugs, which are familiar to all, are very beneficial insects for the farmer and gardener, and should not under any circumstances be injured. They are all more or less hemispherical in shape, and red or yellow in color with black spots, or black with red, white or yellow spots. When in the larva, or grub state, the ladybug is a curious-looking, soft-bodied, worm-like affair of bright colors, that is more or less well covered with warts or spines. In either the grub or the beetle condition, these insects crawl about over the plants, looking for the plant lice and other soft-bodied insects and insects' eggs, which they devour, apparently, with great relish.

The value of ladybugs to horticulture has been clearly demonstrated on the Pacific coast. At one time the citrus-fruit business was threatened with extinction by the cottony-cushion scale. The introduction of an Australian ladybug, which feeds upon this particular scale, removed this grave source of trouble, for as soon as the ladybugs became numerous the scale was held in check.

In the East, there are several common kinds which are frequently found upon both wild and cultivated plants. They should never be disturbed, for they are almost always on a good mission. One species when in the larva state will eat herbs. You can tell him easily, for he is covered with numerous two-forked spines, and is partial to squash vines.

There is one of these ladybugs which frequently gets into houses and winters there in some secluded corner. In the spring it is found on the walls or windows and, mistaken for the carpet bug, is often killed,—a great mistake.

Weight Versus GAS

To offset the high price of gasoline, the best engineering talent in the world has perfected light-weight steels and scientific body construction. Despite its scarcity, aluminum is largely used. Weight reduction has been accomplished in every part of the car except the top.

All that is needed in a good top is found in



Single Texture Topping

It is guaranteed one year against leakage. No top has a finer appearance, and although light in weight, it has the required strength and is made to last as long as the car.

Specify RAYNTITE Single Texture Topping for your 1917 car or re-top your auto with this guaranteed, light-weight, long service top material.

Ask for free booklet "The Top Question" and samples of Rayntite Topping.

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There is yet time to build your silo this year.

The Premier Perfect Silo Is Worth Investigating



Built of No. 1 Norway Pine, bound with steel cables. It offers the biggest value in the market to-day.

Sold on terms which are attractive and which will interest you. Mail a card to-day for information and terms to Dept. A.

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This ladybug is reddish yellow, and each wing-cover has one black spot on it. The carpet beetle is about the same size—one-seventh of an inch long—and covered with black, white, and brick-red scales. The back has along the sutures, where the wing covers meet, irregular bands of brick-red scales. This is, perhaps, the most distinguishing mark; at least it is the one most likely to be seen by the thrifty housekeeper. J. H. H.

Nagging.

To correct the bad habits of others is often to form a bad habit yourself. A nagging disposition is natural to few; it comes from tired nerves, or from super-sensitiveness, or from a too free indulgence in sharp criticism—which is likely to lead a person into a minute and harassing scrutiny of the life about him. So long as criticism does not react unfavorably either on the critic or on the criticized, it is beneficial; but when it is accompanied by a sense of impatience in the one and of resentment in the other, it becomes nagging, and should be dropped—even if the fault that it justly objects to continues to flourish.

The naggers and the nagged are, as a rule, extremely fond of each other. You are not likely to nag any one that you do not care about. In other words, nagging is primarily a family custom, and is chiefly practised between husbands and wives, parents and children, and brothers and sisters. A certain affectionate intimacy seems to be required for it. Few people nag their servants, even if the corners are seldom dusted and the silver and brasses polished only under protest. The mistress endures such a state of things as best she can, and when she can endure it no longer, she "makes a change." Yet long-suffering mistresses are sometimes nagging wives and mothers—for the reason, no doubt that in their conjugal or maternal pride they are always striving to raise the standard of those that are dear to them. In the same way, a man may nag his wife, but he either tolerates or discharges his office boy.

For each of us there are certain persons whom it seems worth while to take pains with; but we should take pains with them at the right time and in the right tone of voice—in short, when the feeling of affection has sufficiently overcome that of annoyance. If we observe this rule, those who have hitherto been the victims of our nagging may soon cease to compel our forbearance.

How Birds Sleep.

The sleep of most wild creatures, whether birds or animals, is light; there is too much danger round to make sound sleep safe. The authors of "A Game Keeper's Note-Book," who made some very interesting observations on sleeping birds, found out that the perch-roosting birds always sleep head to the wind.

If a rook alights in the home tree in a high wind, he swings his head into the wind before alighting. So when wood-pigeons come home before the wind, they pass over their roosting-trees and then beat up into the wind.

At rest the bird doubles its knees, as it were, which causes the toes to contract, the weight of the body resting chiefly on the breast and out-spread wings—not on the eggs if in a nest. The legs and feet have sinews which work an automatic locking action of the claws, so that, roosting with knees doubled up, the feet grip the branch unfaillingly.

Some birds seem always half-wake. Wild-fowls will scratch a match at night to test the presence or absence of wild duck in a distant creek; if present, an instant quacking will betray them. Pheasants are always vigilant; on the darkest night it is difficult to stalk them, however quietly you move. If you come within a hundred yards of guinea-fowl at night, they will raise an alarm. They excel at talking in their sleep.

But some birds, such as wrens, when cuddling in a hole in the thatch, seem to sleep soundly. And while wild pigeons will fly out at once if a match be struck under their tree, a pigeon-lover in London says that his city birds, roosting on window-ledges, lose

their wariness by night, and will hold their own in the face of a candle while a hand is stretched out to touch their necks.

Partridges seek a sheltered, dry-lying hollow in the fields, and a covey of twenty will huddle on a spot a yard in diameter. The colder the weather the closer they roost; the birds on the edge have their breasts outward. Sometimes, by the way, it is unfortunate for partridges and pheasants that the positions of their nests prevent them flying to and fro. Having to force their way through tangled undergrowth, a trail is left for the fox to follow home. The barn-yard fowl may walk from her nest when in captivity; but when she has stolen her nest abroad, she resumes the habit of flying.

Our Serial Story

The Road of Living Men.

BY WILL LEVINGTON COMFORT.

Author of "Down Among Men," "Fate Knocks at the Door," "Red Fleece," "Routledge Rides Alone," "Midstream," "Child and Country," etc.

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III.

14

The old Master had gathered good men about him—valuable in their particular lines, mechanical and scientific; and mining experts who had been graduated both from technical schools and eldoradoes around the world. The many were illiterate, closer to labor than to management; but among the latter was the little company that Romany had brought from the States—men from the lower walks, but with a domestic ideal and a dream of independence. These had left their women and were working for them—a fact which kept them rather true to themselves. Among the fifty that had gone with Romany were a considerable number of this class, who declared themselves content with the percentage of winnings to date, as estimated by the Chief. I found also that a goodly portion of the undesirables had been asked to go—a valuable bit of Romany foresight.

The women who had come down from Guayaquil were not home-makers. Even if they had been, there was too much of gambler's insecurity in the air. The gold-seekers of Tropicania were drawing more than wages. They had an interest in the final settlement. It takes a certain amount of stamina to support a dream of sizable fortune; rather a test of manhood, this. Romany was naturally fitted, and possessed the hardening of a life training, to cope with the spirits of men inflamed with large earnings, restless dreams and fluent chances. Most of these men were built naturally for routine. The essential indefiniteness of their ultimate fortune in Tropicania and the secrecy of Romany's policy, which perforce was mine,—gave rise in their minds to a suspicion of treachery. I had not the old Master's life-record of a gamester absolutely square, for the eyes of the men down in the river-work.

While subordinate I had many friends. Now I was sure of none, save Huntoon. Chances favored a reasonably good result of my leadership on the general tendency of men to sit tight—until the eight weeks were over. But if anything happened to detain Romany, I felt that I should have on my hands, a war indeed.

The departure of fifty-odd men, without disturbing Orion, at first redounded to the greater glory of the absent leader. It was considered one of his perfect things. The laugh, however, which rippled along the river-bed—that interminable first day of my command—changed to silence with the night. The men were thinking and whispering. There was a way out of the valley which they did not know—and which I knew, and fifty others knew. . . . What was to prevent me or one of the fifty from throwing the secret to Orion? The valley would then become a pen of loot and slaughter. . . . Again, their earnings of months, millions, had gone through some secret passage to the outer world. What was to prevent Romany and even the fifty betraying

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the rest for a monstrous division? Or was it out of the question for the fifty to mutiny, kill Romany, and close the black chapter by turning Orion into the valley, to slay the betrayed? These were thoughts of death and dissolution; and steadily the fear grew in the valley that Orion might rush in by the way the fifty went forth.

And I felt these thoughts gathering about my head. I had come late and brought neither muscle, nor expert knowledge. I was one of Romany's secrets. It was hard for the miners, many of them gold-poisoned; and each night I took the day's yield of yellow—and the men knew no more of it. I watched with an anxious heart for the day that should end my leadership.

Though Romany had conducted his departure in such a way that the Vatican was not at first suspected of containing the secret avenue of egress, it was inevitable that the combined thinking of the whole placer-crew should settle upon this fact. I took Maconachie and a few others into the Vatican shortly after the Chief had gone, to impress the idea that whether it was there or not, the way out certainly was not obvious. I found Maconachie deeply interested in the cistern. The truth is, one would have had to wreck the old structure to learn its secrets.

The fourth or western wall of the ruin was the mountain itself, lined with a thin tissue of stone, in no way corresponding, except in appearance, to the three great outer walls, whose two corners were massive monoliths, and the masonry of which was from two to three feet through. The lower rocks were in many places unmortared, of a size calculable only in tonnage, and fitted to each other so precisely that a pin could not be driven into the jointures.

The interior of the Vatican was absolutely featureless, except for the cistern and the original megalithic monument—a huge undressed slab lying horizontally, and flush with the mountain-wall. This was the altar-stone, the very heart of the Quichuan civilization. Here the olden sacrifice had been made to the sun and fire gods. It had not been brought to the Vatican; the latter was a temple builded around it, ancient when Pizarro came to Peru. There was not a remnant of Christian feature—no niche sacred to the relics. The Vatican was pure pagan.

It was a painstaking manuscript which the old Master left for me on the night he vanished with the fifty.

First of all I read his gossipy monograph on Huayana Capac, the great Incan king, whose ancestral seats were on the shores of Titicaca a thousand years ago; of his favorite son Atahualpa, and the boy's mother, the Princess of Quito; of his legitimate son, Huascar, enraged because the great Empire was given to the favorite. Wars of these two sons and their sons, great flights and expeditions northward, and establishments of empire—it was upon the waning of these aboriginal campaigns that Pizarro and the Spaniards appeared.

The ruins of Tropicania were coeval with the famous ruins of Tiahuanac in Bolivia. The ancient Peruvians were the greatest road-builders; they moved mountains, tongued and grooved great rocks; preserved in every temple a subterranean arcanum for the priests. Every temple-door faced the East. They did not know the use of the arch, and overcame this handicap by making the portals narrower at the lintel than at the threshold. This peculiarity, I found, was as inevitable in the old Incan ruins, as the orientation of the doors.

The monograph went on to state how granite hills were shaped; how steps and tunnels were made; and dealt intimately with tombs, altars, sundials, terraced fields, sunken gardens, fountains. It described the amazing facility with which the rivers were diverted; and how earthquakes and volcanic eccentricities were turned to use and ornament by these mighty men of the rocks—these masters of the Andes.

So I entered the Vatican with awe. The great door was locked behind, and I stood alone before the altar, which had run red with the blood of their fairest sons and daughters. I felt the evil of utilizing the cunning of this ancient people—subverting its strength and skill and mastery to the lust of modern fortune-hunting.

The sunlight came down through the broken superstructure and fell upon the altar-stone. The platform behind, upon which the priests had stood, was a massive stone block, in which three steps of huge size were hewn on either side. From the platform, the altar-rock was waist-high to a man, and was filled with round holes of varied diameters. The document had minutely described this feature, furnishing a chart of the ancient bores. A certain three, marked 3-13-43, in a peculiar system of enumeration, involved the entrance to the secret passage. These were to be filled with water, as nearly as possible at the same time. To fill all, or any other but these three bores, meant failure. The key-pipes were clear in my mind after a moment's study, and the water at hand.

The lining of the mountain-wall was formed from great panels of trachyte, taller than a man, and three feet wide. The rock was dressed, the fittings perfect. In the lower tier, there were twenty panels. Number Seven from the north was the door of the passage. It was absolutely identical with the others in weathering, and in its unbroken edges. So perfect was the inner arrangement, that its use, former and recent, had left not the faintest trace of wear. I put my weight against this panel, and the mountain itself could not have felt more rigid. . . . And now I glanced again at the following paragraph of Romany's writing:

"The big trachyte, Number Seven, is hung on a horizontal bronze pin. Unlocked by a certain exact water pressure, the weight of the hand against the lower part of the panel is sufficient to swing it inward, and the upper half outward. . . . A pint of water is enough for each of the three bores, but they must be filled as nearly as possible at the same time. Mark forty seconds on your watch after pouring, while the water sinks from sight. At the end of this interval the panel will yield to the pressure of the hand for a space of seven or eight seconds, but not longer. No sound is heard from the withdrawing locks. If this exact interval of seven or eight seconds is allowed to elapse, the water-weight passing out from the lock-reservoir will diminish enough for the bolts to spring back to their original position. Or if one presses too soon, the bolts will not have unlocked. Water placed in all the bores will never draw the lock from the back of the panel. Water placed in any one of the bores other than the three will clog the intricate arrangement of the inner passages in the rock—and no result will be obtained."

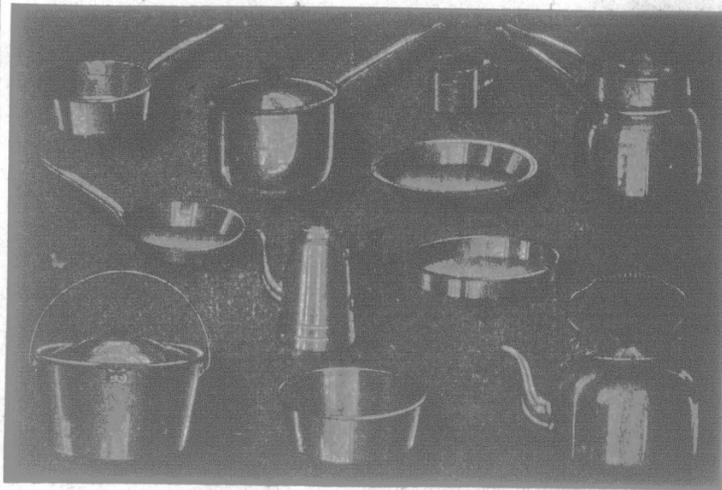
Here her father supplied a long personal note, regarding the manner in which this knowledge had been obtained—an extended and interesting story in itself. The links and clues he had followed showed me more than ever the character of this absorbing adventurer. I recalled the hours he had spent upon this writing. There was a jovial tenderness here and there; delicate approaches to the fine intimacy so hard for men to express afeld, but which we had approached.

He touched upon his solitary labor of many days in the Vatican, after bringing his bridge-builders from the Pass to construct the great iron door. This done, he had undertaken alone to test the mysterious directions in his possession. The chief trouble, he said, was to restrain his own scepticism. He had been forced to clear the bores with compressed air; the bronze pin of the trick panel had been in a bad state of corrosion. Many times he had been on the point of breaking Panel Seven with a charge of powder, but his patience had triumphed over doubt, and the perfection of the original work had prevailed to bring success without this destroying measure. Finally gaining entrance, he had gone over the entire mechanism cleaning and oiling.

At last, when the sun had crept from the altar to the eastern wall, I stood where the ancient priests had bent in "sacred" murder over their victims—a vessel of water in my hand and awe pervading my heart. . . . I poured, waited for the second hand of my watch to mark off the forty seconds—then turned to Panel Seven and rested my knee against the lower part. The great stone swung noiselessly inward. Ample stocked with matches and candles, I glanced behind at the silent deserted interior of the Vatican, and descended the dark stairway.

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Now appeared a vault approximately twenty-five feet square, the floor of which was ten feet below the floor of the Vatican. In the intense silence, I imagined from time to time, the sound of running water. Before permitting the panel to swing back (even though the document assured me of the ease of opening it from the inside) I carefully examined the locking mechanism, and found that the way out was simple as turning a door-knob. In this vault, I was told to store the daily yield of gold from the Calderon; here Romany had kept the fortune which the fifty took away.

The other door, the inner mountain entrance, I was advised not to notice, until such time as necessary. I thought there was a bit of humor in the part of the document having to do with this passage. The locking arrangement of the low stone door was apparent in the candle-light. I tried it sufficiently to find that the door would open; and pictured Romany laughing at my temptation, thoroughly enjoying this Blue-bearing legacy. He refrained from commanding me not to explore the mountain but intimated that it would be wisdom to forego this, except in case of extremity—such as his failure to return, or Orion taking the Pass from Huntoon and driving the men of Tropicania into the Vatican.

I had a greater fear of trouble from my own men, than from Huntoon's inability to hold the outer position.

In the fortnight following the departure of the Chief, there came no letters from Mary Romany, although mail had reached us from the States. I remember taking the gold into the Vatican at the close of a miserable day, in which I had felt the temper of the men on the river, as well as the loneliness of a letter-less man.

It had been growing upon me from the first, that Romany had made an imprudent choice; that I didn't belong to this post; that to rule well in such a capacity, I needed the years and reputation of the old Master of promoters; or, without these, required more of the very hardness which Mary Romany had wished the Year to eliminate.

There had been little time for extended walks to the blocked gorge; and so I had taken the evening calls to the Vatican to concentrate upon the sweet realities, compared to which this existence in the midst of suspicion and gold-tension, was a sort of nether-world galvanized by under-men, creatures condemned to certain endless material ordeals. . . . And this night, the day's gold safely cached, I sat thinking long in the unbroken black, by the curbing of the cistern, until the stress of the work to do at Headquarters drew me back. An hour had passed. Supper had been utterly forgotten, and more important matters. Hastily letting myself out of the great iron door, and clanking it closed, I discovered the full night, and the row of lights by the river, with Dole's bar a garnet stud in the centre. A figure lifted from the shadow down by the picket-line, and lightly over the evening air with the scent of forage and trampled turf, came a voice I loved among men: "Hai—Rivers of Babylon—"

15

Huntoon at the Pass—had made possible this utter surprise for me. Yuan had hoped to come this way. He had parted from Jane Forbes at Shanghai, about the same time I reached Tropicania—slightly less than a month after I had left the pair on the deck of the Doric in San Francisco harbor, eight months ago. The woman had gone up the Yellow River to establish her mission for little Chinese girls. Yuan had seen her once since—ten weeks ago—for a day and evening. The Mission was prospering.

Listening, I served him with my own hands. I had forgotten the valley. We had walked from the picket-line arm in arm—his two servants behind us. I had broken the leads from a packet of choice tea he had given me in China, and heated the kettle and the pot, brought the cups and spoons; fresh fruits from Libertad; olives and butter and bacon from the glass; bread fresh from the valley ovens. Romany had never been without a bit of real wine.

I have forgotten remotely what Macnachie came in for. There were two or three other calls at Headquarters that night—I hardly remembered until after-

ward. Huntoon said he would join us in the morning. So I waited upon Yuan Kang Su, deeply absorbed and delighted. Everything was ready before I remembered that I had not supped; this made it all the happier. Dan-with-the-gout, an old serving-man of Romany's, who had taken care of my solitary table since the Chief's departure, glared with astonishment.

"Come," said I at last, "we'll walk out together down by the river. Everything is here for your boys. Dan will take care of them."

"Would you mind," Yuan suggested, "if we sat by, until they had their supper?"

I minded nothing, but I noted that they regarded the nobleman gratefully, as we made ourselves comfortable in the doorway of Headquarters. And so his story went on. It is the Oriental way between friends, to provide each other, after extended absence, with a more or less coherent and chronological account of the interval. I had begged him to speak first.

They had not called him to trial at once upon his reaching Peking. He was sent to Ostraso, a valuable tea island, to head off the encroachments of the foreigners, and remained four months. With a depreciatory smile, he told me that his work there had been called brilliant, and that within a fortnight after his return to Peking, he had received a decoration. Shan Wo Kai was present at the Capital.

"I found it was to fight for me that he had come," Yuan said. "Those close to the Throne in China make it a point never to forget. Thomas—"

I laughed at the same queer expression on his lips, as he uttered the name.

"Thomas, you must take these things that I have to say, with the cool understanding of a friend—not with the heated inspiration of the apostle of romance, I know so well. What is done is done. I have come to you—a long, long way—to be with you this night, because you are my friend. A man's real friend makes the thought of growing old a pleasure. I ask you not to try to change anything that has been done. Of course, that is impossible, but it would pain me for you to try. A bird beating and maiming itself in a cage would be the same—"

I felt again, as on that day we had walked together in Washington—that his life was over, that the rest was not work, nor love, but empty waiting.

"Tell me, Yuan."

"In coming, I had to make myself believe you would accept the inevitable, as I do. This hour has been worth the coming, and we shall have our talk of two friends. I shall be very happy—if you grant me this thing—"

"What is this thing?"

"That you shall not fall into rage nor misery at what you hear; that you seek not to mend nor rend. . . . Do this for me, Thomas—"

"I will do it."

"Thank you," he said. Glancing at the table, he saw that his companions had finished supper, and added: "Now we shall walk together."

The two Chinese followed us out, walking behind at a discreet distance. Their presence was a restless and altogether peculiar irritation for me. I avoided the settlement, and we reached the river path at a point beyond the last of the shacks.

"Shan Wo Kai did not tell me that he was fighting my battle," Yuan was saying. "Back in the Forbidden City after Ostraso, they made me believe that I was a Daniel in the Imperial Court. Our friend the Ambassador, in speaking of my work on the tea island, said that I had imbibed American and European precepts and practices, and without calling them good or evil, declared that since China was sorely menaced by the younger Powers, young men of my knowledge were necessary to show China the way to compete and combat. He foresaw and depicted the dismemberment of the old meditative Mother-land, if she did not arise and deal with the quicker-witted and quicker-handed peoples according to the latter's methods."

"I wish you had been there," Yuan said reflectively. "I think our friend would have been glad to have you there. He was at his best, and a very strong man. The Empire's old men were present—those close to the Throne—many statesmen the world has never heard of. Shan Wo Kai deplored the necessity of naval and military evolution, but pointed below to India, drained—and above to Japan, keyed with modern national spirit and eager for a trial of war. Between these China must choose her future."

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"You will wonder what these things, so obvious to you, have to do with me. In pointing the way China must go in this youngest born of Eternity," my friend declared he was painting the dreams of service of Yuan Kang Su. I saw that his influence was intense, and that he was exciting the conservatives, who would shortly rise against him like a plague of hornets. Moreover, I knew that the old Throne-Mother was relentlessly against the New; that the doctrines of the younger men bristled with menaces for her eyes. Then I was asked to speak, and you will smile at me, Thomas, for I told them that China needed men; that China must liberate her women to raise men—"

He laughed softly.
"Then I went out of the assembly. From a distance I saw at last our friend Shan Wo Kai rushing forth—his hands to his ears. The hornets had come, Thomas. And that night they brought me a little box containing my decoration. I opened it and thrust it into my breast. There was a fountain near, and I drank a cup of cold water. Looking up, I saw these two—" He turned to the shadowy figures behind. "They have been with me since that day."

My brain did not exactly fathom the truth. I asked questions, but Yuan's fingers for a second closed upon my wrist. He wanted to tell the story in his own fashion.

"I was ordered away on a long journey," he resumed, "but my country gave me three months in which to prepare; and first, I went up the River to say good-by to those dearest of hands under the bright sun—"

Even in the stress I recognized the last phrase. It was a nursery idiom of the Chinese which he had translated literally.

"We walked the roads you know, Thomas—and across the river among the gardens. That is where the real Mission is to be and my father's house shall be her house; her children, even the little Ellen, shall have the rose gardens and the old house-servants. For I have no brothers, and my father is very old. I think the queer little mother will like that very well. It will be hard for China to understand. China will ask for years to come—'Where is the race of Kang Su that used to be on the Bluffs across the river from Liu chuan?' And the strangers shall see little girls running to and fro with unbroken feet, among the rose gardens and a woman of your country in the doorway of the ancestral house. If they ask her, she will answer, 'This is his house, but Yuan Kang Su went away upon a long journey. He wanted to change his country in the swift and furious way that the accident changes, so they sent him away.'"

Had Yuan spoken these words in his own tongue, there would have been a stately rhythm to the telling which I cannot give. There was no moon. We heard the booming of the impassable gorge nearer and nearer, and the lights were farther behind, but the two companions did not change their distance.

"Sometimes she walked beside me with her eyes upon the ground. The rocks were filled with heat, Thomas; the hills held fast to the heat that day. Once a child called; her pale face lifted and she hastened toward the voice—running, in her thin gray dress. I can see her now in this darkness, and the sound of the water here is like the sound of the water there. . . . All that day her face grew whiter and whiter. She did not inquire about the long journey I was to take for my country—until the night. But once she turned and saw my two friends, and asked why they had followed us all day. I told her that when China wishes to use a man, she provides against his encountering accidents.

"And then, as the night drew on, I saw she was beginning to understand—that her soul was thinking the truth and that it was weird and terrible. She said that she was not lonely nor miserable when she knew I was at work; when she could follow my journeys and know that I was doing my best, and thinking about our lives together. Her face was lined and haggard with her soul's tumult—that face with the child's purity upon the brow and the woman's power of the eyes and lips. It made me suddenly impotent. A wild dream came to me—not to take the long journey—to take her away instead; but when she saw how I was breaking, her strength came back. She is the God-touched woman.

"So we had tea together, and I started down the river. And the woman said, 'You

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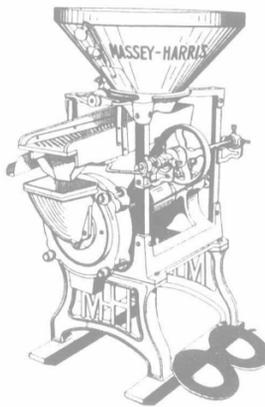
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do not mean to come back, but it will all be well with us.' I answered: 'It will all be well,' and my boat and my friends were waiting. You see, I had to hurry, or I could not have gone, for she was dearer to me than China.

"So I went first to my father; and then to the woman who was waiting, and now I have come to my friend. It has taken ten weeks from Liu chuan, for I had to wait for steamers everywhere. And this is the night of the eighty-ninth day, since I drank the cup of cold water at the fountain—"

"And you begin the longer journey tomorrow?" I asked, remembering the promise.

"Yes."

"And these two friends will not go with you?"

"No. They turn back to Peking."

"And so they gave you the silver cord, Yuan—that was your decoration?"

"Yes."

"So that is the answer of the China you served and loved, with the best of your brain and heart?"

"You see, I was not exactly true."

"No, you saved a few friends from being murdered, and you came to love a woman. I spoke of China more wisely than I knew that night in Washington—"

"China will be born again."

"And so this is the answer of China—the answer Shan Wo Kai did not give me that night?"

"Shan Wo Kai fought for me."

"Yes," said I. "He is a good man with a vile mistress. Forgive me this once, for I do not speak in haste, Yuan. She whom you call Throne-Mother, and those whom you call Conservatives—are a sick and nasty stench upon the modern world—"

"But they are dying."

"They have taken my friend."

A third time Yuan asked me to go back to the placer. The day was rising. I had never seen such a day's beginning. An ethereal mist was in the air. The valley-bed was like the bottom of a sea of heavenly vapors. A transparent electric blue had flooded in between the ranges. Over the eastern heights the sun appeared like the tip of a flamingo plume.

I told him again I knew a door that would shut him from China forever, I would have carried him to the Vatican and laughed at the two as the panel shut between.

"You do not understand," he said. "They are my friends. They would die for me. I could have murdered them a score of times as they slept beside me. They know Yuan Kang Su. What care we for China, you and I? The young men will know of this. It will gird their loins. You will go back to the Mission with your Lady and carry my love to the woman there. Why, Thomas, we are friends, and what have we to do with China, who know such women? Now go, for the day is rising—and it does not belong to me. I do not want it. I am finished. You would not stay—"

I was tiring him, and he had been so calm and forbearing.

I saw his face now in the sky-blue air. It did not seem that he had met suffering. The boy was still upon his brow. I felt old China about me—garroting me. I had wrestled for hours. I was making him suffer. I took his hand. I saw that he had swallowed something. One of the Chinese brought him water, making a cup of his two hands.

"It will be fairer to me and to you—if you go now quickly, and turn not back," he said, holding to my shoulder. "We have met and lived, my friend. We shall meet and live again."

And I did not turn back.

I have told it very ill, but I could not repeat my words that would show how I fought for his life against the promise—knowing how vain those words were. Moreover, it was like a fever that came to me, at the end of that night begun so joyously; and the wrestlings of fever are mercifully shadowed by memory. I was sitting in the doorway of Headquarters when the Two returned and greeted me. They would have gone without breaking their fast, had I suffered them. They had loved him. I sent an escort with them to the Pass. At the end of the day I was at the place where we sat through the night, and where I had left him. There was no sign, except that the great condor sailed across and across—nearer the valley-earth than ever before.

*The silver cord is tendered only to nobility. The honored recipient must slay himself within three months, or be assassinated, a necessity for the latter course being considered dishonorable.

To be continued.

Crops from East to West.

A special press bulletin issued September 5 by the Census and Statistics' Office reports on the condition of field crops in Canada at the end of August, as summarized from telegrams received from the Dominion Experimental Farms and Stations, in accordance with arrangements made between the Departments of Trade and Commerce and Agriculture.

Prince Edward Island.—All grain, except wheat, which has suffered from blight and insects, will yield above average; roots, potatoes and vegetables most promising; fruit a light crop.

Nova Scotia.—Grain ripening rapidly and promising a good yield; hay gathered in excellent condition. At Kentville, roots suffered from dry weather; corn unusually good; at Amherst, roots and corn have made fair growth.

New Brunswick.—August, with more heat and less rain than usual, has been very favorable for crops; oats partly harvested promise well; hay much above average; potatoes unfavorably affected by heat will not give average yield; roots growing well and corn the best crop for years.

Quebec.—Drought has caused premature ripening of grain and reduction of yield; roots, too, have suffered and potatoes are poor; at Rimouski, rains have benefited potatoes and vegetables, and the hay crop is the best in years.

Eastern Ontario.—A heavy crop of hay has been gathered, and in some parts there were two cuttings. Roots have suffered from lack of rain. Grain is nearly all ripe, and is threshing out a light crop owing to drought; pastures are poor from the same cause; and potatoes are likely to be a poor crop.

Prairie Provinces, Manitoba.—From Brandon it is reported that the Manitoba wheat crop is about half the normal yield and practically all low grades; oats and barley are an average crop. Cutting is practically completed and threshing has begun. Fodder corn is a good crop; there is no injury from frost.

Saskatchewan.—The weather during August has been unfavorable for grain, and damage to wheat by rust is reported from Indian Head, Maple Creek, Gull Lake, Eston, Prelate, Rosthern and Scott, reducing the yield and grade. Frost is reported from points in the Moosejaw, Saskatoon and Battleford districts. Threshing is beginning in the first week of September. At Scott, in the Battleford district, the harvest was delayed by cool weather and cutting has only just commenced, hailstorms did much injury early in the month. Late crops of wheat in low land were badly frozen on the 11th. Yields of wheat, what has escaped frost and rust, will do satisfactorily.

Alberta, Munson.—Cutting not general until first week in September. Some wheat crops show effects of frost on August 10. Carmangay, crops good if they can be secured before frost, hoed crops looking fine, but are later than last year. Lethbridge, harvest over a week later than last year. Cutting general; no damage to wheat from frost, no appreciable damage from rust. Lacombe, three degrees of frost, August 10, damaged much grain over an area of 150 square miles. Certain localities immune, harvesting of barley is general and wheat cutting has begun. A further ten days of good weather required to render safe crops that are so far uninjured.

British Columbia, Agassiz.—An exceptionally bright, fine month is reported, with excellent weather for grain harvest and for making a record crop of hay. Corn prospects have improved, and mangold crops are growing exceptionally well. Invermere, weather conditions favorable for grain harvest and second cuttings of clover and alfalfa; corn backward; pulse crops good. Summerland, weather hot and dry, nearly all grain harvested, hay harvested in good condition, apple crop equal to last year and very good in quality. Sidney: Weather continues dry, grains harvested, threshing commenced and yield good of autumn grain and peas, second crop of red clover and third crop of alfalfa harvested; corn and chard growing well, orchard crops ripening and promise well.



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Questions and Answers. Miscellaneous.

Yeast Treatment for Barrenness.

I have a cow about 9 years old but cannot get her to breed again. She comes around regularly every three weeks. We have opened her up and changed sires but all of no avail. Can you give any remedy? She is a pure-bred cow.

F. L.

Ans.—The yeast treatment has given results in many cases. Mix an ordinary two-cent cake of yeast to a paste with a little warm water and allow to stand for 12 hours in a moderately warm place. Stir in one pint of freshly boiled, lukewarm water and again allow it to stand from 8 to 12 hours. Mixture then will be ready for use and the entire quantity should be injected into the vagina of animals to be bred. Use the mixture when period of heat is first detected and breed when period is about ended.

Sowing Sweet Clover.

In bulletin No. 235 issued by the Department of Agriculture it speaks of threshing sweet clover with a grain thresher. If this crop grows to a height of 6 to 8 feet how can an ordinary thresher handle it? Will it not be so bulky as to bother the blower? How can an ordinary binder elevate and successfully tie such tall stuff? Will the elevating canvases not have a tendency to carry stalks around with them and eventually become fast?

2. Will sweet clover sown in August produce seed the following year? 3. Can sod be successfully seeded with it?

F. H. W.

Ans.—1. Only in extraordinary cases will the crop attain the height mentioned. Five feet is more nearly the average height. A grain binder can cut, elevate and tie this length of crop quite easily, as the back of most binders is open and the knotted can be shifted to tie very nearly the center of a long sheaf. If the packers can get hold of the straw there will be little trouble with the elevating canvases giving trouble. It may be necessary to feed the thresher rather slowly, but the sweet clover stalks will break up and give no trouble in the blower.

2. It would be risky sowing in August. Spring seeding is preferable. 3. Yes.

Advertisement for Briscoe automobiles. Features a central illustration of a vintage car with passengers. Text includes: 'Briscoe The Car with the Half Million Dollar Motor', 'MADE IN CANADA', 'Four 24 \$825', 'Eight-38 \$1185', 'Four-38 \$975', 'The Half Million Dollar Motor at Toronto Exhibition', and 'The Canadian Briscoe Motor Co. Limited, Brockville, Ont.' The ad also describes the car's features like the 105-inch wheel base and floating type rear axle.

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Sealed Tenders, addressed to the Postmaster General, will be received at Ottawa until noon, on Friday, the 22nd of September, 1916, for the conveyance of His Majesty's Mails, on a proposed Contract for four years, six times per week, over London No. 7 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 London and London West, and at the office of the Post Office Inspector, London.

Post Office Department, Canada, Mail Service Branch, Ottawa, 11th August, 1916. G. C. Anderson, Superintendent.

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A. H. CROZIER,
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Farm Training for Soldiers

In England.

Canadians are looking with considerable hope to the arrangements, made and making, to establish ex-soldiers as farmers.

First in order of importance, of course, must be the Dominion Government's plan. This, as the Prime Minister assured Sir Rider Haggard the other day, "Will be satisfactory to all those who have at heart the great purpose." For its details we must wait till Parliament meets.

Then there is the scheme embodied in the British Columbia "Soldiers' Homestead Act." This includes a free grant of land, and a loan of money for improvements to each soldier settler, with exemption from all except school taxes, and five years' exemption from seizure for debt.

There is also the scheme of the Canadian Pacific Railway,—a development of the ready-made farm system, the Company devoting millions of dollars to this enterprise.

Most of the schemes proposed are for able-bodied men; and for general farm work an able body is as necessary as an able mind. But some forms of work on the land can be hopefully undertaken even by men more or less disabled.

The Government, through its Military Hospitals Commission, is already giving the men, at some of the convalescent institutions, instruction in gardening and poultry-raising; and a good deal of progress may be expected along these lines.

Canadians are therefore keenly interested in watching the similar experiments now being carried on in the Old Country.

In England, the first experiment in the program of training disabled soldiers for work on the land, started eight months ago at the Cheshire County Council's Agricultural College, and the result so far is regarded as most promising.

Some of the men have either lived in the country or worked on the land before, while others are town-bred; but all alike have shown considerable aptitude. They have been disabled in various ways. Two, for instance, have lost an arm each, and one a hand; but all three have shown themselves perfectly competent to do good work. In every case the country life, and work in the open air, have been of benefit to them.

The main endeavor has been to make the men good, all-round farmers. Some of them will be able to manage small farms of their own; others have obtained or are obtaining sufficient practical knowledge to assist in gardening, dairy-work, or poultry-raising. All spend much more time in actual work than in attending class room lectures; but they are learning a little botany and chemistry, and enough veterinary surgery for simple purposes. Some of the men have already been placed in good situations.

One of the most urgent requirements of our own country is that our returning soldiers shall be encouraged and assisted in every practicable way to seize the opportunities offered them for such training; and this will be available not only at the Convalescent Hospitals where a beginning can be made, but afterwards at the agricultural schools and colleges which have offered to instruct men, disabled from returning to their previous occupation.

The Government, as our readers will remember, makes special money allowances for the maintenance of the men and their families while this instruction is being taken.

In Canada.

From cities as far apart as Victoria and Quebec come reports of an interesting development in the training of our disabled soldiers.

Variety, of course, is always aimed at in their training by the Military Hospitals Commission; what one man is fit for, another is not. That is true even among able-bodied men. It is much more true among the disabled; for they are disabled in all sorts of different ways. A large number

"Golden Opinions"

"I have won golden opinions from all sorts of people."—MACBETH

The Mutual Life of Canada has just published a booklet of "Golden Opinions" contributed by the policyholders and beneficiaries of the Company—the third of this series.

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Price \$1.00 per bottle. Sold by druggists, or sent by us express prepaid. Write for Booklet E.
The LAWRENCE-WILLIAMS COMPANY, Toronto, Can.

of subjects are taught, so that every man, whatever his trouble may be, can pick out the trade or occupation offering him the best assurance of success.

One healthy, out-door occupation, fit for men who cannot do general farm work, is poultry-keeping. It is interesting to notice, therefore, that at Savard Park, Quebec, the men at the convalescent hospital have started an incubator; while 100 young birds are being fattened for the market by different methods. A group of the men have been on an excursion to the Dominion Government's Experimental Station at Cap Rouge, where they spent a day in the poultry department.

At the Esquimalt Hospital, Victoria, a Poultryman's Club has been organized and is making very satisfactory progress. At the same place rabbit-raising has been undertaken, and a correspondent describes "three men busy erecting a house under the direction of a fourth, who is so badly paralyzed that he cannot work. They reckon it pays to keep rabbits, and I am sure they are right."

Bee-keeping also is being taken up at Victoria; and there is talk of homing pigeons also to appear on the scene.

Questions and Answers.

Veterinary.

Mammitis—Fatality in Foals.

1. Cow calved July 30th. As her udder was very full I milked her before calving. Since calving her milk has not been fit for use. It will not pass through a strainer. The swelling has subsided, but there are some hard lumps. I had her tested with tuberculin and she passed all right.

2. I have a Clydesdale mare that I have bred to Clydesdale stallions. The foals were all large but unable to stand when born. The first one lived, but the next five died. I then bred her to a Percheron stallion and the foal lived. I then again bred her to a Clydesdale and the colt died. In all cases the bowels and kidneys acted normally.

Ans.—1. These lumps are indurated portions of the udder. Bathe the udder frequently with hot water, and after bathing rub well with hot, camphorated oil, and milk her at least four times daily until the milk becomes normal. When the inflammation has subsided and the milk has become normal, treat to reduce the lumps, but do not be greatly disappointed if the treatment is not entirely successful. Get an ointment made of 2 drams each of iodine and iodide of potassium, mixed with 2 oz. vaseline, and rub a little well into each lump once daily. Also give her 1 dram of iodide of potassium twice daily.

2. There is no reason why the foals by a Clydesdale should die and those by a Percheron live. All that we can recommend is to see that the sire is in good health and vigorous when the mare is bred. Then, during the whole period of gestation keep her in only moderate condition, and give her regular light work or exercise. Keep this up until the foal is born, and then give her a few months' rest.

The name of the City of Berlin, Ont., has been officially changed to "Kitchener."

A feature of the Exhibition at Toronto, particularly interesting at the present time, is a log bungalow showing the agricultural products of Northern Ontario.

Fifty lives were lost in a great hurricane that swept the British West Indies Island, Dominica, on August 28.

One thousand Chinamen have arrived in France to work in the munitions factories.

New England Training.—"Now," said a Boston school teacher to his class in English, "can anyone give me a word ending in 'ous,' meaning full of, as 'dangerous,' full of danger, and 'hazardous,' full of hazard?" For a moment there was a dead silence. Then a small boy raised his hand. "Well," queried the teacher, "what is your word?" Then came the reply, "Pious," full of pie!"

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"Puslinch Plains" at Arkell, C.P.R. Station, 3 miles from Guelph.

The New Home of the Auld Herd
The Land of the Big Bees

FIELD MARSHALL = 100215 = the calf of 1915, sold June 7, 1916, for \$3,775.

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Shorthorns

Pure Scotch and Scotch topped—Booth. Also five (5) young bulls from ten to twenty months old, of the low down, thick kind, good colors—reds and roans. Prices reasonable.

G. E. MORDEN & SON, Oakville, Ont.

IRVINEDALE SCOTCH SHORTHORNS

Offering this year in Scotch Shorthorns is probably the best we have offered for many years; there are several young bulls of serviceable age, right good ones and breeding the very best; also females of any age.

JOHN WATT & SON,

ELORA, R.M.D.

Choice Breeding

SCOTCH SHORTHORNS

High Quality

We are offering this fall the choicest lot of young herd headers we ever bred, several are of serviceable age, high in quality, rich in breeding. Also a number of heifers.

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Grand Valley Sta.

Maple Grange Shorthorns

Pure Scotch and Scotch-topped—Breeding unsurpassed.

R. J. DOYLE,

Owen Sound, Ontario

OAKLAND—52 SHORTHORNS

For Sale. 52 Shorthorns for sale, 40 females and 12 bulls of the dual-purpose strains. 1 choice red bull, near two years old; also our stock bull Scotch Grey = 72692 = one of the best aged roan bulls in Ontario. Used in herd for 7 years.

JOHN ELDER & SONS,

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Pleasant Valley Shorthorns

Special Offering, Sittyton Favorite, one of the best individuals and stock bulls we know of. Also young bulls and females bred to (imp.) Loyal Scot and Sittyton Favorite. Write your wants. We can suit you in merit, breeding and price.

GEO. AMOS & SONS,

Moffat, Ont.

Moffat, 11 miles east of Guelph, C.P.R.

Robert Miller Still Pays the Freight—And he is offering in Shorthorns some of the best young bulls and heifers that can be produced. Young bulls fit for service, some younger still; heifers ready to breed and younger, and some in calf. They are of the best Scotch families and some of them from great milking families. They are in good condition and made right, just what you want to make a proper foundation for a good herd, and suitable to improve any herd in the land. They will be priced so that you can afford to buy, if you will tell me what you want. Our business has been established 79 years, and still it grows. There is a reason.

ROBERT MILLER, Stouffville, Ont.

Females - SHORTHORNS - Females

I can supply females of the most popular Scotch families, Crimson Flowers, Minas, Lady Fannys, Nonpareils, Butterflays, Amines, Athas, Miss Ramsdens, Marr Emmas, Marr Missies and Clarets. A few bulls. A. J. HOWDEN, COLUMBUS, ONT. Myrtle, C.P.R. and G.T.R.; Oshawa, C.N.R.

Shorthorns and Shropshires T. L. Mercer, Markdale, Ont.

With 125 head to select from, we can supply young cows in calf, heifers from calves up and young bulls from 9 to 18 months of age, richly bred and well fleshed. In Shropshires we have a large number of ram and ewe lambs, by a Toronto 1st prize ram; high-class lot.

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Stops Bleeding at once.
Removes all Inflammation.
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will clean it off without laying the horse up. No blister, no hair gone. Concentrated—only a few drops required at an application. \$2 per bottle delivered. Describe your case for special instructions and Book \$ K free. **ABSORBINE, JR.**, antiseptic salient for mankind. Reduces Painful Swellings, Enlarged Glands, Colic, Wens, Bruises, Varicose Veins, Farcinities, Old Sores, Allays Pain. Price \$1 and \$2 a bottle at drugists or delivered. Manufactured only by **W. F. YOUNG, P.D.F. 258 Lyman's Bldg., Montreal, Can.**

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ALLOWAY LODGE STOCK FARM

Angus, Southdowns, Collies

Special this month

Southdown Prize Rams

ROBT. McEWEN, R.R.4, London, Ont.

BEAVER HILL ABERDEEN-ANGUS CATTLE AND OXFORD DOWN SHEEP Bulls from seven to nineteen months old. Females all ages Shearling ewes, ewe and ram lambs.

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

Glenfoyle Shorthorns

Large selections in females all ages, bred from the best dual-purpose families. One extra choice fifteen-months bull, some younger ones coming on. Priced well worth the money.

Stewart M. Graham, Lindsay, Ont.

Shorthorns Bulls, females, reds, roans, size, quality. Breeding milkers over 40 years. Cows milking 50 lbs. a day. Big, fleshy cows that will nurse calves right. Prices easy, write:

THOS. GRAHAM, R. R. 3, Port Perry, Ont.

Maple Leaf Shorthorns, Shropshires and Berkshires. Some choice young bulls; also a few heifers and cows due to calve soon. Some extra good rams, 10 choice shearling ewes, extra good lambs by Nock 16 (Imp.). A number of extra good Berkshire sows. **John Baker, R. R. No. 1, Hampton, Ont.**

Northlynd R.O.P. Shorthorns and Jerseys Present offering: One Shorthorn bull old enough for service, whose dam, his dam's full sister and his grandam in six yearly tests made an average of over 8,500 lbs. milk, testing over 4% in an average of 329 days. **G. A. Jackson, Downsview, Ont.**

Burnfoot Stock Farm—Breeders of high record, dual-purpose Shorthorns with a splendid conformation for beef. Visitors welcome.

S. A. MOORE, Prop, Caledonia, Ont.

Shorthorns "Pail Fillers"—Our Shorthorns are bred and developed for big milk production. If you want a stock bull bred that way we have several; also Clyde, stallion rising 1, won 2nd at Guelph the other day in a big class. **P. Christie & Son, Manchester, Ont.**

Shorthorns and Swine. Have some choice young bulls for sale; also cows and heifers of show material, some with calves at foot. Also choice Yorkshire sows.

ANDREW GROFF R.R. NO 1, ELORA ONT.

Rainy-day Ruminations.

The hired man handed me one the other day which is too good to keep. He was a new homesteader from Eastern Canada, and we had been conversing about the country from time to time. I had been telling him about the toughness of the root-bound prairie sod with its saskatoons, willows, rose briars and poplar, not to mention the close-knit turf formed by the native grasses. I had assured him that though the dry, cool weather of May prevented the rapid top growth of grain and grass which he was accustomed to in the East, yet, the roots were developing ready to shoot the plants ahead when the June rains came. When, later, about the first of June, an unseasonable frost flattened out the stools, I was again ready with the comforting reflection that the roots were still there developed to a stage where they could soon make up for lost time.

"I think," he replied, quizzically, "this must be a great country for roots."

I am a farmer and proud of it, but it does tempt a feeling of shame sometimes at the narrowness and superstition exhibited by a minority of the class to which we belong. It seems as though superstitions are rather more prevalent among rural than among urban peoples. Many connect it with weather and crops. About a year ago a few weeks of dry weather had threatened to shorten crops of timothy and cereals. A neighbor came over to borrow a mower, remarking that his timothy was all burning up, and he was going to cut it at once. He scoffed the suggestion that rain might come soon. "There'll be no rain here till the war's over," he declared. "The cannonading is bringing all the moisture down over in Europe." That afternoon it rained, and from then on we had, as delightful a season of warm showery weather as one could wish to experience, and the finest harvest in the history of Grande Prairie.

This year it really did begin to look something very near a crop failure on all except well-prepared summer-fallow or breaking. During the three months of April, May and June barely three-quarters of an inch of rainfall was registered by our official gauge, and farther east on Grande Prairie I understand there was not a single shower of any account since seeding. The situation became serious, conservative minded men expressed the fear that possibly this might prove to be our first season of crop failure. A couple of new settlers were discussing the case the other day and wondering whether there was much in these June rains they had heard so much about. Irony of ignorance. On the morning of July 3 it commenced to rain, a light misty sprinkle from a broken sky. "Rain before seven quit before seven" was the confident prediction of one of them and he started away in his shirt sleeves for the cow. He returned wet to the skin. The drizzle grew into a drench, pouring through sod roofs and straw stacks and every other shelter not absolutely water tight. Over three inches have fallen up to the moment of this writing on the 4th, and it appears doubtful whether the downpour is half over yet. The cannonading in Europe must have ceased.

For two years we let spring and summer freshets pour down the "draws" and then hauled water for the stock or drove them to it. This year we have taken a leaf from the book of several neighbors and scraped out a pond in a natural hollow near the barn, using the earth moved to raise the water level all the higher by damming the "draw" just below the excavation. It is nearly full now, and I only wish it were 12 feet deep instead of four. A number of similar ponds in the vicinity supplied water nearly all through the severe cold of last winter for considerable herds of stock. We shall deepen ours at the first opportunity. Fencing was all that prevented us making it deeper when we were at it.

Surprises are the eternal order of the day in agriculture and all its

Get Rid of Worms!

Many animals, especially hogs, are troubled with worms. When your hogs are unthrifty, you hear a little cough now and then, suspect worms.

Dr. Hess Stock Tonic

Keeps Hogs Healthy Expels Worms

So sure am I that Dr. Hess Stock Tonic will keep your hogs healthy and expel the worms, that I have authorized my dealer in your town to supply you with enough Tonic for your hogs and, if it does not do all I claim, just return the empty packages and get your money back.

My Stock Tonic is not a feed, but a true conditioner and tonic, highly concentrated, which contains blood purifiers, laxatives and drugs which are powerful worm expellers. Feed in small quantities, watch your hogs improve.

NEVER PEDDLED. SOLD ONLY BY DEALERS.
25,000 reliable dealers in U. S. handle it. Why pay the peddler twice my price?

25-lb. pail, \$2.25; 100-lb. Sack, \$7.00

(duty paid). Valuable stock book mailed free, if you write for it.
DR. HESS & CLARK, Ashland, Ohio

Dr. Hess Poultry Pan-a-c-a conditions fowls, makes hens lay and is a great help at moulting time. Valuable for chicks, for pullets starting to lay and for all grown fowls. Costs a penny for 20 fowls per day. 1 1/2 lbs., 35c; 5 lbs., 85c; 12 lbs., \$1.75; 25-lb. pail, \$2.50 (duty paid). Guaranteed.

Dr. Hess Instant Louse Killer A reliable lice killer, very quick acting. For use on poultry and stock. Use by dusting and sprinkling. Destroys bugs on cucumber vines, cabbage worms, slugs on roses, in handy sifting-top cans. 1 lb., 35c; 3 lbs., 85c (duty paid). Guaranteed.



Write Dr. Hess about any sick animal or live stock trouble, enclosing 2c stamp. He will advise you free.

Escana Farm Shorthorns

FOR SALE; Two imported bulls, proven valuable sires; 12 bulls, 10 to 20 months old all by imp. sires and from high-class dams; also for sale, 20 heifers and young cows, several with calves at foot, all of very choicest breeding, and especially suitable for foundation purposes. Mail orders a specialty. Satisfaction guaranteed.

MITCHELL BROS. Burlington, P.O., Ont.
Jos. McCrudden, Manager. Farm 1/4 mile from Burlington Jct.

Spruce Glen Shorthorns

When in want of Shorthorns visit our herd. We have 70 head to select from. Minas, Fames, Miss Ramsden, breeding age—level, thick, mellow fellows and bred just right.

James McPherson & Sons, Dundalk, Ont.

Spring Valley Shorthorns

Herd headed by the two great breeding bulls, New ton Ringleader (imp.) 73783, and Nonpareil Ramsden 83422. Can supply a few of either sex.

Kyle Bros., Drumbo, Ont. Phone and telegraph, via Ayr.

Canada's Grand Champion Shorthorns of 1914-1915

are headed by the great "Gainford Marquis" Imp. Write your wants.

J. A. WATT, ELORA, ONT., G.T.R. & C.P.R.

GLENGOW SHORTHORNS AND COTSWOLDS
Pure Scotch in breeding, we have an exceptionally choice lot of bulls for this season's trade, ranging in age from 8 to 15 months, big mellow fellows and bred in the purple. Also ram and ewe lambs of first quality.
Wm. Smith & Son, Columbus, Ont. Myrtle, C.P.R., Brooklin, G.T.R., Oshawa, C.N.R.

Scotch Shorthorns, Yorkshires, and Oxford Downs
Our Shorthorns are of the most noted Scotch families and the Scotch (imp.) bulls, Joy of Morning (imp.) = 32070 =, Benachie (imp.) = 69954 =, and Royal Bruce (imp.) = 80283 = have been used in succession. Two choice bulls of breeding age and heifers for sale. Also sheep and swine.
Erin Station, C. P. R. L.-D. Phone Geo. D. Fletcher, Erin, R. R. 1

Imported Shorthorns Our recent importation of thirty head has arrived at our farms. We have imported cows with calves at foot, imported heifers that are in calf, imported yearling meet trains at Burlington Jct. at any time, if notified.
J. A. & H. M. PETTIT, FREEMAN, ONTARIO

DUMFRIES FARM HOLSTEINS

Think this over—we have 175 head of Holsteins, 50 cows milking, 25 heifers due to calve in the fall, and 60 heifers from calves up to 2 years, as well as a dozen yearling bulls, and anything you may select is for sale. Breeding and individuality the very best. **S. G. & Erle Kitchen, St. George, Ont.**

branches. I set out this spring some apple trees, currants, raspberries and a variety of ornamental shrubs received from Ottawa for experiment under special arrangement. At the same time we transplanted some wild raspberries and native saskatoons, which latter are so hardy they can scarcely be killed. A small piece of root remaining in the breaking will send up fresh shoots whenever it gets the chance. I naturally expected that of all we set out these would make the promptest start. Not so. The currants came on first, every plant doing well. The apple trees and ornamentals followed suit and most of these survived the long shipment and subsequent ordeal of cold drying winds. The wild raspberries were next in promptness and vigor of foliage, while the domestic raspberries and the saskatoons were tardiest of all. Indeed I began to be a little dubious about the former when at last I observed most of them springing up from the roots, the original stems having apparently died, notwithstanding that they had been well pruned back, as were all the other trees and bushes. I did not despair of the saskatoons, but they certainly took their own time about showing signs of life. When at last they did so it was after the manner of the tame rasps (the wild rasps had put out foliage and blossoms from the canes). Now why were the raspberries the slowest of all the domestic fruits in developing foliage, and the saskatoons, transplanted under exceptionally favorable conditions, slowest of all?

What little evidence we have encourages the expectation that many of our native fruits—saskatoons, wild raspberries, wild currants, wild gooseberries and probably strawberries—would thrive much better and produce a larger quantity and superior sample of fruit if transplanted into gardens and suitably cultivated. In the wild state they suffer in most seasons from lack of moisture. Native strawberries growing in thick turf seldom fruit to any important extent, but where a few plants have come up on breaking they do far better. One of our enterprising neighbors set out a short row—a couple of rods, perhaps—of wild raspberries in his garden, and last summer picked a nice quantity of delicious fruit. Guarantee by cultivation a liberal supply of moisture and plant food and deliver the bushes from competition with grass and it is reasonable to anticipate a delightful reward. I intend to extend my plantings of wild as well as of domestic varieties. Why not?

Speaking of weather, we possess a climate peculiar unto itself so far as signs are concerned. Perhaps proximity to the mountains is the cause, but at any rate its vagaries utterly confound the weather-wise of other regions. It is liable to be most cloudy in drouth and to rain from practically a clear sky. The only thing we can count on is the unexpected and we are not always sure of that. "PLOWBOY."
Grande Prairie, Alta.

Questions and Answers.
Miscellaneous.

Use of Ram—Cutting Clover.
1. What is the usual fee for the use of a ram when you take ewes in, and how long should I keep them?
2. Do you think it does this year's seeding of clover any harm to run the mower over it to cut the ragweed, and when should it be done?
H. H. L.
Ans.—1. For pure-breds generally \$1. Some charge 50 cents for pure bred ram on grade ewes. Keep them six weeks or a little over.
2. If done at all, cut at once and set the mower as high as possible. We would be afraid it would weaken the plants.

On September 1st the Duke of Connaught relaid the corner-stone of the Parliament Buildings, first laid by his brother, King Edward, then Prince of Wales, on September 1st, 1860.

King Segis Pontiac Paul 15940
WE have for sale a few sons of the above bull, ready for service, and whose dams are large, heavy-producing cows. Here is an opportunity to get the blood of KING SEGIS and KING OF THE PONTIACS at reasonable prices. Correspondence solicited.
Also Berkshire and Yorkshire Swine
Larkin Farms Queenston, Ontario

HOLSTEIN CATTLE

The only herd in America that has two sires in service whose dams average 119 lbs. milk a day and over 35 lbs. butter a week. Cows that will give 100 lbs. milk a day are what we are trying to breed. At present we have more of them than any other herd in Canada. We can supply foundation stock of this breeding. Visitors always welcome. Long-distance Phone.

D. C. FLATT & SON, R. R. 2, HAMILTON, ONT.

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

Hospital for Insane, Hamilton, Ontario—Holstein bulls only for sale, four fit for service, one being a son of Lakeview Dutchland Lestrage, and the others from one of the best grandsons of Pontiac Korndyke, and large producing, high testing R. of P. cows.
APPLY TO SUPERINTENDENT

1 YEARLING BULL
Bull calves from 10 months down. Could spare 10 cows or heifers, bred to the great bull, KING SEGIS PONTIAC DUPLICATE.
R. M. HOLTBY, Port Perry, Ont.

Walnut Grove Holsteins

Herd headed by May Echo Champion, full brother of May Echo Sylvia, who made 36 lbs. butter in seven days. Females for sale from one year old upwards. Prices right for quick sale.

C.R. JAMES, Langstaff P. O., Ontario
Phone Thornhill

Bulls, Bulls We have several young Holstein bulls for sale, just ready for service. Sired by the great bull, King Segis Pontiac Duplicate, and our junior herd bull, Pontiac Hengerveld Pietertje, and from high-testing dams. Prices low for the quality. Write and get them. Manchester, G.T.R., and Myrtle, C.P.R. stations. Bell Phone.
R. W. Walker & Sons, R.R.4, Port Perry, Ont.

Please mention "The Advocate."

Big Dinners

The bigger the family the greater the need for this new Coal Range with the Handy-height oven. There is an almost unbelievable number of trips to the oven while a big dinner is under way. That is what makes the work so tiring. Constant stooping does so weary the back.

And here, to lighten that work is the Lighter Day—the Coal Range with a Handy-height Oven.

A big capacity oven with a Clearview door of glass. You lift the dishes in and out of this oven without bending your back. You watch things baking without opening the door—and without stooping. The thermometer is at standing height too. Everything is contrived to take the last ache out of baking.

And for big dinners! The number of things that can be cooked quickly and kept hot on the Lighter Day Coal Range would astound you.

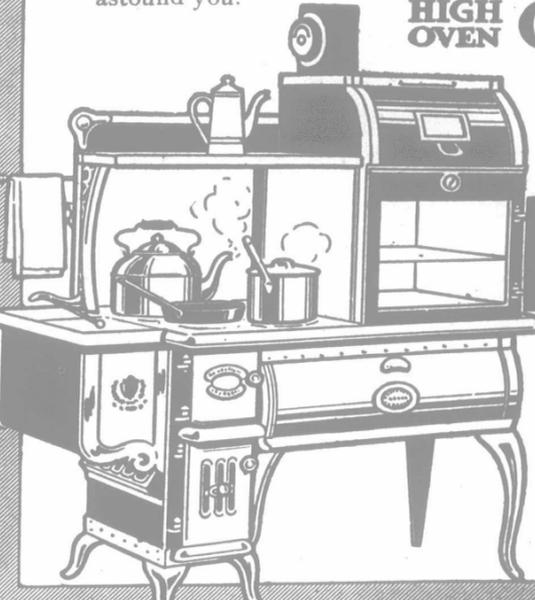
There must be three times the usual warming space. The warming closet over the oven is heated like an auxiliary oven. Below the oven is a large storage closet often used for stowing away pots and pans. This is a famous warming closet when there is a big crowd to cook for. Besides this unusual warming space there is a shelf over the cooking top where plates and dishes may be warmed and kept in readiness for serving.

There are six pot-holes. Four of these are placed in the wide cooking top. Two are fully enclosed to shut in odors of cooking. There need never be an odor of cooking vegetables in the house.

And when dinner is over there is an abundant supply of water on hand to wash up. The reservoir is very large and is kept at boiling heat.

Where there are many mouths to feed there should be a Lighter Day in the Kitchen. Anyone who would like to know more about this wonderful range should have a copy of our booklet "A Lighter Day in the Kitchen." This is a book made from photos of a housewife actually using the Lighter Day Range. A copy will be sent without charge to anyone using this coupon.

CLARE BROS. & CO. LIMITED
PRESTON, ONT.



LIGHTER DAY HIGH OVEN COAL RANGE

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COTSWOLDS
ills for this season's
bred in the purple.
R., Oshawa, C.N.R.

Downs
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s with calves at foot.
imported yearling
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EMAN, ONTARIO
NS
o calve in the fall,
anything you may
a, St. George, Ont'



The Deacon SHIRT

Cut roomy, yet trim—of flannels, drills, tweeds and serges that are soft, yet substantial—made with turned, felled and double-stitched seams, collars in all the popular styles, and half or full-length sleeves. DEACON Shirts look well, feel good, and wear better. Every shirt guaranteed—your money back for any defect in material or workmanship. At good stores.

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Advancing markets, together with our twenty years' experience, should interest you. We invite your inquiry for particulars.

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or stuttering overcome positively. Our natural methods permanently restore natural speech. Graduate pupils everywhere. Write for free advice and literature.

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BERLIN, CANADA

Glencairn Ayrshires Herd established 40 years. Producing ability from 8,600 to 11,022 lbs. If that sort of production appeals to you, we have heifers all ages and young bulls for sale. Thos. J. McCormick, Rockton Ont., Copetown, Sta. G.T.R.

Questions and Answers. Veterinary.

Infectious Ophthalmia—Difficult Breathing.

1. Cows have sore eyes. They run water, and then a white scum forms and causes temporary blindness and they get better. Others are still blind in one eye.

2. Horse had distemper last spring. He got better and we worked him all spring. About the middle of June he commenced to breathe heavily. I have had three veterinarians examine him. Two of them did not know what was wrong, and the third said the trouble is in his nostrils and he is not likely to recover.

Ans.—1. This is infectious ophthalmia. Isolate the diseased cows and keep them in partially darkened stalls. Give each 1 lb. Epsom salts and 1 oz. ginger. Get a lotion made of 10 grams sulphate of zinc, 20 drops fluid extract of belladonna and 2 oz. distilled water. Bathe the eyes well three times daily with hot water, and after bathing put a few drops of the lotion into each until they clear up.

2. The veterinarians who have examined the horse are in a much better position to diagnose than I. It is probable the third one is correct, and the trouble is a growth, called a polypus, in the nostril. In some cases this can be removed by an operation.

Diarrhoea in Young Pigs.

A month ago my sow farrowed 8 smart, healthy pigs. When ten days old one took diarrhoea and died in a few days. Three others also died from the same trouble. I then took the others from the sow and fed on cow's milk, but in a few days two of them took the same trouble and died. Besides these I have a litter five months old, six of which appear to have diarrhoea and one has died. In some the diarrhoea has ceased and they are constipated. Their feed consists of 2/3 oats, 1/3 barley and a little buckwheat.

Ans.—In our issue of July 27th last, you will notice an article on this subject. The original trouble is either infection, or an altered condition of the sow's milk. When the pigs were taken from the dam and given cow's milk it should have been diluted with warm water 1 part to 3 parts milk, and a tablespoonful of sugar added to each pint. If those remaining are not too weak give each about a teaspoonful of castor oil, and in 8 or 10 hours make a mixture of one part formalin and four-fifths new milk, to each part of milk or water given add a teaspoonful of the mixture, and about 1/4 of its bulk of lime water. To those suffering from constipation give sufficient castor oil (1 to 2 tablespoonfuls) to act gently on the bowels, and then give sufficient of equal parts of Epsom salts and sulphur in feed daily to keep the bowels normal. Feed on milk as above, middlings and chopped oats with the hulls sifted out, omit the barley and buckwheat. If the trouble be infectious you may have to dispose of the whole herd and thoroughly disinfect the farrowing pens and other premises before introducing fresh stock.

Miscellaneous.

Alsike Seeding.

I have a field prepared for wheat but it is rather low, so if I sow alsike on it, alone this fall, would I reap a crop of seed next summer?

Ans.—It is too late to sow alsike this fall. Better sow with spring grain and seed down to alsike next spring unless you can get the wheat in.

Sun Spurge.

I am enclosing plant for identification. Have some of it in potato patch. Please let me know through "The Farmer's Advocate" name, habits, etc.

Ans.—The weed is sun spurge an annual plant which is a common weed in gardens and waste places. It is most troublesome in light sandy soils. Seeds are frequently found in commercial seeds. It gives little trouble in land worked under short rotation of crops. Keep late plants from seeding this autumn.

"Production and Thrift"

You Dairymen of Canada! The Department of Agriculture, in its War Book, "Production and Thrift," asks you to "do your bit" in the great struggle by increasing production. The shortage of labor has made this hard to accomplish. Yet the problem can be solved by labor-saving devices. Take milking: One man can milk and strip 30 cows per hour with a Sharples Milker. If you have 15 cows or more, it will pay you to get a



SHARPLES MILKER

The patented "Upward Squeeze" keeps the teats perfectly healthy—Nature's own way. Valuable cows can be safely milked—hardest milkers respond readily. Breed makes no difference. Over 300,000 cows milked twice daily by the Sharples is abundant proof of satisfactory service. Milk flows through rubber tubes to sealed silver buckets, so no pollution is possible from stable air, stable dust or hands. That makes cleaner milk and higher prices. Anybody can operate it. Practically every part is non-corrosive—built to last. Send for free booklet: "Dairying for Dollars Without Drudgery"—full of hard-headed facts.



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PIONEER FARM HOLSTEIN HERD

Of long-distance record makers, the kind that milk heavy and test around 4 per cent. the whole year. Of the six highest butter-fat-record two-year-olds in Canadian R.O.P., one half were bred at Pioneer Farm. Young bulls for sale from dams of the same breeding as these and sired by Canary Hartog, whose 3 nearest dams average 30 lbs. butter in 7 days and 108 lbs. milk in one day. WALBURN RIVERS, R. R. No. 5, INGERSOLL, ONT. Phone 343L, Ingersoll Independent

Evergreen Stock Farm Registered Holsteins. The kind that tests 4% and wins in the show ring. Could spare a few yearling heifers, or if you want a choice young bull, eight months old, we have one that is strictly a gilt-edge individual, almost as much white as black. The records of his dam, sire's dam and grandsire's dam average over 30 lbs. butter in 7 days and nearly 100 lbs. of milk per day. For quick sale we have priced him within your reach—\$150. A. E. HULET, BELL PHONE NORWICH, ONTARIO

Clover Bar Holsteins A splendid 14-mos.-old son of Minnie Paladin Wayne, who has just completed a record of 26.87 lbs. butter, 545 lbs. milk in 7 days. Her 2-year-old record was 22.33 lbs. For type and color he is second to none. Also her 3-weeks-old bull calf and a few others from good R.O.M. dams. PETER SMITH, R. R. No. 3, STRATFORD, ONT.

FAIRVIEW HOLSTEINS

Anything in herd for sale which consists of 22 cows, 6 two-year-old heifers bred to freshen this fall and early winter, nine yearling heifers bred to grandsons of the great King Segis, and nine heifer calves. All bred in the purple and priced right. Fred Abbott, R. R. No. 1, Mossley, Ont.

GLADDEN HILL AYRSHIRES

Herd headed by Fairview Milkman. Some choice bull calves for sale, from dams with good records, and a few females. Agincourt, Ontario LAURIE BROS.



Glenhurst Ayrshires For 50 years I have been breeding the great Flos tribe of Ayrshires, dozens of them have been 60-lb. cows; I have lots of them get 60 lbs. a day on twice a day milking. Young bulls, 1 to 10 months of age, females all ages. If this kind of production appeals to you, write me. James Benning, Williamstown, Ont.

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, Ont.

CANADA'S MOST BEAUTIFUL JERSEY HERD The entire herd, not a few selections of the best, will be exhibited at the Western Fair, London, in September, and lovers of the Jersey are asked to note its uniform high quality. Some young bulls, ready for service, for sale, from register of merit dams, also young cows and heifers. Particulars gladly furnished. We work our show cows and show our work cows. The Woodview Farm Jerseys, London, Ont. Jno. Pringle, Proprietor.

Oxford and Hampshire Down Sheep

Farnham Farm The oldest established flock in America Having quit the show ring we hold nothing back. Our present offering is a number of superior yearling and two-shear rams for flock headers, a carload of yearling range rams, a hundred first-class yearling ewes; also a fine lot of ram and ewe lambs of 1916. ALL REGISTERED HENRY ARKELL & SON, ROUTE 2, PRICE REASONABLE GUELPH, ONTARIO

English Live-stock and Agricultural Notes.

EDITOR "THE FARMER'S ADVOCATE":

Sheep are making great prices in Britain. Whatever class of animal the farmer has to offer, provided it is at all suited to its particular purpose, he is assured of a good market. Breeding stock, if not so dear relatively as grazing or fat, have made good money at all the southern sales. Hampshire Down, ram lambs at Blandford fetched up to 95 guineas (let) and 60 guineas (sold), and at Ipswich a Suffolk ram lamb brought 140 guineas from a Scottish buyer, and others made 120 guineas and 84 guineas. Longwools also are in demand, as was shown at Exeter and Taunton, where Devon Longwool rams made up to 23½ guineas. At Oxford Ram Fair the Duke of Marlborough bought one of the Messrs. Hobb's Oxford Down ram lambs for 72 guineas, and Hampshire Down ram lambs made up to 40 guineas.

At Manor House, Leconfield, near Beverley, in the sale of the Leconfield Lincoln longwool, shearing rams, the amount realized for ninety shearlings sold was 1,595 guineas, giving the excellent average of a little over £18 12s. per ram. Highest price paid was 54 guineas, by Geo. Morris, Kirmington, who obtained a grand ram by Riby Quality 2nd, after spirited competition. This was closely followed by W. Jackson, North Dale, who paid 51 guineas for another fine animal by Horkstow Champion. Ewes met with purchasers at an average price of nearly £5 each.

In Britford Sheep Fair James Flower's sixty-three ram lambs were keenly competed for. Mrs. Jervoise hired No. 1 at 180 guineas, Squarey (for Major Morrison) No. 2 at 220 guineas, Bishop (for J. G. Williams) No. 3 at 60 guineas, Thorold (for Sir George Cooper) No. 4 at 100 guineas, and A. E. Blackwell No. 5 at 100 guineas, making an average of £138 12s. Others were sold up to 100 guineas. The average for the sixty-three lambs let and sold was £31 14s. 6d.—a record letting and a record sale.

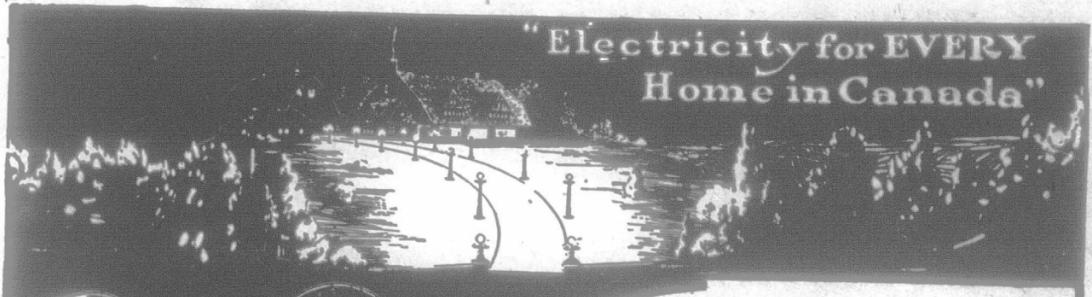
At Newmarket sale of Suffolk sheep, ninety shearlings from Fred. M. L. Slater, Weston Colville, averaged £6 0s. 6d., top price being £6 15s. The ram lambs sold up to 60 guineas and 51 guineas, these being the top prices of the day. These figures were obtained by R. Burrell, Westley, whose consignment of a dozen averaged £24 8s. 3d. The next best average was £26 17s. 7d. for five from Sir Ernest Cassel.

At Northampton, ewes from the Stowe-Nine-Churches flock of Oxford Down sheep belonging to George Roberts, sold well. For ewes (sold in pens of five) top price was £7 15s., given by W. P. Horsley. The highest figure for the yearling ewes was £10, paid in two cases.

In Cumberland and the Border district best classes of half-bred ewes are making from 60s. to 66s. each, crosses from 48s. to 64s. each, and Cheviot hill sheep from 44s. to 51s. 6d. each. These prices are generally from 6s. to 8s. each in advance of those of last year. In Cheshire ewes are 9s. to 11s. more expensive than they were last year.

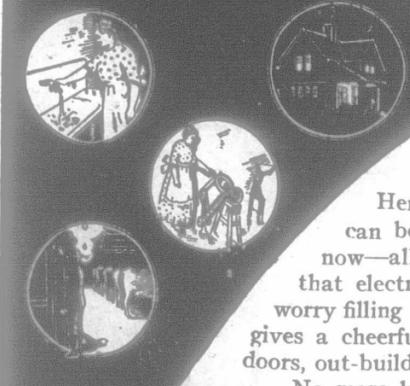
The result of the sale of the flocks of Oxford Down sheep bred by the late S. W. Jefferys at Black Burton, Scotland, indicates the present spirited state of the sheep trade. The average price for 412 of all ages was £7 1s. 1d., highest ever obtained for a flock of the breed. The weighty downs of Oxfordshire and neighboring counties are maintaining their progress in their native territory as well as in the Scottish Lowlands. The British South Africa Company has made its third shipment this season of pure-bred cattle to its farms in Rhodesia. The consignment consisted of twenty Hereford heifers and two bulls, and twelve Shorthorn heifers and two bulls from well-known herds.

The Buluwayo 1,000-guinea trophy offered for the best bull of any breed by the Buluwayo Agricultural Society at their annual show has been won this year (for the second time in succession) by Mr. Drummond Forbes with his roan bull Lomond, which is by



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Here at last—a complete, efficient, isolated electric plant that can be installed in any farm. You, too, can have electric light now—all the convenience, all the brilliance, all the cheerfulness that electricity gives to the home in the city. No more fuss and worry filling and cleaning those smoky smelly oil lamps. Delco-Light gives a cheerful, brilliant light everywhere on the farm. House, outdoors, out-buildings—one flood of brilliant light at the turning of a switch. No more handling of those dangerous coal-oil lanterns.



Takes the Drudgery out of Housework.

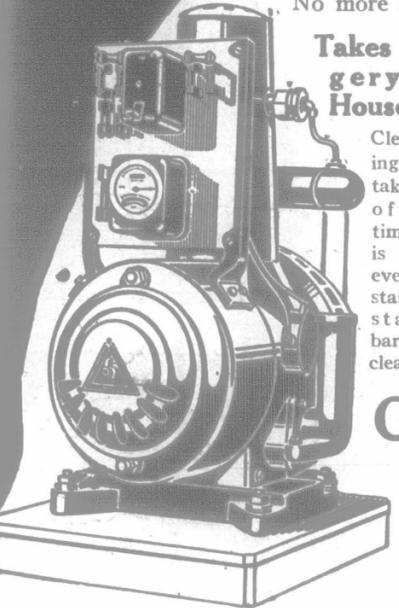
Cleaning and filling coal-oil lamps takes up too much of your wife's time. Delco-Light is convenient everywhere—upstairs and downstairs, in the barn, etc. Light is clean—no smoke.

Power From Delco-Light

Though Delco-Light runs on low-voltage system for safety, it develops power enough to drive small machines. Think of the labor saved when Delco-Light pumps water into the house. Think how your wife's work will be lightened with Delco-Light—cream separator, churn, washing-machine, all run by electric power.

Complete—Easy to Run

Delco-Light is a complete isolated electric plant—thoroughly reliable, thoroughly efficient. It combines in one compact unit gas engine, dynamo for generating current specially designed storage batteries, and switchboard. The low voltage system—32 volts—saves battery expense. Yet it is powerful enough to supply all the lights required and power for small machinery. Gasoline engine is air cooled—no danger of freezing no matter where located. Self-starting—a switch sets it in motion. Automatically cuts off when batteries are fully charged. Sealed glass jar batteries specially designed for Delco-Light. No danger—absolutely trouble-proof—a child can operate it. Engine only need be run once or twice a week. Write for full illustrated folder.



Cost So Small!!

Delco-Light is the first completely reliable and efficient isolated electric plant. Supplies current sufficient for all the lights required. Yet the cost is small, averaging less than five cents a day. No trouble to operate—a child can do it. First cost alone is worth while to make your life on the farm easier, brighter, more pleasant. Delco-Light comes complete—gas engine, dynamo, switchboard, and batteries fully charged. Price..... **\$375**

Delco-Light was developed by the same company making the world-famous Delco starting, lighting and ignition plants for automobiles.

Behind Delco-Light lies the great ideal of "Electricity for EVERY Home in Canada." Never was ideal so big, so sure of attainment. For the Delco-Light plant is efficient. So too is the big organization selling Delco-Light—all enthusiastic about the success of Delco-Light.

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OXFORDS

in Canada. Look up our show record, it will give you an idea of the kind of Oxfords we have for sale.

PETER ARKELL & SONS, Proprietors, Teeswater, Ont.
Customers, beware of imitations of this advertisement.

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PRESENT OFFERING:
100 Imported Shearling Ewes 75 Canadian-bred Shearling Rams JOHN MILLER, Ashburn, Ont.
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75 Canadian-bred Shearling Ewes 5 Bulls of serviceable age

Maple Shade Shropshires A number of splendid ram lambs, fit for service this fall. Sired by one of the best imported rams that we ever owned, and from imported dams. Prices and description on application.
W. A. DRYDEN, Maple Shade Farm, Brooklin, Ont. Brooklin, G.T.R., C.N.R., Myrtle, C.P.R.

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Champion Oxford flock of Canada. Choice Oxfords of all ages for sale. Prices reasonable.
E. Barbour & Sons R.R. 2, Hillsburg, Ont.
LINDEN We are offering a number of Shearling Oxfords, Ram Lambs, Shearling Ewes and Ewe Lambs of first-class quality, foundation of flock imported by R.J. Hind, Joseph Mountain, R.R. No. 5, St. Mary's, Ont.

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Healthy—hardest milkers cows milked service. Milk production is superior milk and art is non-corollars Without

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4% and wins in the rs, or if you want dual, almost as much over 30 lbs. butter in your reach—\$150. RICH, ONTARIO

adin Wayne, who has r, 545 lbs. milk in 7 For type and color I R.O.M. dams. TRATFORD, ONT.

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ES with good records, gincourt, Ontario

breeding the great ens of them have ay milking. Young tion appeals to you, own, Ont.

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air, London, in Sepyoung bulls, ready Particulars gladly

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er of superior year-hundred first-class

REASONABLE PH, ONTARIO

**September - October
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These are the months in which Bricks should be hauled for use next Spring. Otherwise you will have to haul through the bad roads of early Spring.

**Interprovincial
Pressed Brick**

is a smooth, hard surfaced facing brick and is the kind to haul for first class work. Made of extra heavy shale, which ensures durability. Interprovincial Brick offers many pleasing shades in natural colors.

Write to-day for set of samples. We pay all charges.

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GOODYEAR BLDG., TORONTO, ONT. 21

LIVINGSTON BRAND

The purest and best

OIL CAKE MEAL

THE DOMINION LINSEED OIL CO., Ltd.
Manufacturers, Baden, Ont.

For Sale, Several

YOUNG SOWS

Pedigree Tamworths

Herolds Farms, Beamsville, Ont.

Alderley Edge Yorkshires

Young pigs both sexes for sale.
J. R. KENNEDY, Knowlton, Que.

TAMWORTHS

Young sows bred for September farrow, and some nice young boars. Write:

JOHN W. TODD, R.R. No. 1, Corinth, Ont.

Meadow Brook Yorkshires—Sows bred, others ready to breed; 20 sows, 3 to 4 months old, and a few choice young boars. All bred from prizewinning stock. Also one Shorthorn bull, 18 months old.
G. W. MINERS, R.R. 3, Exeter, Ont.

Duroc Jersey Swine A few choice sows bred, both sexes, all ages, bred from imported stock. Heading herd: Farough's King—2012—, Brookwater, B.A.B.'s. King 5042 from U.S. Importer and breeder: Charles Farough, Maldstone R.R. No. 1, Ont.

ELMFIELD YORKSHIRES Choice ones—ranging from 2½ to 5 months. Will be ready for full service. Prices right.
G. B. MUMA, R.R. 3, Ayr, Ont. Paris, G.T.R. Ayr, C. P. R., Telephone 55 R. 2, Ayr Rural.

Sunnyside Chester Whites and Dorsets. In Chester Whites we have both sexes, any age, bred from our champions of many years. In Dorsets we have ram and ewe lambs by our Toronto and Ottawa champion, and out of Toronto, London, and Guelph winners. W. E. Wright & Son, Glanworth, Ont.

Pine Grove Yorkshires. Bred from prize-winning stock of England and Canada. Have a choice lot of young pigs of both sexes, pairs not akin, to offer at reasonable prices. Guaranteed satisfaction.
Joseph Featherston & Son, Streetsville, Ont.

Swine for Sale—Am offering choice stock in Poland-China and Chester White swine of either sex; most any age. First-prize Poland-China herd London and Toronto, 1915. Prices easy.
GEO. G. GOULD R.R. 4, Essex, Ont.

Townline Tamworths We can supply worths of both sexes and any desired age of superior quality. Also Leicester ram and ewe lambs, Pekin ducks, Langshan cockerels and pullets. Write us your wants. T. Readman & Son, Streetsville, Ont. R.M.D.

Duroc Jerseys For 13 years our breeding stock has been choice selections from the champion herds of the U.S. We have both sexes, all ages, over 100 to select from. Bred from champions. L. A. Pardo & Sons, R. R. 1, Charing Cross, Ont.

CLEARVIEW CHESTER WHITES For many years my herd has won the highest honors at Toronto, London, Ottawa and Guelph. For sale are both sexes of any desired age, bred from winners and champions.
D. DeCoursey, R. R. No. 5, Mitchell, Ont.

Lakeview Yorkshires—If you want a stock boar of the greatest strain of the breed (Cinderella), bred from prizewinners for generations back, write me. Young pigs of all ages.
JOHN DUCK, Port Credit, Ontario

Morrison Tamworths and Shorthorns—Bred from the prize-winning herds of England. Tamworths, both sexes. 12 young boars fit for service, 12 young sows to farrow in August. Choice Shorthorns of the deep-milking strain.
CHAS. CURRIE, Morrison, Ont.

an imported bull out of a South African-bred Shorthorn cow.

The cereal crops on some of the farms on Lord Derby's estate at Burscough, near Ormskirk, were sold on the ground, and high prices were realized. In one case the average for wheat and oats was close to £14 an acre.

Recently a party of English Holstein breeders toured among the Scottish herds of this breed of cattle, taking advantage of the Cradlehall sale at Inverness to see what some of the breeders in the north are doing. The first dispersion in Scotland of pure Holstein-Friesian cattle took place at Cradlehall, Inverness. The herd, founded 30 years ago, belonged to D. McBean. The majority of the cattle were bought by English breeders of this noted milking stock. Sixty-one cows, calves, and heifers averaged £77 15s. 4d., the total amount realized being £4,743 18s. The average realized is £20 above the record. The top price was 180 guineas, given by Messrs. Wallace, for a five-year-old cow, while her six-weeks-old heifer calf made 85 guineas., to Messrs. A. & J. Brown. A five-year-old cow and a two-year-old heifer made 140 guineas each.

There has been the reappearance of Dutch cheese on the counters of most London provision shops, and at a price decidedly lower than when it was last seen there four or five months ago. Germany, meanwhile, had been absorbing for its army the great bulk of this product; but difficulties of various kinds have arisen, and a steady stream of Edam and Gouda cheese, and especially the former, has again set in towards this country. The Germans are so much annoyed that, not content with threatening the Dutch with fearsome penalties if they assist to feed the English, they have prohibited the import of fish from Holland into Belgium, which would create a virtual monopoly of the Dutch fish market by Germany. Rotterdam is protesting vigorously, and meantime the cheese is coming here.
ALBION.

**Questions and Answers.
Miscellaneous.**

Scirrhus Cords.

We have a pair of four-year-old Clydesdale geldings that were castrated when yearlings. Where the wounds healed up there was an enlargement in the scrotums. Now, on one side of each horse there is an enlargement as large as in an entire.

R. McC.

Ans.—This condition is one of the untoward results of castration that occasionally occurs. It is called "Scirrhus Cord." Treatment consists in a second operation, more difficult than the first. Some horses go through life with a scirrhus cord which does not interfere with their usefulness. In other cases the growth becomes so large it is necessary to get a veterinarian to operate.

Winding Up Estate.

1. A and B are executors to an estate of which A. is an heir. C. offers them \$200 for a horse. A says you can have him and B says you can't. Now, can A sell the horse in spite of B, as it is all the horse is worth?

2. When one of the executors proves unreasonably stupid and stubborn, can the estate in any way dispense with him?

3. What percentage can each executor claim?

4. Can a lawyer make any exorbitant charges he wishes, or is he restricted to a percentage? The charges are \$450 in this case on about \$4,500.
Ontario. READER.

Ans.—1. Yes.

2. Yes, but not without his consent. It is a matter for arrangement between the beneficiaries, and the other executor on the one hand and the executor in question on the other.

3. There is no legally fixed percentage. He is entitled to reasonable remuneration for services rendered and his care, pains and trouble generally in the winding up of the estate.

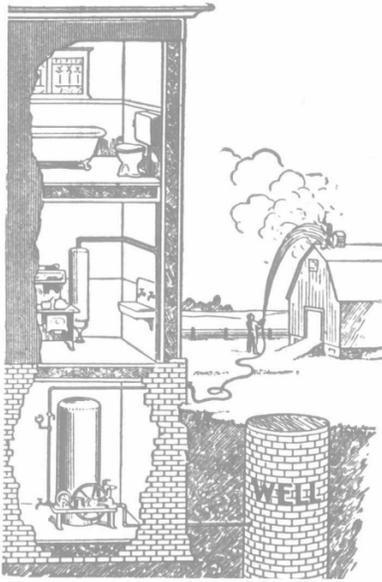
4. Neither; he should have his proper professional fees for the work he has done.

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A strictly modern hot and cold water system for your home and farm

No matter where you live, we can send you an Empire Outfit that will not only give your home a modern bathroom with all fittings, but will provide running water for all other farm needs as well. To-day is the day to find out how an

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can be adapted to your particular requirements. Wouldn't you like to have hot and cold water always ready in the kitchen? Wouldn't you like running water in the barn and out-buildings, water at good pressure for fire protection, water to lighten farm work? It is easier and cheaper to get than you think. The Empire Outfit, including all piping, is sent complete, ready to set up. Do away with the disease-breeding outdoor cesspool and the hard water-lugging methods.

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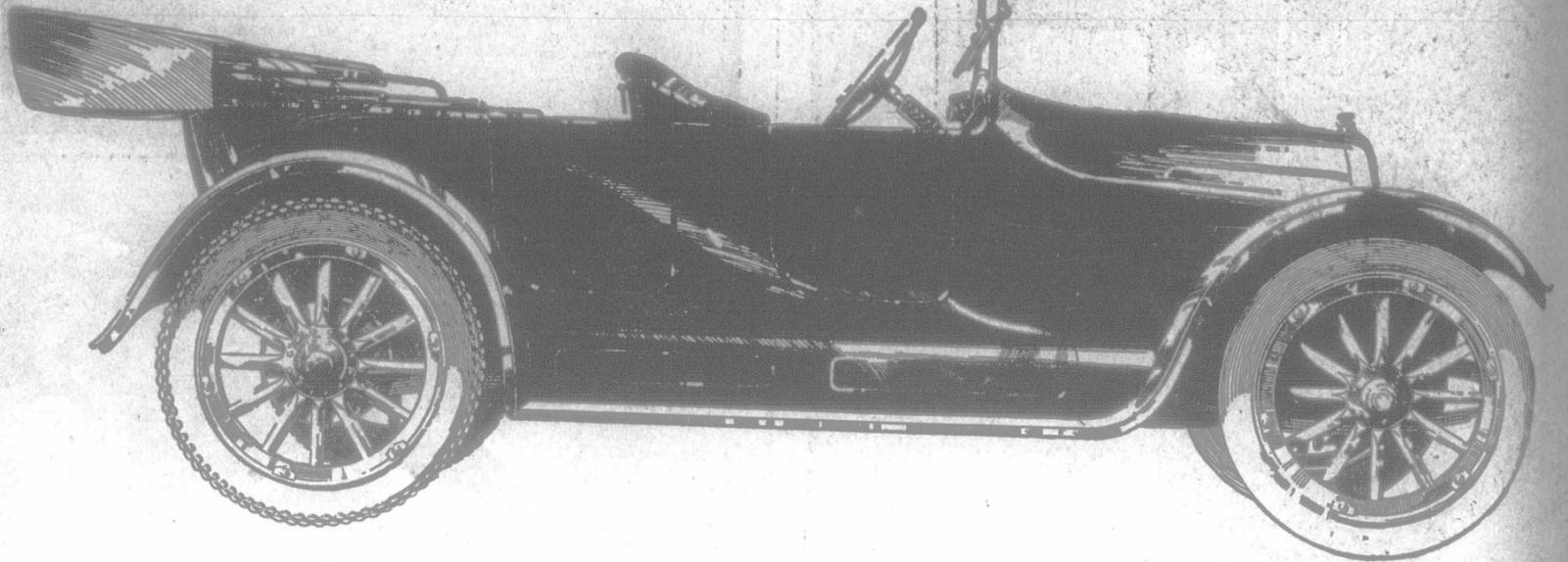
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