

PUBLISHED *The* \$1.50 PER YEAR

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE SUCCEED

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

Census and Statistics
Dept. of Agriculture
Dec 31, 09

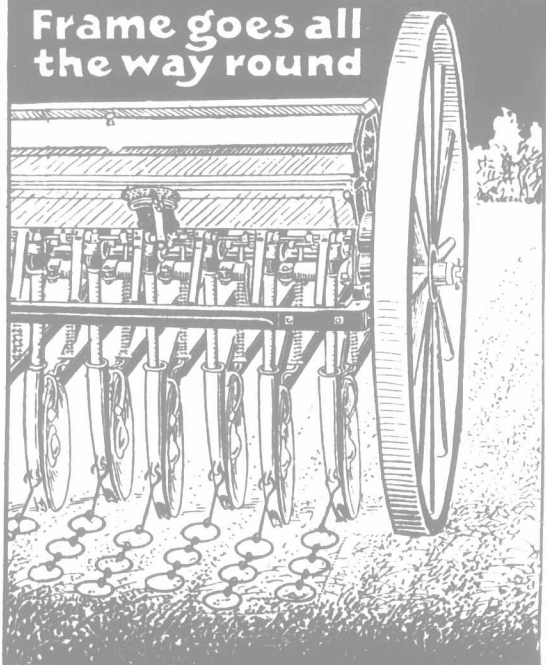
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Vol. XLV.

LONDON, ONTARIO, JANUARY 6, 1910.

No. 902

Frame goes all the way round

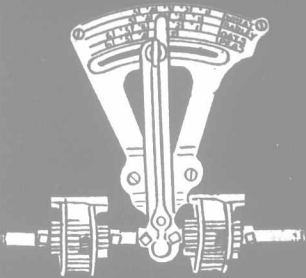


Sows accurately in dirty fields.
Runs easily. Dust-proof hubs.

You need never fear that the "Champion" Disc Drill will prove a "quitter." Like all machines in the Frost & Wood "Quality" Line it is built to work where others quit. The "Champion" will sow seed in "dirty" fields where corn roots, tangled grasses and straw manure are in such profusion that an ordinary Disc Drill soon gets choked up and cries "enough." The "Champion's" carefully tempered,

sharp-edged steel discs seem to revel in such a field. They make a clean cut right through such rubbish. They gather no trash. The cutlery-steel scrapers keep them scrupulously clean.

Should a heavy stick or stone be in the path of the machine, don't stop and waste time throwing it out of the way. Just keep right on. The discs are adjusted to raise automatically and roll over the obstruction.

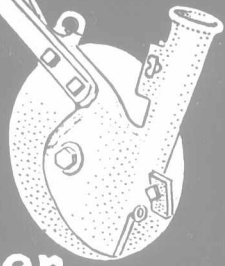


Grain Index



Ball Bearings in Disc Hub

Disc, Boot And Scraper



Frost & Wood

Champion Disc Drill

Your horses would rather be hitched to the "Champion" than an ordinary Disc Drill, because the "Champion" runs so much easier. It has friction-eliminating Ball Bearings in the disc hubs, where others have hard-running friction bearings. As there are eleven to twenty discs on each machine you can imagine how much lighter-draft the "Champion" must be.

These Ball Bearings on the "Champion" are in dust-proof hubs, too. You need oil them but once a year, whereas friction bearings are crying for oil and getting choked with dust all the time.

Yes, indeed, you can sow a lot more seed in the same time with the "Champion" than with harder-running disc drills.

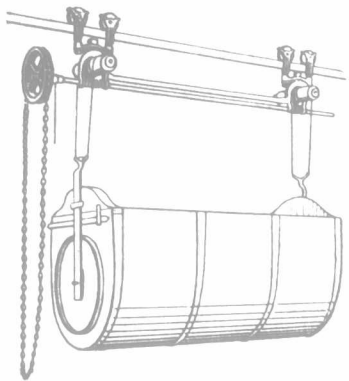
Before you get your machine we know positively that the "Champion" will do your sowing accurately. We set up complete both the Grain and Grass Seed Boxes and test them thoroughly before they leave the factory. We make sure that every part of this machine—and every other machine bearing the Frost & Wood name—will do its work perfectly from the minute you begin to use it.

You can sow as you please with the "Champion." There are no "slot holes" or notches into which you must shove a shifting lever. You can adjust the Index so your machine will sow to a fraction of a pint if you so desire. And the Grass Seed Index is plainly marked for different varieties of grass seed. You'll not find this convenience on other makes of disc drills.

"Champion" Disc Drills have Telescope Axles, while other Drills have to have loose axles to accommodate their range of pressure. They cannot compare in rigidity with the "Champion." We maintain a perfectly stationary axle and grain box.

We've not the space to tell you other points of superiority about the "Champion," so send today for our Disc and Hoe Drill Catalog F 43, which describes our line in detail. And remember this: No manufacturers maintain a higher standard of Quality than Frost & Wood, and no maker gives you more downright value for your money. You are making a sound investment when you purchase a machine of Frost & Wood Quality.

Frost & Wood Company, Limited, Smith's Falls, Canada 43



Get a Beath LITTER CARRIER

With the Beath Litter and Load Carrier you can save many hours a week. It carries all kinds of litter, and dumps it just where you want it. It is a decided improvement on other styles. No dog or brake required—an endless chain raises the load. All parts subject to strain are made of malleable iron. For sureness in operation, simplicity of construction and all-round excellence the Beath cannot be excelled. Send for catalogue and learn more about it.

W. D. BEATH & SON, LIMITED.
Toronto, Ontario.
Agents wanted in unrepresented districts.



Synopsis of Canadian North-west Land Regulations.

ANY person who is the sole head of a family, or any male over 18 years old, may homestead a quarter-section of available Dominion land in Manitoba, Saskatchewan or Alberta. The applicant must appear in person at the Dominion Lands Agency or Sub-Agency for the district. Entry by proxy may be made at any agency, on certain conditions, by father, mother, son, daughter, brother or sister of intending homesteader.

Duties—Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within five miles of his homestead on a farm of at least 80 acres, solely owned and occupied by him, or by his father, mother, son, daughter, brother or sister. In certain districts a homesteader in good standing, may pre-empt a quarter-section alongside his homestead. Price, \$3.00 per acre. Duties—Must reside six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right, and cannot obtain a pre-emption, may take a purchased homestead in certain districts. Price, \$3.00 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres, and erect a house worth \$300.00.

W. W. CORY,
Deputy of the Minister of the Interior.
N. B.—Unauthorized publication of this advertisement will not be paid for.

Sold on Commission

Farmers wishing to sell their farms should communicate with us. We make a specialty of this, and have constant inquiry for good Stock, Grain and Fruit Farms.

ADDRESS:
The UNION TRUST COMPANY, Ltd.
Real-estate Department,
174 176 Bay St., TORONTO, ONT.

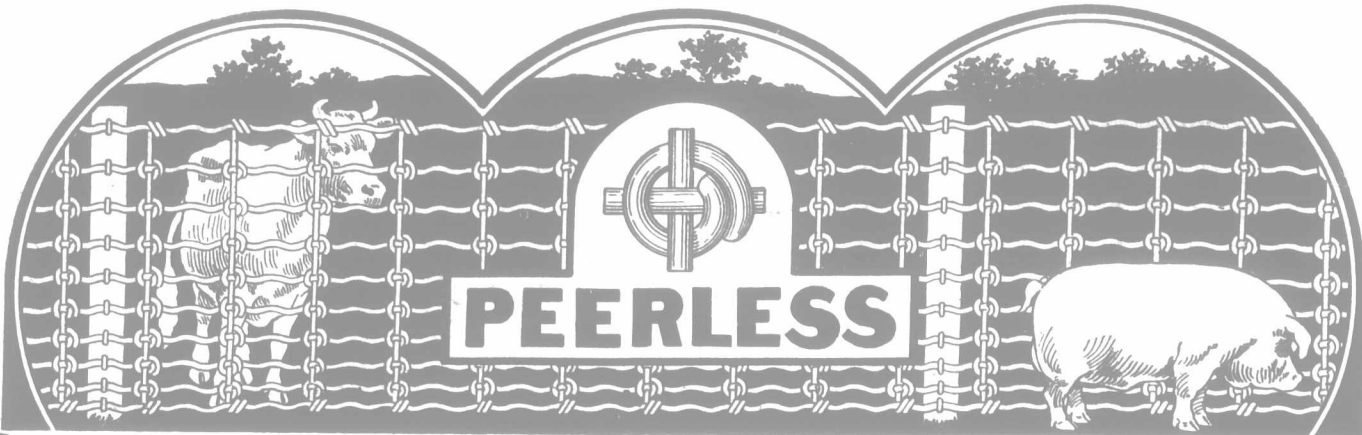


Build Concrete Silos

Any size and the London Agency, 19 Marmora Street, London, Ontario. We manufacture a complete line of Concrete Machinery. Telus and other measurements.

London Concrete Machinery Co., Ltd., 19 Marmora Street, London, Ontario.
The largest manufacturers of Concrete Machinery in Canada.

Advocate Advertisers Reap Results.



Don't Buy Any Wire Fence Till You Know It Will Last and Give Good Service for Years

TEST IT. PROVE IT.

We have always exercised great care in regard to the quality of wire entering into the construction of our PEERLESS Fencing. Our product is evidence of this.

We have spent much time and money experimenting with different kinds and makes of fence wire. We are now prepared to give our customers the benefit of our experience.

We find that English-made wire (that is wire made by English manufacturers expressly for our purpose) is superior to any fence wire made in this country. This is specially so in regard to the galvanizing. It will stand more than double the endurance, when sub-

mitted to what is known to the "ACID TEST," as compared with American or Canadian made wire.

English manufacturers are noted the world over for their thoroughness. In the manufacture of wire they are past masters—they are not new beginners—they have made galvanized wire to stand the salt, foggy English climate—they have a hundred years' experience back of them. American or Canadian made wire, under like conditions, rusts in a few months' time.

We have used this English wire to a limited extent for some time past. We are now making our all No. 9 PEERLESS Fence from this wire, and will,

at your request, be pleased to send you samples of this wire, and give you full particulars as to how you may test it, or any other wire you may choose.

TEST and PROVE any wire fence to your own satisfaction before buying it.

LAST. A fence that you know will last. Don't be deceived into investing in a fence with any soft or light wire in it. "A chain is only as strong as it is at its weakest link."

Our No. 9 PEERLESS Fence is made from heavy, hard steel wire for both the upright and horizontal wires, with a No. 9 lock—neat, compact and non-slipable.

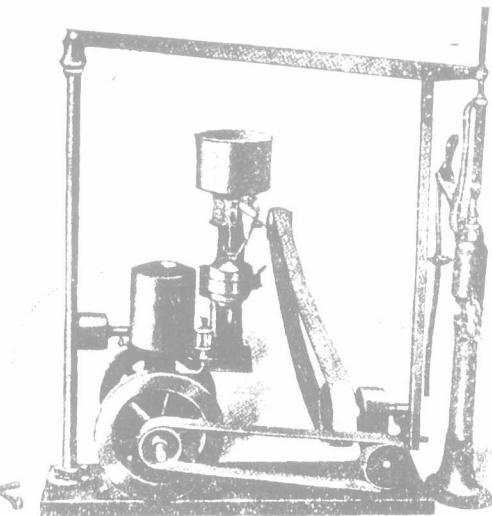
PEERLESS, THE FENCE THAT PROVES

BANWELL HOXIE WIRE FENCE COMPANY, LIMITED,

Makers of Farm, Poultry and Ornamental Fence and Gates,
DEPARTMENT A. HAMILTON, ONT. WINNIPEG, MAN.

IDEAL GASOLINE ENGINES

1/2 TO 40 HORSE-POWER.



Windmills,
Grain Grinders,
Pumps,
Tanks,
Water Boxes,
Concrete Mixers,
Etc., Etc.

Send for catalogue.

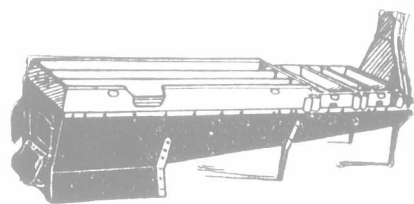
GOOLD, SHAPLEY & MUIR CO., LIMITED,

Brantford, Canada.

The Razor Steel, Secret Temper, Cross-Cut Saw.

WE take pleasure in offering to the public a saw manufactured of the finest quality of steel, and a temper which toughens and refines the steel, gives a keener cutting edge, and holds it longer than by any process known. A saw to cut fast must hold a keen cutting edge. This secret process of temper is known and used only by ourselves. These saws are set up and ground thin back, requiring less set than saws now made, perfect taper from tooth to back. Now we ask you when you go to buy a saw to ask for the Razor Steel, Secret Temper, Saw. When you are told that some other saw is equal to ours, we challenge you to let you take them both, use them, and keep the one that is the best. Saw sets are made in lengths of 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100 feet. We have the sole right for the "Razor Steel" brand. It does not pay to buy a saw for one dollar less and lose 25 cents per day in labor. Your saw must hold a keen edge to do an average day's work. Thousands of these saws are shipped to the United States and sell at a higher price than the best American saws. Made in Canada only.

SHURLY & DIETRICH, GALT, ONT.

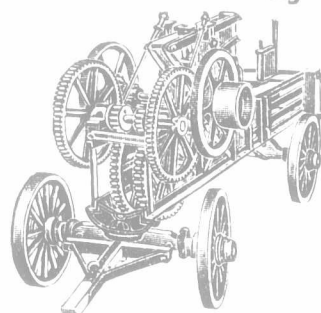


FREE TO SYRUP-MAKERS!

Get our free illustrated booklet at once. It contains all the information you need about syrup-making, etc. Write us today. A post card places you under no obligation. The Champion Evaporator is a medal winner. Look on the results at most of the fairs, and you will see that in nearly every case where syrup evaporators are exhibited, the "Champion" captured over two-thirds of the prizes. We make the size you need. Think it over.

THE GRIMM MFG. CO.,
58 Wellington St., Montreal.

100 MEN WANTED TO SELL THE Columbia Hay Press



We guarantee it the best belt press made or no sale. Capacity, 50 tons in 10 hours. Write for full descriptive and agency.

COLUMBIA HAY PRESS COMPANY,
Kingsville, Ontario.

FURS Do you trap or buy furs? I am Canada's largest dealer, I pay highest prices. Your shipments solicited. I pay mail and express charges; remit Sheepskins, etc. Quotations and shipping tags sent free.

JOHN HALLAM, TORONTO

**TO EARN THE BIG SALARY
LEARN RAILROADING.**

There is no line of work to-day that pays the princely salaries as does that of Railroading. Mechanics and tradesmen, office and store clerks, street-railway men, etc., spend years in learning and training, only to find that they have entered overcrowded trades and lines, and are therefore compelled to accept small wages. Not so with Railroading.

**FIREMEN AND BRAKEMEN
Earn from \$75 to
\$150 per month.**

With the rapid progress of Railway building in Canada, it takes only from 2 to 3 years to be advanced to Engineer or Conductor, whose salaries are from \$90 to \$185 per month.

**You can earn that money.
We can start you for it.**

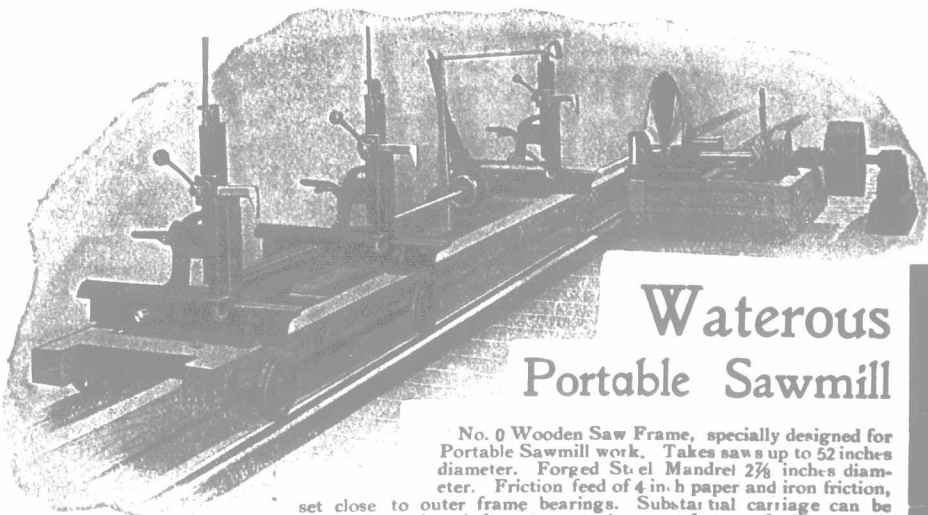
We teach and qualify you by mail in from 8 to 14 weeks without loss of time from your present work. Positions are secured; in fact, there are many openings right now if you were qualified to fill them. Our Course is the most complete treatise on the subject of Railroading in existence. We do not show a course anywhere nearly as thorough. Don't tamper with your education by buying cheap bargain courses. Ours is the only School of its kind in Canada with text-books written for use on Canadian Railways.

Our free booklet tells all about our system of teaching. When writing, state age, weight and height.

Address:

**THE DOMINION
RAILWAY SCHOOL,**

Dept. F.
Winnipeg,
Canada.

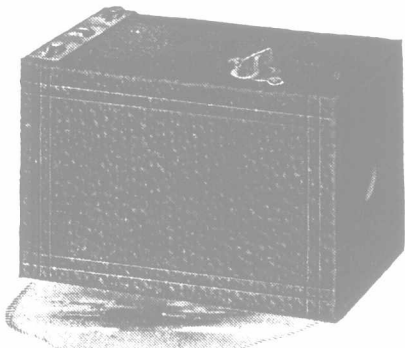


**Waterous
Portable Sawmill**

No. 0 Wooden Saw Frame, specially designed for Portable Sawmill work. Takes saws up to 52 inches diameter. Forged Steel Mandrel 2 3/4 inches diameter. Friction feed of 4 in. h paper and iron friction, set close to outer frame bearings. Substantial carriage can be returned or giggered from 5 to 10 times as fast as feeding speed. Carriage will accommodate good size logs. Standard carriage for rack feed is 16 feet 11 inches long; rope feed 17 feet 6 inches long. Frame extra wide, of heavy red pine stringers, edges bound with heavy iron. Log seats heavy web. Six-inch eye-beams. Knees and rack cast in one piece. Knees have 3-in. h independent t-p-r movement and are fitted with our patent upper and lower steel hook Peel Dogs, operated by overhead single-acting ratchet networks, having large ratchet wheel. Split steel setting and holding Pawls, designed to eliminate lost motion and permit a set of 1-16 inch. Steel-set shaft 1 1/2-1 3/4 inches diameter and 16 feet long. Carries pinions which operate knees and is fitted with heavy cast iron hand-wheel for hand setting. Track 54 feet long. This is one of the finest Portable Sawmills made. It will pay you to send for our free catalogue, which describes it, as well as many others, in detail. Drop us a card to-day.

**The Waterous Engine Works Co'y, Ltd.
BRANTFORD, ONTARIO.**

Anybody Can Kodak.



**THE NO. 1
BROWNIE**

Pictures 2 1/4 x 2 1/4. Price, \$1 00.

If you feel somewhat interested in photography, but are not just sure whether you will really care for it after you have taken it up, there's a very inexpensive way of making the experiment. The Dollar Brownie offers the opportunity. The Brownies are not expensive, but they stand the supreme test—THEY WORK. The pictures are 2 1/4 x 2 1/4 inches, and the camera is truly a capable little instrument for either snap shots or time exposures. The price is so small that at first thought you may consider this camera a toy. The fact is that its production at this price is only made possible because it is made in the Kodak factory, the largest and best-appointed camera factory in the world.

The Brownie Cameras all load in daylight with Kodak film cartridges, have effective lenses and shutters, and are capable of really high-grade work. They are made in both the box and folding form, at prices ranging from \$1.00 to \$12.00.

THE BOOK OF THE BROWNIES tells all about them, and may be had free at any dealers, or will be mailed upon request.

**CANADIAN KODAK CO., LIMITED,
TORONTO, CANADA.**

**RUSH'S U-BAR
STEEL
STANCHIONS**

are swinging stanchions. See the comfort and freedom they give cattle. Are strongly made to stand roughest usage, and save lumber and labor in fitting up cow stables. Saves time in tying cattle, because the latch is easily operated and absolutely secure. Made in five sizes. Write for catalogue and prices.

**A. M. RUSH,
King St.,
Preston, Ontario.**



**Your
Money
Earns 4%**

when invested in Huron & Erie Debentures. An absolutely secure way to make your savings earn a higher rate of interest.

Each Debenture issued for \$100 and upwards. You can arrange to have your money returned at end of from one to five years. Interest is paid half-yearly. Our Free Booklet tells all about our Debentures and why they excel as an investment. Ask for it.

**Huron & Erie
Loan and Savings Co.
LONDON, CANADA**

INCORPORATED 1864
ASSETS OVER \$11,000,000

GILSON

"GOES LIKE SIXTY"

**GASOLINE
ENGINES**

LOW
PRICES



AIR COOLED OR WATER COOLED
ALL SIZES
STATIONARY AND PORTABLE
Write for Catalogues and Prices
GILSON MFG. CO.
17 YORK ST., GUELPH, ONT.

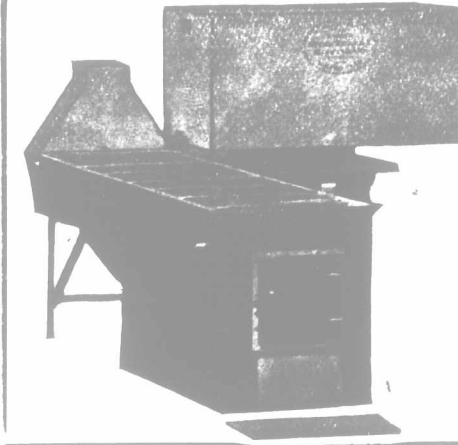
COMPACT
AND
SIMPLE

WATER
COOLED
Frost Proof

**PERFECT MAPLE
EVAPORATOR**

Price low—quality high—product the best possible—the kind you like syrup—it retains its maple taste—all unnecessary expense and middlemen's profits cut out. Sold at a price the poorest man can buy. Every one guaranteed. Write for pamphlets and recommends. Do it now.

**Steel Trough & Machine Co.
TWEED, ONT.**



Bagpipes



We're the largest Bagpipe dealers in North America.

Lowrie's famous make is the kind we sell. Write to-day for

**FREE
CATALOGUE**

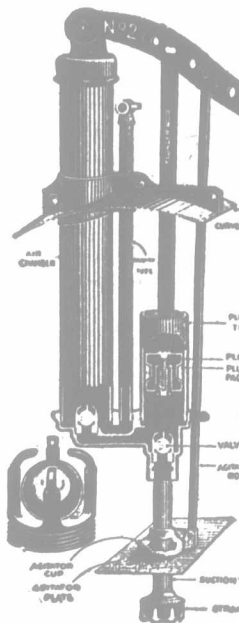
We're from the Old Country ourselves, and know all about the Pipes.

Chanters, Bags, Reeds, Etc., in big stock.

Repairs promptly done. Write for catalogue to-day.

ORME

Ottawa, Ontario.



Mr. Leigh Supt., put on the N. Y. C. Stock Yards, Buffalo, N. Y., 40 tons (80,000 lbs.) of Co'd Water Paint with these wonderful Hand Machines. In this event the

Spramotor

has proven its value. A demonstration like this is more convincing than a bookful of argument. The Spramotor is guaranteed for a year. In all sizes for Orchard, Potatoes, Painting, White-washing, Vineyard and Weed destruction. Say what you want it for. This ad. will not appear in this paper again. If interested write now.

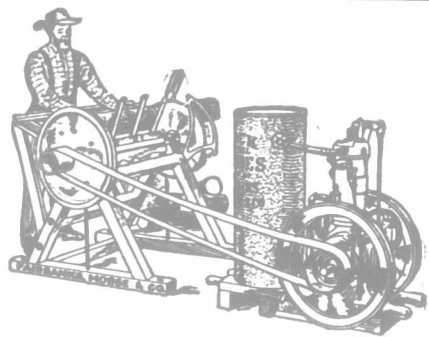
**SPRAMOTOR, LTD.,
1358 King St., London, Ont.**

BY HOOK OR BY CROOK.

"By hook or by crook" is an allusion to an ancient manorial custom which permitted the neighboring poor to take all the wood that they could reach and pull down from the forest trees, using only their shepherd's crooks.

FARMERS!

POWER FOR YOUR FARM



IT DOES
THE
BUSINESS

BUY A FAIRBANKS-MORSE GASOLINE ENGINE

The farmer of to-day ought to be as far ahead of the primitive methods of farming as the present-day manufacturers are ahead of the old-time methods, where hand-work was largely used. A Fairbanks-Morse Gasoline Engine will reduce the manual labor around your farm and put it on a paying basis. One of the most popular engines for farmers is our

JACK-OF-ALL-TRADES 2-6 h.-p.

A self-contained unit with gasoline tank and water tank on the same foundation. Portable and well built. Numerous outfits have been arranged to meet the farmer's needs. They are in part: Wood-Sawing, Pumping, Churning, Grinding, Spraying, Threshing, etc.

Cut out this complete advertisement and send for Catalogue F.A. to-day.

Name.....

Address.....

THE CANADIAN FAIRBANKS CO., LIMITED
Fairbanks Scales. Fairbanks-Morse Gasoline Engines.
Montreal. Toronto. St. John, N. B. Winnipeg. Calgary. Vancouver.

SEED PEAS

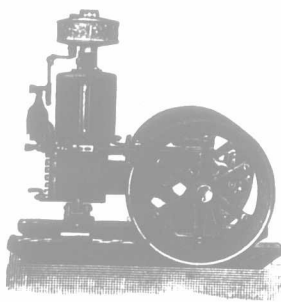
Being one of the largest growers of seed peas in Canada, I am desirous of placing seed in good pea-growing sections free from "weevil" or "pea bug."

I supply the seed and contract with farmers for the product, deducting the seed supplied when crop is delivered.

Prefer growing in places where a carload of seed could be placed.

For particulars, address: **W. P. NILES, Wellington, Ont.**

"STICKNEY"



Gasoline
Engine

is built
for the
FARMER

SO SIMPLE that a boy can learn to run it in 5 minutes.
EASY TO START, another wrinkle. No pipes or separate tank. All in one, as shown above.

Power Guaranteed

And if you send for Catalogue No. 57 you will get some good ideas.

Tanks. Pumps. Windmills.

Ontario Wind Engine & Pump Co.,
LIMITED,
TORONTO and WINNIPEG.

Don't Throw it Away

Does Your Granite Dish or Hot Water Bag Leak?

USE **MENDETS**

They mend all leaks in all utensils—in brass, copper, granite, hot water bags, etc. No solder, cement or rivet. Any one can use them; it's any surface; two million in use. Send for sample pkg. 10c. Complete pkg. assorted sizes, 25c. postpaid. Agents wanted. Collette Mfg. Co. Dept. K. Collingwood, Ont.



EASY STREET

That's where most everyone wants off. A

De Laval
Cream
Separator

WILL TAKE YOU THERE.

1,000,000 Sold.

Send for Free Book

The De Laval Separator Co.,
173-177 William Street, - MONTREAL
VANCOUVER - WINNIPEG

RAW FUR COMMISSION HOUSE

52-60 TEMPERANCE STREET, TORONTO, ONTARIO, CANADA.

Shipments of Raw Furs Solicited. Highest prices, prompt returns, fair assortments. All shipments kept separate until remittance is found satisfactory. We pay all express charges. Write for Price Lists.

Chas. Weckler, Manager.

WHY DON'T YOU CLIMB THE FENCE?

Between you and success in life there is a fence, beyond it lies THE FIELD OF KNOWLEDGE. You don't get a better position because YOU DON'T KNOW the things you need to know in order to fill the position. You don't get better pay because YOU CAN'T DO THE WORK which would earn more pay. CLIMB THE FENCE! Get into the field. We show you the way. Here are some of the courses which you can study at home by becoming one of our students:

BEGINNER'S COURSE Just the thing for anyone who has a poor education, or who needs a review of the important elementary subjects. Starts you right at the beginning in Arithmetic, Composition, Grammar, Spelling, Penmanship and Geography, and carries you through the whole public school course in these subjects.

COMPLETE COMMERCIAL A thorough business training, which everybody should have, is given by this course. Bookkeeping, single and double entry, joint stock, retail systems, etc.; Business Practice, the writing of all business forms, invoices, notes, drafts, cheques, receipts, money orders, etc.; Penmanship, a thorough drill; Business Correspondence and Composition; Commercial Law, all about contracts, payments negotiable paper, mortgages, property rights, landlord and tenant, etc.

CIVIL SERVICE The next examination will be held May, 1910. Get ready during the winter. Full instruction guaranteed until you pass in the necessary subjects. Arithmetic, Grammar, Geography, English, Canadian and French History, Typewriting, Transcription, Spelling and Writing.

STEAM ENGINEERING Stationary, Traction, Gas or Gasoline, Marine, etc. Complete course given by mail to fit you for engineer's license or Government examination in any province. Text-books free. Special course in Arithmetic included.

MECHANICAL DRAWING You can learn Mechanical Drawing and Machine Design so as to be able to design any sort of machinery, to make models and patterns, blue prints, etc., for all classes

of mechanical work. This course carries you from the drawing of simple lines to the most complicated designing and structural work. Instruction in Arithmetic, and all rules and calculations included.

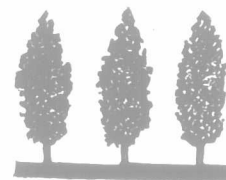
AGRICULTURAL COURSES Special courses in Stock Raising, Agriculture and Poultry Raising, comprising the cream of the Agricultural College lectures, with illustrative charts and drawings. Student's papers corrected by experts on Agricultural College staff.

UNIVERSITY MATRICULATION The first step towards entering any profession, or taking up a college course, is to pass the University Matriculation. If you wish to be a minister, a lawyer, doctor, dentist, druggist, civil engineer, mining or mechanical engineer, etc., you need Matriculation first. Instruction given in any university. Tuition fee good till you pass.

TEACHERS' EXAMINATIONS We prepare students for entrance to Normal or Model Schools in any of the Provinces of Canada. Every subject prescribed for the examination fully covered. Instruction in the full course or special subjects. Fee good till you pass.

WRITE NOW Now is the time to begin. Don't wait for more time—there will never be more than twenty-four hours in a day, and you should be able to spend one or more of them in helping yourself over the fence. Write to us fully about your present education, and the work in which you are interested. Full information about our courses will cost you nothing, and place you under no obligation to us. You owe it to yourself to find out what there is in this for you. **WRITE TO-DAY.** Address:

Canadian Correspondence College, Ltd., Dept. E., Toronto, Can.



The Central Nurseries

(30th Year)

Our new catalogue will tell you honest verities and prices of **Fruit, Ornamental and Shade Trees, Evergreens, Shrubs, Roses. The Hills of Snow Hydrangea (new) beautiful Red Herbert Raspberry, California Privet, etc.** Get our prices before placing your order. Better, place order early this season.

A. G. HULL & SON, St. Catharines, Ont.



CENTRAL Business College

STRATFORD, ONT.

A Commercial school of the highest grade. A school without a superior in the Dominion. Catalogue free.

ELLIOTT & McLACHLAN, PRINCIPALS.

Write for "SEAL OF FORTUNE" to Canada's Leading Business School.

THE NORTHERN Business College,

OWEN SOUND, ONTARIO.

Students admitted any time. Information free.

C. A. FLEMING, PRINCIPAL.

7% GUARANTEED

Returns absolutely secure. A postal card will bring you information of a highly satisfactory investment.

ROBERT E. KEMERER,

Confederation Life Building, Toronto, Ont.

AGENTS 200% PROFIT

HANDY, AUTOMATIC HAME FASTENER

Do away with old hame strap. Horse owners and teamsters will about them. Fasten instantly with gloves on. Outwear the harness. Money back if not satisfactory. Write today for confidential terms to agents.

F. Thomas Mfg. Co., 744 Wayne St., Dayton, Ohio

INVENTIONS

Thoroughly protected in all countries. EGERTON R. CASE, Registered U. S. Patent Attorney, TEMPLE BUILDING, TORONTO. Booklet and drawing sheet FREE.

The Farmer's Advocate

and Home Magazine

"Persevere and Succeed."

Established 1866.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

Vol. XLV.

LONDON, ONTARIO, JANUARY 6, 1910

No. 902

EDITORIAL.

A hundred-million-dollar increase in the value of Canadian field crops for 1909, is the New Year's message of the Dominion Census and Statistics office.

There is a wealth of information in a good dictionary. Reference to such a book would answer not a few questions submitted to us for reply through the paper. A good one is offered as a premium for obtaining two new subscriptions to "The Farmer's Advocate."

What the Ontario Winter Fair at Guelph would be to the whole Province, but for the handicap of distance, the Eastern Ontario Live-stock and Poultry Show at Ottawa aims to be for the easterly region. The approaching show gives promise of encouraging success. The Winter Fair idea is "catching on." St. Lawrence and Ottawa Valleys will do well to support their institution at Ottawa. Dates, January 17th to 21st.

Higher education at the farmer's expense, seems to phrase the situation in Manitoba, where the Provincial University has experienced a considerable degree of unpopularity in some districts through the holding of many thousand acres of land with which it has been endowed. Some 87,000 acres are still held by the University, paying not a dollar of taxes either to local education, rural improvement, road-building, or any public work. Thus, many communities have had in this, as well as in railway and other lands, a striking object-lesson of the evils of idle holding of land—an evil, by the way, which advocates of the single tax (or taxation of land values only) claim their system would tend to discourage, if not prevent. Taxation of land tends to hasten the putting of it to productive purposes, through its sale to those who wish to use it. Any taxation at all will have such effect, but the higher, the more effective. Single tax is the highest and most effective tax that may be levied on the land.

"To know for yourself because you have thought it out to your own satisfaction, is of far more benefit than to have it told you." That sentence, extracted from a letter received for publication, contains more sense than many a lecture. It often occurs to us, when answering questions about rations, stable plans, silo-building, etc. While the replies are cheerfully given, there is no doubt but that, if the inquirers would study carefully the information, plans and suggestions offered from time to time through our columns, they could often work out rations, plans and ideas more precisely adapted to their particular needs and conditions than can any expert, however careful, who has to depend on information furnished by correspondence. And, besides the greater suitability of these home-thought-out ideas, there is the education, efficiency and self-reliance that results from the thorough study by which they are arrived at. There are some questions which may be asked through the paper with much propriety and advantage—questions of a general nature, or those touching points not recently discussed in the paper, and some others requiring expert diagnosis and prescription, but there are hundreds of the kind indicated above which could, with much greater advantage, be answered by the inquirer himself with a little patient study, calculation, reflection and research. Mastery is greater than knowledge.

Fruits of Forty-four Years' Effort.

Commencing the first volume of another year, a word of retrospect and promise may be fittingly indulged. How many readers ever pause to consider what this paper represents? Briefly, it represents forty-four years of earnest striving for a definite purpose—to produce a first-class agricultural journal at a reasonable price, and thereby benefit the agricultural industry. It pioneered the field, and a small fortune was sunk in the business before it was put on a paying basis, but since the turning point it has constantly improved, each year's profits contributing to the betterment of the paper during the succeeding twelvemonth. The paper to-day is thus not the product of one man's effort, nor of the whole present staff. It is the cumulative product of forty-four years' effort of publishers, editors and patrons, representing continual acquisition of experience, knowledge, prestige and influence. On file in this office, available for present use, is the cream of the correspondence and writings of years. All this goes to produce a more useful, more practical and more reliable paper than would be possible for a new publication in the field. "The Farmer's Advocate" is what it has grown to be, and, if the witness of friends is to be taken, grows better all the time. You, as a subscriber, get the benefit of the constant improvement and progress in the form of more pages of better matter, more illustrations, and riper advice.

Take the matter of size alone. In 1904, when the paper was first made a weekly, the year's volumes comprised 1,831 pages. Last year there were 2,104, or nearly 300 more. That alone would make a good-sized book. To be sure, advertising has increased, but the paper has been enlarged whenever the amount of advertising warranted the extra size, and the advertising pages themselves are a useful part of the paper. Take the illustrations: In 1907 we indexed 524; in 1909, 673.

But, of course, the greatest gain is in quality. History-making developments or discoveries in every branch of agriculture are published accurately and promptly in "The Farmer's Advocate," largely on the strength of direct, first-hand information or inquiry. The fruits of research and experience are kept before our readers in the most instructive and timely manner.

Helpful, stimulating correspondence is published from every corner of the country, while editorials calculated to provoke thought and promote information are a regular feature. Through the Questions and Answers Department a wealth of information is always on tap. The markets of our leading centers are accurately reported by the most painstaking of correspondents, ever alert for the producer's interest. The Home Magazine is most capably conducted by a special editor, who devotes her whole time to the work, assisted, besides, by a most acceptable staff of correspondents. This department alone is worth the subscription price of the whole paper.

By prizes for results in roadmaking, and by orchard demonstration work, the paper has allied itself in a very practical manner with agricultural progress.

For the coming year, plans have been made for several special features, one of which is the series of articles on breeds, which no stockman should miss. Certain other plans it would be premature to disclose.

And all this we give you for three cents a week. In reading, as in no other article, it pays to have quality. Life is too short to read anything but the best. This paper gives the fruit of forty-four years' experience to each subscriber for \$1.50 a year. To many a farmer it has been worth a hundred dollars in a year, or even in a

single issue. To many more it might be. It is the greatest bargain in agricultural reading ever offered Canadian farmers.

The results set forth above could not have been accomplished without the hearty and active support of the best farmers and business men in the country. The mutual relationship between publishers and patrons has been to the advantage of both. Every person who has contributed of his experience, or has put forth effort to extend our circulation, has thereby contributed to the making of a better paper. For the support of the past we are grateful. For the future, we can honestly promise renewed efforts to excel in the production of a high-class journal that will promote and reflect credit upon Canadian agriculture.

Artificial Bleaching of Flour.

Our references to a recent news-item that fourteen carloads of flour had been seized by the U. S. Department of Agriculture for violation of the order prohibiting the artificial bleaching of flour by gas or electrical processes, has been the occasion of interesting correspondence on the subject. The head of one extensive milling establishment in Ontario writes that, "The millers of the United States, being satisfied that there is no injury done to the flour (by artificial bleaching), have, after months of fighting, forced the Department to bring action in the courts against some mill or mills using the bleacher, and have the courts decide as to whether the bleaching is contrary to the Pure Food Law." The same correspondent states that the first case must be brought into court not later than the 15th of February next. He also adds that the subject has been fully considered in Great Britain, and decided by the Privy Council, that there are no harmful results arising from the bleaching of flour by gas or electrical process, as practiced in this country.

Inquiry of Prof. Harcourt brings the information that a machine for bleaching flour by the Al-sop process has been installed in the laboratory of the Agricultural College, at Guelph. In advance of the complex investigation requisite to a decision, he is naturally non-committal as to whether the effects on the flour are harmful or not.

Prof. Alway, of the Agricultural Experiment Station, Nebraska, concluded a report of an extensive investigation with the statement that nitrogen salts in large doses are harmful, but the quantity in carefully-bleached flour is so small that it is of no physiological importance; also, that the use of nitrogen peroxide in the quantities employed by the millers of Nebraska whitens the high-grade flours and the resulting bread, without affecting the composition, odor, taste, texture or weight, and without adding any substance in sufficient quantities to be injurious.

Professors Ladd and Stallings, of the North Dakota Station, conclude their report of an investigation with the charge that the nitrous oxide remaining in the flour after bleaching is physiologically active, and is injurious to the quality of the gluten; further, that the process permits low-grade flours to be passed off for high-grades or patents.

To the layman, the perusal of these reports, with their conflicting conclusions, proves nothing but the difficulty of the problem. In a matter affecting the digestibility and wholesomeness of such an article as bread, any reasonable expense incurred by Government in discovering and publishing the truth, and the whole truth, is amply justified.

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THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED)

JOHN WELD, MANAGER

AGENTS FOR THE FARMER'S ADVOCATE AND HOME JOURNAL,
WINNIPEG, MAN.

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LONDON, CANADA.

Eastern Experience with Box- packing.

Some experienced fruit-growers in Eastern Canada expect to see box-packing much more generally resorted to for the shipment of choice apples of No. 1 grade. Interest has been evinced in several quarters in our experience with box-packing in "The Farmer's Advocate" Demonstration Orchard. Consideration of the matter of box versus barrel packing leads us to the following conclusions, which, however, are but tentative, and subject to revision:

A barrel holds about 150 pounds of apples; a box, 12 pounds. The boxes cost us 15 cents apiece, the barrels 40 cents. Under our conditions, employing expensive male labor, it cost between 6 and 7 cents to pack a box, and about 15 cents to pack a barrel. Deducting package and packing, a box of fruit netted us about 78 cents. Now, if 42 pounds of fruit netted 78 cents, 150 pounds (the quantity in a barrel) would net about \$2.78. If packed in a barrel, this quantity of apples would have to sell for \$2.78 plus 40c. plus 15c., or \$3.33, in order to net as much as they did sold at \$1.00 per box. However, as the grading is supposed to be, and in our case really was, much stricter than for barrel-packing, this advantage is pared down. We estimate, however, that \$1.00 per box was at least as good as \$3.00 a barrel, especially as the closer culling goes to build up the No. 2 grade.

Fruit packed properly in boxes carries better, opens out better, and sells better than barrelled fruit.

Taking all things into account, it probably pays to pack dessert fruit in boxes, particularly in a year of high prices.

A number of co-operative fruit-shipping associations in Ontario have tried the box-pack, and have had very fair returns. While as yet they have not, speaking generally, the skill to put up fruit in quantities such as sent out from Hood River and Rogue River Valleys of Oregon and Washington, still, the returns have been very favorable as compared with the prices received for Western fruit

One association has shipped a carload of boxed apples to France. The experience of two of the largest associations is that all their early apples, such as Duchess, Astrachan, Wealthy, Snow, Alexander, etc., bring far better returns when packed in the bushel box. One of them reports making as much per box on the early fruit as per barrel on the winter fruit.

One good thing about the box package is that it tends to cut out much of the poorer-grade fruit. If growers will keep in mind that the box package should not contain anything other than the best of our fruit, we can soon work up a splendid reputation for this package. If, however, it becomes merely another outlet for low-grade fruit, our reputation will suffer accordingly.

There is this point, too, as Mr. McNeill made clear in his paper read before the Quebec Pomological and Fruit-growing Society, the market for box-packed apples is a special market, and the customers have to be sought out at first. To derive the best returns from box-packing, it must be followed up year after year, and a reputation established that may eventually be coined into money.

The Colt-training Question.

Several responses to the invitation extended to our readers for comment or criticism of the methods of colt-training outlined in the prizewinning articles recently published in these columns on that subject have been received, not all of which have been complimentary or commendatory, and some of which have been decidedly critical. The principal point to which exception has been taken is the extent of time required to impart to a colt the education and training advocated. It must be admitted that there is some reason in this complaint, since "time is money," or its equivalent, on the farm, as in other occupations, and especially in these times, when suitable help is so difficult to secure. It is a co-incidence, however, that, in a considerable majority of the essays entered in the competition there is a striking similarity in the methods of education suggested, such as the early accustoming of the foal to be handled, haltered, and taught the lessons of submission to the will of his trainer, and confidence in his kindly attention and intentions. While it may have appeared to some readers that too much emphasis has been attached to this early training, and to some of the later phases of the undertaking, it may, at the same time, be accepted as sound doctrine, and adopted to the extent to which time available will admit. Another coincidence is that the authors of the prizewinning essays have evidently dealt principally with the education necessary in the training of the lighter, or driving, class of horse, which necessarily differs considerably in kind and degree from that required in the heavy-draft class, which are usually of quieter disposition and temperament, and much more easily trained for the work and duties they are called upon to perform. The former class logically require, and, as a rule, receive much more time and attention in their training, and it is possible that the judge's predilections run more in the direction of the driving or harness class, or of the saddler, and that his rating of the essays may to some extent be accounted for on this score, though, except for the question of time involved, it is difficult to conceive of any valid objection to the method of gradual training and education advocated by the writers of the prize-winning essays, when the wide difference in the temper and disposition of young horses is taken into account. And since colt-training is usually done in the winter months, when farm work is generally less pressing than at other seasons, and time less valuable, the training advised may profitably be adopted to a greater or less extent.

Thoroughness in the training of a colt may serve to avoid the formation of vices or faults of manners which may seriously affect his usefulness as a worker or driver, and as seriously discount his value in the market. In view of these possibilities, a little extra time given to his training may be profitably expended.

A correspondent, referring to the methods set forth in the first-prize essay, suggests that it might interest our readers to know what occupation the writer follows. In regard to that question, we are assured that he has been raised on a farm, and personally performs a fair share of

the work on a 200-acre farm, on which a dairy herd of pure-bred Holsteins and as many grades are kept, and that he has had considerable experience in training colts, of which he has three in hand at present, two of which are of the carriage class, with tempers requiring careful treatment, the third being a Clydesdale, promising to be more easily trained.

Notes from Ireland.

WHAT ARBOR DAY CAN DO.

Amid all the bitter battles of the Budget, the cries and countercries of constitutional custom, and the excitement of electioneering encounters, national undertakings, none the less practical because more prosaic, are apt to be lost sight of. The passage of the latest Irish Land Bill through Parliament has, however, served to bring to the front once more the vitally important subject of Irish afforestation. At last something has been done to deal with this eminently utilitarian matter, and by the Act referred to, the Department of Agriculture have been appointed the forestry authority for the country. Special clauses defining their duty in this capacity are contained in the Bill, and effect is thereby given to several of the suggestions made eighteen months ago by the committee which inquired exhaustively into the matter. In the future, when an estate is purchased by the Estates Commissioners, who thereby obtain possession of the woodlands, the Department can step in and buy these from the commissioners, repaying the purchase money in annual instalments, just as the tenants pay their annuities. The Department thus become national trustees of woodlands so obtained. Already, on the strength of the committee's recommendations, several forests have been secured, properly fenced and provided for by trained experts. The Act also empowers the Department to acquire land and raise money for tree-planting purposes in conjunction with the county and district councils, but no local scheme can be proceeded with till submitted to and approved of by the Department. A third responsibility imposed by the Act on the Department is the control of tenant-purchasers in the matter of timber-cutting, a duty formerly entrusted to the Land Commission, but very laxly observed. It will now be an offence under the Act for any purchaser to cut down trees on his holding without permission first being obtained from the authorities. This, it is hoped, will check wanton waste.

Some readers may be wondering why I have introduced "Arbor Day" into the title of this portion of my article. Well, the reason is a desire to give credit where it is justly due. We owe to its influence the unanimity of public sentiment manifested in persistent agitation that has compelled the State to take definite action. As in other countries, so in Ireland, Arbor Day is destined to prove the handmaid of afforestation. Although not yet as widely observed here as it ought to be, the movement was celebrated with greater éclat and enthusiasm this past year than ever during the five or six years that have elapsed since its introduction into Ireland. Labor Day has had to live down a great deal of prejudice. For a long time it was regarded by a large section of the community as merely some now-forgotten idiosyncrasy of well-intentioned but irrational faddists; but the comparative handful of enthusiastic arboriculturists, undeterred by the prevailing indifference, have pushed the movement well along, and, as a matter of course, it is carrying its own enlightenment and justification with it. No longer is it fashionable for any intelligent person to decry the influence of Arbor Day in centering the public gaze on the timber problem. The institution, as it were, "finds tongues in trees," and its annual observance not only speaks encouragement to active woodland lovers, but it utters a forcible rebuke yearly to those who are heedlessly denuding the country of its existing forests and, worse still, deliberately repudiating their responsibility in the matter of replanting. It is also found that Arbor Day is instrumental in bringing together in desirable harmony of accord people of all shades of religious belief and political fancy. If it did nothing else, it would confer inestimable benefit on our country, which has too long been sadly divided.

Foremost among the useful functions which Arbor Day is now showing itself to be capable of discharging is the enlistment of the earnest sympathies of the children in the subject of tree-life and welfare. A great deal of damage and neglect for which "grown-up" folk are responsible is doubtless due to ignorance as well as wilfulness, to want of thought as well as want of heart; and it is not a very easy task to materially alter the attitude of the adult mind. But greater hope of success lies with the children, and we are confidently looking to Arbor Day to spread through our country and city schools, and impart to the juvenile mind a love for trees born of an intelligent understanding of their nature as living things, an appreciation of their worth as national assets, and an inevitable sympathetic consideration for their welfare.

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THE EVOLUTION OF IRISH HORSE SCHEMES

Perhaps the best feature of the recent meeting of the Council of Agriculture in Dublin was a discussion on Irish horse-breeding, the subject being introduced by Prof. Campbell, of the Department, who had prepared a valuable memo, explaining in great detail the history of the schemes adopted during the past nine years. Three kinds of effort are comprised in the scheme at present in operation: (1) The annual registration of stallions; (2) the purchase by the Department of suitable sires and their resale to farmers; and (3) the granting of service nominations to mares. Considerable modifications have been made in the schemes from time to time, the most important undoubtedly being in 1906, when the registration of cart-horse stallions (e. g., Clydesdales and Shires) was discontinued, except in special and clearly-defined districts. Concurrently with this step, the half-bred stallion of the hunter or Irish draft type was first recognized, and the attention of the Department was forced to this class of sire by reason of the difficulty of getting a sufficient number of suitable Thoroughbreds at possible prices. A census, taken of the country in the year 1906, revealed the disquieting fact that, of 2,300 stallions at service, little or nothing was known of fully 2,000. The owners of these were then asked to submit them for examination, but only 367 were put forward, and of these only 12 were considered sufficiently good for registration. What the Department now appear to be striving for is a list of 1,000, instead of 300, registered stallions, and their policy is to secure this without resorting to either the Clydesdale or Shire breeds, as the reputation of the Irish horse rests largely on its freedom from cart-horse blood. Rather do they recognize the necessity of finding sires of the same type and blood as the ordinary horse of the country. Plenty of good half-bred colts are raised in Ireland, but the Department are faced with the difficulty that, under present conditions, "the value of a first-class horse is higher as a gelding than as a sire." In order to insure that the best shall be retained for breeding, two methods are in the official mind. One is being carried out, and consists of the purchase by the Department of promising colts which would otherwise be castrated as likely hunters, and their rearing on the Department's farms till three years of age, when they are sold to private owners. The other scheme is to subsidize breeders by offering them substantial prices for suitable entire colts submitted for purchase as three-year-olds. This is the French method, but is not favored for Ireland.

In order to meet the requirements of those who specially go in for harness horses, the Department propose to introduce, as an experiment, some Normandy sires, which they state are somewhat similar to the native Irish type, but more "harnessy." The Hackney has long since been emphatically pronounced against, but, judging by opinions so far expressed, the public do not seem to be greatly enamored with the suggested resort to French sires.

To strengthen whatever scheme may prevail, the need for licensing all stallions standing for public service is being more clearly realized every day, and the Council of Agriculture have resolved to ask the Vice-President of the Department (who is quite sympathetic) to secure legislation to deal with this pressing matter. It is not sought to treat owners of existing low-grade sires too harshly, but rather to give them every facility to get better ones. The Council were inclined to accept only Thoroughbred sires serving Thoroughbred mares exclusively.

The registered sires are also to be overhauled. It transpired, in the course of the discussion, that each Committee has been asked to express an opinion on the fruitfulness and the soundness of the progeny of their local registered sires, with a view to the elimination of all that may not be giving a good account of themselves.

"EMERALD ISLE."

Canadian farmers have never been favored with more prosperous times than now. Prices for nearly every line of agricultural production are encouraging, while some are almost fabulously high, the better grades of them, at least. Cost of production, while also enhanced, has not increased in proportion to the possible returns. The margin between cost of production and selling price was never before so wide. High prices, however, are but an aggravation to him with nothing to sell. More hogs, more cattle, more sheep, more horses, more poultry, more clover, more corn, more silos, more alfalfa, more roots, more soiling crops, more orchards (and better care of them), more intensive crops—those that yield the large returns! But will not increased production lower prices? Not disastrously. Increased production is necessary to supply increasing demand. Particularly is this true of the better grades of produce. Labor? Aye, that is a problem, but not insurmountable. Management will solve it. Labor-saving methods, liberal wages regularly paid, and steady employment by the year, with good treatment, will gradually attract a class of labor that will be a credit and blessing to the farm.

HORSES.

Training the Colt.

(A DRIVER.)

The colt should know its master; also, the master should know the colt. He should be handled sufficiently, and in such a way as to thoroughly overcome all shyness, and to lead him to feel that man is his friend. When this confidence has been once established, the training will be more easily and successfully accomplished.

Give the colt its name, and teach it to come when called, by providing a little sugar or salt, allowing the colt to lick it from the hand.

When about a week old, get it to lead in the box stall, the trainer standing on the near side, with the left hand over the face; the right hand should be on the top of the animal's neck. Now, gently push the colt away from you until it will lead. When the command, "Whoa!" is given, hold the colt still until it is again told to come.

In haltering, which may be done any time after the colt is two weeks old, approach him gently from the near side, holding the halter in both hands, allowing the colt plenty of time in which to smell it. When all fear is gone, hold the halter up in the left hand, and, with the right hand over the colt's neck, reach the strap, and quietly and quickly draw on and buckle the halter. Provide a suitable rope, ten or twelve feet long, attach same to the halter-ring, and tell the colt to come.

Teach it to circle, going first to the near, then to the right. Lead it into a narrow stall, run the rope through the ring on the center of the manger a couple of turns, giving the colt about three feet of a tie-rope. Hold the slack rope in the hand until the colt ceases to pull back. This will usually not take more than fifteen minutes' time. Now tie the colt securely and leave it alone for an hour or two, when it may be allowed loose with the dam. It has learnt that it could neither break the halter nor get away. The foal, once haltered, taught to stand quietly and to lead kindly, is given its liberty for the next two years, with the exception of being handled and led by the halter occasionally.

When two years old, commence training in the harness. At that age the colt has less strength than when older, has not the disposition to resist so readily, and will acquire its lessons more easily. Taking the single harness, put the backband over the right shoulder, and enter the stall on the near side, allowing the colt time in which to see and smell the harness. Now gently put the backband over the back, fondling the colt while you get the crupper and breeching in place. Next, adjust the breast-collar, bringing the traces back, and making them secure in the breeching. Now put on the bridle, with check in place, and lead the animal out into an enclosed yard after it has learned that the harness will not hurt it. Let it be at large for a couple of hours.

Next day, harness the colt again, bringing the drive lines back through the shaft loops, and have a lead-rope twelve or fifteen feet long, having one end of it run through the near ring of the bridle, under the jaw, and fastened in the right ring.

Holding the rope in the left hand, get the colt to circle the near way until you can keep well behind him. Now take a line in each hand and commence to drive him, tapping him gently with the whip when required.

After getting the animal to drive nicely with the lines, teach it to back. The trainer should stand facing the animal, and, taking a ring of the bridle-bit in each hand, as he gives the command "Back!" he should gently press back on the bit, repeating as often as is necessary, until the colt will back promptly at the command. This accomplished, gently stroke and pet the animal, giving it a slice of apple or carrot, or some sugar, after each exercise as a reward for obedience.

When hitching, I face the cart into a stone wall or a building in which there has been placed a ring for tying purposes. When the colt has been securely tied to this, I gently pull the shafts up, meanwhile speaking kindly to the animal. I first hitch the traces, then the hold-backs, and while the colt remains tied I push the cart up gently, and then pull it back again. This is repeated two or three times, and then the shafts are brought first against one side, then the other. Unfastening the rope, I turn the colt around, and lead it off, meanwhile standing on the near side, with the lead rope in the left hand, and the lines in the right, the latter resting on the shaft to steady it.

When the colt will go so that it will drive off when the command is given, exercise it for not more than two hours during the first few days that it is hitched. I never break a colt to drive with a loose line, but I train him to be a fast walker, a stylish mover, and a well-mannered horse, which will very much enhance his value. My training along this line of amusement I owe to my father. I felt that I had been fully rewarded for my labor and pains, when the different judges of our agricultural fairs, held in Goderich and Dungannon, presented me with the first prize for best lady driver for four years in succession, at each place. (MISS) ANNIE W. GREEN, Huron Co., Ont.

Remedy for Tail Switching.

Editor "The Farmer's Advocate":

I noticed in your last week's issue someone asking a remedy for tail-switching. I have found the following method to bring good results: Take two straps, about one inch wide, that will reach from the crupper to the breeching. Have loops made in both ends of these straps, so that the crupper can run through one end; the other end is for the breeching to be slipped through (the latter loop should be large enough to permit the strap to slide on the breeching easily). Have two small straps, with buckles attached; sew one small strap on each of the larger ones crosswise, about six inches from the top of the loop through which the crupper will run. Place one on each side of the mare, and buckle the small straps around the bone of her tail, under the hair. With this appliance, she can move her tail, but not far enough to allow her to catch the line.

Seeing that the mare is a young one, and that, therefore, the habit likely won't be of long standing if the above appliance will be put to use for a



An Educated Driving Horse.

few weeks, it will save her from the evil results of that habit.

Another method that may prove effective for this habit is to tie up the tail, and put a seven-pound weight in the inside of the hair. This extra weight keeps the animal from switching the tail so easily. There are some other methods, but not so humane as the above. Docking would not secure the desired effect.

Brant Co., Ont. GEO. I. SUTHERLAND.

Unsatisfactory Syndicate Experience.

Editor "The Farmer's Advocate":

I have just read your editorial on stallion syndicates. You think that the evils of syndicating would be done away with by having several farmers form an organization, and then make a purchase. Well, that very thing was tried up here a few years ago, and I don't think any unscrupulous horse-owner ever did up a lot of farmers worse than we were done up, as the writer of this was one of the fleeced. This is the way it was done: When enough stock was subscribed, a meeting was called to choose a couple of the members to purchase a horse. One of the men chosen was this fall acting as expert judge at fall fairs, and the other—well, at the present time he is standing his trial in Manitoba on another horse fraud. Those two worthies went to a certain horse firm, and entered into a secret arrangement, which was that they should pay \$2,400 for a horse, and they were to reserve back \$200 in cash and \$100 in stock, for which they agreed to take a horse which was not worth much more than half what they paid for him. Unfortunately, we did not find them out in time to save ourselves, but we took their ill-gotten gains from them and let them go, instead of having them sent down for fraud. The horse proved to be a worthless animal, only leaving fifteen colts from eighty-five mares, and, after running him at a loss the second year, we accepted about one-quarter what he cost us, and no doubt he was used again and again to fleece the dollars out of other farmers. S. H.

[Note.—Exceptions to all rules. This case would seem to have been one of the unfortunate exceptions. Nevertheless, the syndicate, organized from within, not by a promoter from without, has been the means of introducing good horses into many districts. The experience indicates, however, that, no matter what the system, utmost vigilance should be exercised by every party to the contract. Let us have the experience of others.]

The thirty-second volume of the British Clydesdale Studbook, about to be issued, will be, we are promised, the largest ever published. What's the matter with the Clydesdale!

LIVE STOCK.

Holstein-Friesian Cattle.

By W. G. Ellis.

These are what are known on the Continent of Europe as North Holland cattle. But in Holland, as in the British Isles, there are many different types of the bovine race. We in America gave to these cattle a new name, Holstein-Friesian, which, although not correctly designating the land of their nativity, wards off confusion, and they are described by the Holstein-Friesian breeders of America as being large black-and-white, improved cattle, bred in North Holland and the neighboring provinces—and their descendants.

The first volume of the Netherland Herdbook for North Holland cattle gives the following information: "The pedigree of the Netherland (North Holland) cattle dates back farther than two thousand years. The form, proper to the breed, is owing entirely to climate, housing, feeding, tending, and manner of treatment, having remained the same for hundreds of years. Hence, the cattle have attained a distinct type, which, through inheritance, remains constant to itself."

This type has undergone a gradual change in America, chiefly owing to the fact that their rations here contain a larger proportion of rich, concentrated food than they are in the habit of receiving in their native land, the general quality of Holstein-Friesian milk product, as a consequence, being much improved. It is largely owing to this fact that the prejudices existing 20 years ago against these cattle are non-existent to-day.

The earliest knowledge of Holstein cattle being imported into America was about the year 1613, when a few were brought in by Dutch settlers. One hundred and eighty years later, The Holland Land Co. were known to have shipped to America eight head of Dutch cattle. For some reason, these animals did not do well. At different periods during the next seventy-five years small importations were made, but the importers, either through ill-luck or carelessness, made but little headway—so little, that in 1861 there was known to be but one pure-bred Holstein animal in America. That

same year, Winthrop W. Chenery, the first president of the American association of breeders of Holsteins, made an importation of a bull and four cows. A few years later, Hon. Garrett S. Miller made another importation, consisting of a bull and three cows. Others quickly fell in line, and in 1872 the first herdbook in America was printed, registering 56 bulls and 77 cows.

About ten years later the fame of these exceptional animals spread into Canada, and excited the attention of many of Ontario's prosperous farmers, who paid as high as \$700 for a Holstein-Friesian cow. A. C. Hallman, New Dundee; Wm. Shunk, Sherwood; R. S. Stevenson, Ancaster; R. Howse Crump, Masonville; H. Bollert, Cassel; D. E. Smith, Churchville; T. W. Charlton, St.

possessed with anticipations not likely to be realized under ordinary conditions; but as quantity of production and persistency of milking during long periods are well-known characteristics of this breed, he should probably anticipate a yield from a two-year-old, fairly well cared for, of from 5,000 to 6,000 pounds of milk in ten months, increasing each succeeding year, until, at five years old, he should expect from seven to nine thousand pounds. Of course, if he wishes to give them exceptional care, and feed very heavily, their yields may easily run from 11,000 pounds up. It is difficult to put a limit. For instance, in 1880 the cow Aggie made a record of 18,004 pounds of milk. Five years later, the owner of Aggie commenced a record of his cow Clothilde; extraordinary precautions were taken to remove all chance of doubt as to the accuracy of the record, and her record for the year was 26,021 pounds. However, the average breeder should be well satisfied if he can secure dairy animals which would give him an average of eight or nine thousand pounds in ten months, and he need have no doubt whatever of obtaining such yields from matured Holstein cattle generally.

The directing of public attention to the valuable dairy qualities of the Holstein breed during the nineties was accomplished by the conducting of public milk tests at fairs, and the publishing of privately-conducted performance results. Although these methods were good, the breeders required something different, consequently our Canadian Association, at their 1901 annual meeting, decided to adopt a system of registration of performance, to be known as the Record of Merit. Canadian



Beauty and Utility Combined: Canadian-bred.

George, were conspicuous among the early Canadian importers, and many of these pioneer importers still occupy positions in the front rank of Canadian Holstein-Friesian breeders.

The Holstein-Friesian Association of Canada issued their first herdbook in 1892, breeder A. C. Hallman securing the honor of registering the first bull and the first cow. This first volume contains the registration of 400 bulls and 714 cows. Since then, in the face of national prejudice, the black-and-white cattle have grown into strong favor, and to-day the records of the Canadian Holstein-Friesian Association stand out in marked contrast with those of other dairy breeds, for which we are indebted to the general excellent performance of Holstein-Friesian cows. It is a breed of dairy cattle among which it is hard to find culls.

The Holstein-Friesian breed excels in milk production, it is superior for veal production, and valuable for beef production. The calves are

registered animals, entered for a record test, are properly classified according to age, the date of calving, date of test commencement, and date of test closing is noted. The total quantity of milk and butter-fat produced is recorded.

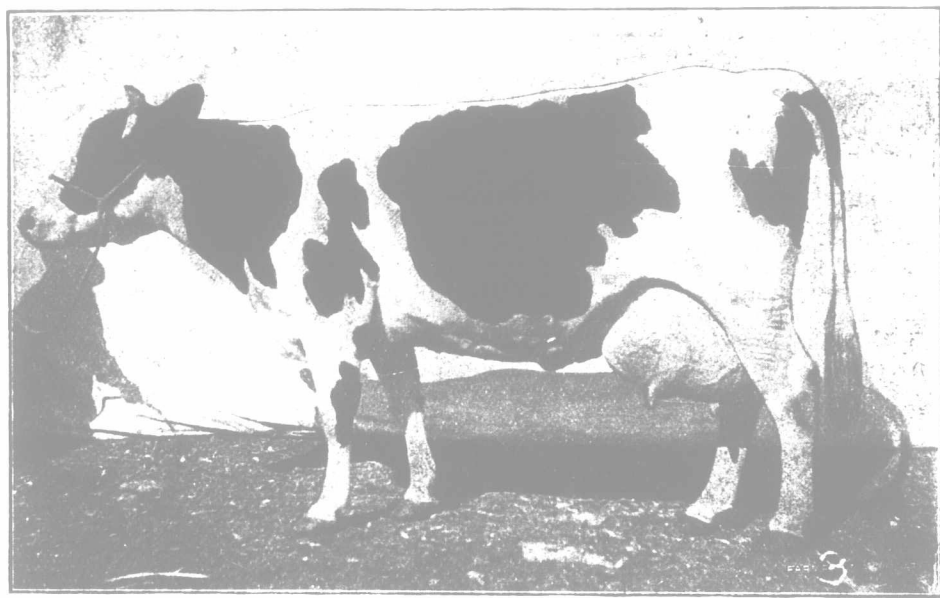
The test is conducted under the inspection of an appointee of the superintendent of an agricultural college or an experimental station. The inspector, along with each and every person assisting, including in every case the owner of the animal, is required to make a very sweeping affidavit before a commissioner, notary public, or justice of the peace. In case the result is considered abnormal, a 24-hour test is immediately made under the direction of a different inspector, the expense of which is borne by the Association.

At first these tests were confined to seven-day periods, but now a breeder may have conducted a seven, fourteen, or thirty-day, or other length of time, test. Also, he may have a successful seven-day animal given another seven-day test eight months after calving, in the same lactation period, providing her condition conforms to the rules governing the test.

It is gratifying to note that Canadian breeders generally are taking advantage of the Record of Merit test opportunities, and, although the standards set for the different ages are quite high, the Holstein-Friesian cow, under fair treatment, easily accomplishes the task.

In 1907 the Association decided to accept the proposition of the Dominion Department of Agriculture, and establish, in addition to its Record of Merit, based on official 7-day or 30-day tests, a Record of Performance the same as other dairy-breed societies have adopted, publishing thus in its herdbook yearly records of production made under officially supervised private tests. While the Association does not guarantee the reliability of these tests, still the conditions are such that fairly accurate records of production are insured. Up to the latter part of October, 325 Holstein cows had been entered for Record of Performance test, of which 51 had already qualified, by completing their yearly records and fulfilling the breeding conditions.

The American Holstein-Friesian Association has, from its overflowing exchequer, liberally encouraged official and authenticated tests, with the result that a very large number of high records of per-

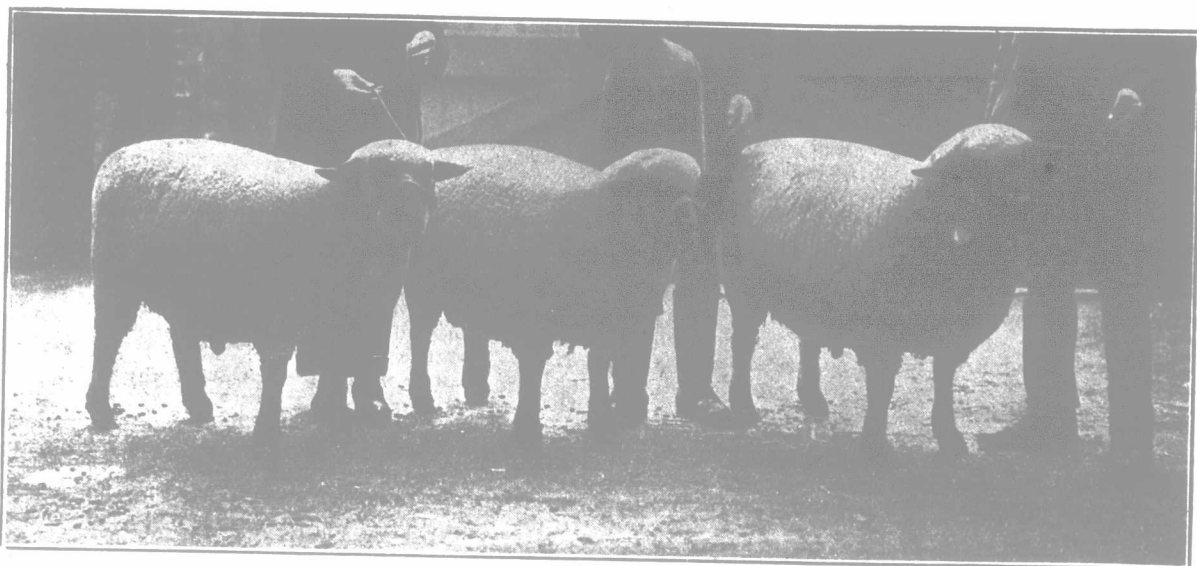


Colantha 4th's Johanna.

large at birth, and grow and fatten with great rapidity. The breeders in North Holland and West Friesland have always avoided in-and-inbreeding. Consequently, this breed has maintained a high standard of vital force, and does well in almost every climate, including that of Northern Russia. In Canada they are as hardy as our native cattle. Individuals of this breed naturally possess strong, vigorous constitutions. They are good feeders, being by no means choice in the quality of their food, consuming freely the roughage of our farms. Farmers appreciate this characteristic, as it is hard to realize on roughage, but easy to dispose of the more costly commercial grains.

The young breeder, in reading about some of the extraordinary performances of this breed, becomes

likely to be but as quan- of milking dur- characteristics of icipate a yield ed for, of from en months, in- at five years nine thousand give them ex- y, their yields up. It is diffi- e, in 1880 the 04 pounds of of Aggie com- le; extraordi- were taken to of doubt as to e record, and year was 26,- ver, the aver- be well satis- dairy animals im an average ousand pounds he need have of obtaining tured Holstein



Hampshire Down Yearling Wethers.

First in class, and grand champion pen, Smithfield Fat-stock Show, 1909. Bred and exhibited by James Flower.

public atten- e dairy quali- n breed during m- plished by public milk the publishing ed performance these methods eders required consequently ation, at their g, decided to registration of known as the t. Canadian record test, are the date of and date of anty of milk

formance have been registered. The Superintendent of Advanced Registry, in his report to the annual meeting, in June last, stated that the list of cows having produced in excess of 24 pounds butter-fat in seven days then numbered 34, while 41 full-aged cows appear in the prize-list of the seven-day division, the last of which has a fat production of 21.184 pounds. And in the 49 heifers appearing in the junior two-year-old class, all show a production in excess of 13.9 pounds butter-fat. Furthermore, the report shows that, during the past fiscal year, 2,351 animals tested under the Advanced Registry, of which one-half were heifers with first or second calves, produced, in seven consecutive days, an average of 395.2 pounds milk containing 13.681 pounds butter-fat; equivalent to 56.5 pounds, or 27 quarts of milk, and 16 pounds of the best commercial butter per week.

It is safe to say that no other breed of cattle has made a record nearly equal to this for so large or nearly so large a number of tested cows in one year; while, for a single cow's record in a year's test, that of Colantha 4th's Johanna, namely, 27,432 pounds milk, and 1,164.64 pounds butter, and that of Grace Payne Second's Homestead, of 35.55 pounds butter in seven days, and 134.43 pounds butter in 30 days, stand out in bold relief as unprecedented and unequalled.

Winter Steer-feeding.

For the past four years the Indiana Agricultural Experiment Station, at Lafayette, has conducted experiments in steer-feeding, and published the results in bulletins issued yearly. In bulletin 136, issued lately, the details are given of experiments carried on last winter, beginning Nov. 17th, and continuing for six months. The object of this work was to obtain additional information on the following problems in feeding beef cattle: "The Influence of Age on Economy and Profit in Fattening Steers in Winter"; "Corn Silage as a Roughage in Fattening Two-year-old Steers"; "Cottonseed Meal as a Supplement to Corn in Fattening Two-year-old Steers"; and, "Results of Short vs. Long Feeding Periods."

It is pointed out that conditions in Indiana last fall were so unfavorable that many feed-lots were allowed to remain empty during the winter. The summer of 1908 was one of prolonged drouth, resulting in thinner grass cattle, and poor yield and high price of corn. The experimenters, in common with other feeders, had to face these unfavorable conditions, and yet they are able to report that a reasonable profit was secured from all lots of cattle used in the experiments.

The manner of cattle-fattening—about the same as carried on by the ordinary Indiana feeder—differs very materially from that pursued by Canadian feeders, but, from the conclusions arrived at, helpful information may be gained by those in the business on this side of the line. All cattle were fed in open lots, 40 x 50 feet, with an open shed, 10 x 40 feet, on the west side of each lot. The sheds were kept well bedded, but the lots, the winter being mild and rainy, were muddy almost the whole time. Corn and meal were fed in troughs in the yard twice a day, roughage in racks. Differing from the practice of some feeders in the corn belt who keep grain continually before fattening cattle, only as much concentrated food was given as would be cleaned up in three quarters of an hour. Water could be taken at will.

The cattle consisted of calves, yearlings and two-year-olds, all high-grade Angus, of good quality.

The values placed upon the animals both at the beginning and end of the feeding period were what skilled marketmen from two leading firms estimated them to be worth at prevailing prices. Summary conclusions in full are as below:

SUMMARY.

The amount of feed consumed, daily gain, cost

of gain and profit per steer increased with the age of the cattle.

Two-year-old cattle, placed in the feed-lot in equal condition, and given a full feed, attain a higher finish during a six months' feeding than either yearlings or calves.

The margin between buying and selling prices of yearlings and two-year-old steers was \$2.25 per hundred; of calves, \$2.00.

An increase of 10c. per bush. in the price of corn required a corresponding increase in the selling price of two-year-olds, 41 cents per hundred; of yearlings, 42 cents per hundred; of calves, 40 cents per hundred.

An increase of 50 cents per hundred in the original cost of cattle required an increase of 29 cents per hundred in the selling price of calves, 31 cents in that of yearlings, and 35 cents in that of two-year-olds.

The amount of capital required to handle the same number of cattle increases with their age.

The amount of pork produced from the droppings increased with the age of the cattle.

The price received per bushel for corn was 78.1 cents when fed to calves, 78.6 cents when fed to yearlings, and 79.3 cents when fed to two-year-olds during the winter of 1908-9. The profit per head was \$6.73 on calves, \$10.84 on yearlings, and \$12.79 on two-year-olds from a six-months' feeding period.

The profit per dollar invested in cattle, hogs and feeds for six months was 12.5 cents in feeding calves, 13.7 cents in feeding yearlings, and 12.5 cents in feeding two-year-olds.

A ration of shelled corn, cottonseed meal and corn silage, without hay, proved to be the most efficient ration tested for fattening two-year-old steers, as shown by the rate of gain, cost of gain, and finish of the cattle.

The addition of corn silage to a ration of shelled corn, cottonseed meal and clover hay, resulted in a more rapid and cheaper gain, and a higher finish on the cattle.

Corn silage has a beneficial effect in causing cattle to shed their winter coat earlier than those receiving the same ration without the corn silage.

When corn silage is used, there is a smaller consumption of grain than where it is omitted from the ration.

The addition of cottonseed meal to a ration of shelled corn and clover hay resulted in a more rapid and cheaper gain, a higher finish, and a greater profit per steer.

The steers receiving cottonseed meal and corn silage fattened more rapidly, required less feed in producing a pound of gain, attained a higher finish, distributed the fat more evenly over the carcass, had a higher market value, and returned a greater profit per head than similar cattle fed without using these feeds.

The price received during the winter of 1908-9, per bushel of corn, fed in connection with clover hay, was 73.1 cents; in connection with clover hay and cottonseed meal, 79.3 cents; in connection with clover hay, cottonseed meal and corn silage, 85.8 cents; and in connection with cottonseed meal and corn silage, 96.7 cents.

"Short-fed" cattle consume a greater proportion of concentrates to roughage than "long-fed" cattle.

"Short-fed" cattle make a greater daily gain per head, at a smaller cost per hundred, than "long-fed" cattle.

A greater margin is necessary to insure a profit from a feeding period of 180 days than from one of 120 days.

The margin necessary to prevent loss on "short-fed" was \$1.41 per hundred; on "long-fed" cattle \$2.07 per hundred.

During the period when both lots of cattle were in the feed-lot there was a greater profit from feeding heavy, fleshy feeders than from feeding lighter and thinner cattle. When the lighter cattle were fed two months longer, the profit per head, and also on the investment, was practically the same.

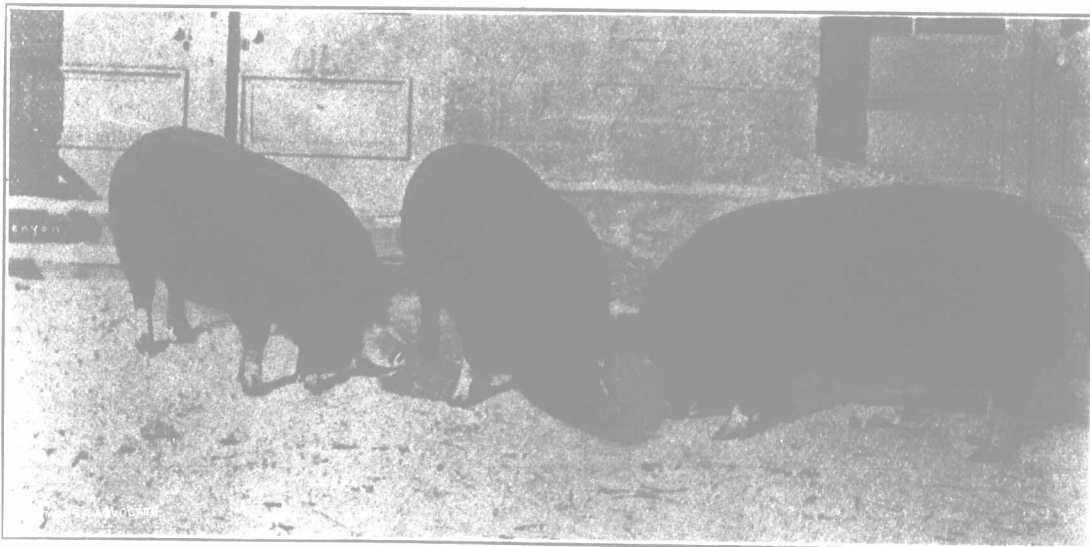
The corn fed to "short-fed" cattle had a feeding value of 80.3 cents per bushel, or 25 cents more than the market value when fed; that fed to the "long-fed" cattle, a value of 79.3 cents, or 20.5 cents more than market value when fed.

Special attention may be drawn to the fact that, while, as is pointed out in the bulletin, it is more profitable for the man who raises his own steers to fatten them before they reach the age of two years, yet, for the feeder who buys in his cattle, animals of greater age are often more profitable. Also, to the conclusions that the addition of cottonseed meal to a ration of shelled corn and clover hay resulted in a more rapid and cheaper gain, a high finish, and a greater profit per steer, and that when silage was further added to the ration the result was a still more rapid and economical gain and higher finish than before.

Sheep at Our Agricultural Colleges

Editor "The Farmer's Advocate":

The system of keeping a couple of breeds of sheep, as carried on at the Guelph and Macdonald Agricultural Colleges, is not, according to my way of thinking, either in the best interests of the students, nor of the sheep-breeding industry of Canada. What is the first impression the student, inexperienced in sheep-breeding, is likely to form when he enters the sheepfold at the College? Is it not that these are the principal breeds. I care not what breed or breeds he may find there, it is quite natural that he would expect they were the best. It has often been said it is next to impossible to keep a breeding flock of all the mutton breeds on one farm, with any degree of success. With this I heartily agree, but is there no other plan that could be worked out, so that the students would have an opportunity of studying the characteristics of each breed, so that they could go into a college judging competition, such as is held every year at the International (Chicago), upon at least an equal footing with the other college teams? This alone would be of great value to this banner sheep-breeding ground of North America. It would also be of manifold benefit to our college professors, who are most capable, if we only put the material in their hands to teach



Pure-bred Berkshires.

First prize in their class for three of one litter, first and second for sows and second for barrow six months and under nine, Ontario Winter Fair, Guelph, 1909. Exhibited by W. W. Brown-ridge, Ashgrove, Ont.

1907 the As- on decided to the proposi- of the Domin- epartment of ture, and es- in addition al 7-day or 30- same as other ublishing thus duction made ests. While ntee the re- nditions are oduction are October, 325 Record of Per- andy qualified, and fulfilling

association has, ly encouraged h the result eords of per-

from, besides the knowledge pertaining to sheep that each student should carry home with him.

Let me formulate a plan, crude though it may be, whereby this could be accomplished. We have nine distinct breeds in this Province. Suppose each College selects, say, five typical lambs of each breed, either ewes or wethers, each year, and keep them until they are yearlings off. This would mean that there would be a flock of 90 head during part of each year after the first. Representatives of each breed could then be used in the class-room for the students' benefit, also for the farmers' short course in judging, and should be of untold benefit to the many thousand excursionists who visit the College during the month of June. Right here I would say that, in order to make the best impression upon excursionists, the breeds should be kept separate during June, as all varieties of sheep grouped together present a mottled appearance, no matter how good the individuals. Ten acres of good pasture, fenced into nine lots, temporarily, would be sufficient for the occasion. After the yearlings are done with in the class-room, etc., they could be marketed as seemed best. If ewes were selected, they should be sold in time for mating; if wethers, they could be slaughtered at the Winter Fair, for comparison only, not for competition. Or, what would probably be better, would be to slaughter a few of each breed, and keep the remainder for the short judging course in January, and then send them to an abattoir, and have them reported upon. A report from the Colleges as to cost of maintenance, etc., should be of great value, as well; or the sheep could be slaughtered for the College dining-room, and thereby cultivate among the students an appetite for good, wholesome meat, which would be a good thing for the students, as well as for Ontario generally.

In concluding my rambling remarks on this very important subject, I might say I have no objection to lessening or increasing the number of head I have named, but I would like to have a free and friendly discussion upon the principle laid down to find out what farmers, students and professors really think is best.

Middlesex Co., Ont. R. H. HARDING.

Horses Versus Cattle.

Editor "The Farmer's Advocate":

The Brant Township Farmers' Club has again been resurrected, and, after a short sleep of the summer months, is going to awake a stronger club than ever. Last year we had a membership of 32, and all indications are that this year our membership will be greatly increased. We have had a number of very good meetings, consisting of debates and discussions on various subjects, and much valuable information has been passed on. The benefit derived from Farmers' Clubs is not only learning from others, but it is also an incentive towards self-education, which is in the end by far the most important. To know for yourself because you have thought it out to your own satisfaction, is of far more benefit to you than to have it told to you. This sort of education will bring independence, while to have things told fosters dependence. The reason that farmers are coming more to the front is because they are getting to be more of a thinking community. Former-

ly, their activity consisted mostly of physical hard labor; but now, when a little mental exercise is mixed with the labor, we find it much easier to get along. To know why we do certain things goes a great way to making work take on the form of play, and we will always find that the more mind-stuff we mix with our work, the easier it is performed; at least, it seems so, because we are interested in it. The more we know of the laws of nature, the more pleasure we derive from working in harmony with these laws.

Not only is our Club trying to help us in agricultural matters, but it has also taken up a lighter and perhaps just as important a branch as the agricultural, namely, that of entertainment and culture. We are trying to make our Club one of all-round development, with special stress, however, on agriculture. A good farmer should be developed on physical, intellectual and moral lines, and, of course, on spiritual lines, too, but we have not yet seen fit to incorporate this feature.

The annual meeting of our Club was held on the evening of November 11th, and a very pleasant time was passed. The meeting was enlivened by several solos and instrumental duets, and everybody pronounced it a splendid success. After the auditor's report and the minutes of the last meeting were adopted, the previous officers were again elected. The balance of the evening was spent listening to a debate on the subject, "Resolved, that raising horses is more desirable than raising cattle."

The debate was well contested, and some very good points were presented on both sides, but many of them lost much of their value because of imperfect presentation. The points on the affirmative could be briefly summed up as follows:

1. The feed that we raise for horses is easier on the land than what we raise for cattle.
2. Horses are a necessity for farm work.
3. More pleasure can be derived from raising horses than from raising cattle.
4. There is more recreation in preparing and training a horse for market than for preparing a steer. One is a pleasure, while the other is work.
5. There is far more heavy labor in raising food for cattle than there is in raising food for horses.

6. Cattle require the grain to be ground, while horses do not. This requires, first, the time, and also the charge for chopping.

7. Dairying perhaps pays better than raising horses, but it requires a great deal more labor.

8. High prices of individual horses cannot be touched by prices of cattle.

9. Horses show more life than cattle, and are, therefore, more fascinating.

On the negative side, the following points were scored:

1. Statistics show that there are a great many more cattle raised than horses, which should go a long way to prove that cattle pay better than horses.

2. When a steer is fit for the market there is always a ready sale, but a horse is not so easily sold.

3. In breeding horses, the colt is the only object; while, with cattle the main object is milk, and the calf is secondary, and may be regarded as clear profit.

4. The horse is subject to more serious ailments than the cow.

5. A horse with a serious accident, such as a broken leg, is only worth his hide, while a cow is always worth her value as beef.

6. It requires a great deal more care to raise a colt than to raise a calf.

7. Cattle can be wintered over more cheaply than horses.

8. The good old ox team has never been known to balk; this cannot be said of the horse.

9. The horse that produces the high prices is so little thought of in many colleges that they have no place on the curriculum.

10. More colts die than calves, and,

11. Because colts are more valuable than calves, we lose more in such event by raising colts than by raising calves.

12. The country makes more money exporting cattle and dairy produce than exporting horses.

13. The average price of horses sold in Ontario during a certain year brought 10 per cent. profit over their average valuation before they were sold, while the average price of cattle sold in Ontario during the same year brought 39 per cent. profit over the average valuation before they were sold.

Affirmative points criticised by negative side:

1. Horses are not a necessity. Oxen can do all farm work. Horses are becoming obsolete. The automobile, traction engine and flying machines are taking their place.

2. It was pointed out that just as much pleasure can be derived in caring for cattle as for horses.

3. The horses that produce the high prices are race-horses, and these horses have the tendency of drawing humanity downwards, while cattle build humanity up.

Negative points criticised by affirmative side:

1. Although cattle can be used for work, they are too clumsy and unsatisfactory.

The decision of the judges was in favor of the cattle. At our next meeting we will discuss "The most important improvement I intend to make during the coming year."

Bruce Co., Ont. A. E. WAHN, Sec.-Treas.

THE FARM.

Countries that Grow Clover for Seed.

What countries besides Canada and the United States grow clover for seed purposes? Is it grown successfully in any of the countries of South America, or Europe, and, also, is it grown to any extent in Australia? Also, can you tell me, in order of merit, which produces the most alsike-clover seed? What I wish to know, if I can get the information, is what countries besides Canada and the United States grow alsike-clover seed; that is, harvest it, and sell the seed? And I presume all countries that produce alsike-clover seed will likewise produce profitably all other kinds of clover seed. W. D.

Red clover for seed purposes is grown to a limited extent in almost all countries having a temperate climate. It is grown in quantity for commerce in Canada, the United States, Great Britain, France, Germany, Denmark, Sweden, Austria-Hungary, Russia, northern Italy, Switzerland, Chili in South America, New Zealand and Australia. The quantity of red clover grown in Australia for seed is as yet not extensive. Only in exceptional years do they have red clover seed for export.

Alsike clover is used to a greater or less extent as a fodder plant, and is also harvested for seed in practically all countries with a temperate climate. The principal countries which produce alsike clover seed in quantity for commerce are Canada, the United States, France, Germany, Great Britain, Austria-Hungary, Scandinavia, Russia, Switzerland, and northern Italy. Until recent years, the Toronto market was commonly said to control the world's prices for alsike clover seed. The Chicago market is now scarcely second to that of Toronto, except in the matter of the quality of the seed. Canadian-grown alsike and red clover seeds are free from dodder, because of which they command a premium in European markets. I learned in Hamburg, Germany, which is one of the largest distributing centers in the world for grass and clover seeds, that, when compared with the quantity of alsike seed from America in which the dealers do not make a sharp differentiation between Canada and the United States, the amount of alsike seed available from any one other country was inconsiderable.

Ottawa. GEO. H. CLARK,
Seed Commissioner.

"The Farmer's Advocate" is a welcome visitor, eagerly read by old and young. I think, if the suggestions you and your correspondents advocate were put into practice, Ontario might make a better showing. We are not producing what we might or should do. Several reasons could be given. JAMES GREEN.

Wellington Co., Ont.



Devon Steer, Favorite.

First in class, and champion Devon, Smithfield, 1909. Exhibited by His Majesty the King.

THE DAIRY.

Maine Dairy and Breeding Problems.

THE CO-OPERATIVE BREEDERS' ASSOCIATIONS.

Touching Breeders' Associations, the testimony of Leon S. Merrill, State Dairy Instructor, addressing the Maine Dairymen's Association early last month, was to the effect that members had already so improved their stock that the people of the State had begun to sit up and take notice, and the supply of well-bred animals could not keep up with the demand. A step in the right direction here is the refusal to sell or interchange unworthy males, and a statement to that effect was received with applause by the convention.

EDUCATION OF PRODUCERS AND CONSUMERS.

From the observations of Prof. J. O. Jordan, Milk Inspector, of Boston, temperature and bacterial content of market milk are controlled by legislation. Thorough cleansing and sterilization of packages at a central point is the rule, and prohibition of the sale of loose milk is coming in 1910.

That producer, dealer and consumer needed education that should teach cleanly and sanitary methods of producing and handling cream and milk was forcefully brought home to the audience in an illustrated lecture by Prof. I. C. Weld, U. S. Department of Agriculture. Some of the slides shown were familiar to many: the sediment in the bottom of the bottle, the hair in the milk, the flies walking over the utensils or the dust collected on them; the one-can milk-vendor, with the bare-foot, unkempt boy as assistant, that picks up a little summer trade where laws are lax; cans sitting near fish and oil in the grocery; the array of bottles half-filled, some sweet, some sour, sitting in the pantry window—all testified to the need of enlightenment.

The creamerymen in Maine are on the right track in demanding milk from tuberculin-tested herds, with sanitary environment. A better price is paid for such product by some of the creameries, and the creamerymen would be glad for the State Board of Health to dictate officially in the matter.

The fact, advanced by E. L. Bradford, the manager of the Turner Centre Creamery, that over 200 tons of butter were imported into Maine from Western States and Canada, to be used by dairymen, because they could not afford to use their own product, showed another phase of the dairy industry.

BUTTERMAKING AND MARKETING.

Professor P. A. Campbell, University of Maine, Chair of Animal Industry, delivered an able address upon buttermaking. Perhaps, as important points as any were the use of a starter which would tend to produce butter of a uniform flavor, and packing attractively. The pound package, bearing the maker's stamp, parchment-wrapped, with fold underneath, slipped in paper cartons having the trade-mark of the maker printed thereon, was, he thought, the ideal way of marketing the prints.

SOME CORN YIELDS.

The heavy yields of corn reported from a few sections—600 bushels from a little over three acres, grown by Dr. H. M. Moulton, Cumberland Centre, and 6,325 pounds, raised by Dr. G. M. Twitchell, Auburn, on his best acre of flint corn—could be duplicated by any, Prof. Hurd thought.

NEW IDEA IN BREEDING: BREEDING FROM KNOWN PRODUCERS.

The new idea in breeding, the use of males known to get producers, was the prominent feature of a paper read by Dr. C. D. Woods, Director of the Maine Experiment Station, and prepared at his request by Dr. Raymond Pearl, Biologist at the Experiment Station. In the experiments at the Station, breeding from hens in advanced registry had given progeny with no better performance qualities than those not in this registry; in fact, not quite so good. This had started breeding off on another tack. Considering this high-producing power as only one factor, males which had a certain number of daughters in advanced registry were used as breeders, and indications at the present time pointed strongly to successful issue. Dairy experience seemed to confirm the new idea, in so far as data from its limited application could be learned. The whole idea was to an extent in embryo, but if the Dairymen's Association desired it, and would raise funds to maintain it, scientific investigation would be started by the Experiment Station. Prof. Sanborn, of Gilmanton, N. H., concurred in the ideas advanced by Dr. Pearl. His idea was to cling to tested males and females, and study blood lines for prepotency. He expected as much from the feeder's as from the breeder's art.

At the annual business meeting, W. G. Hunton, Readfield, was elected president; L. E. McIntire, Waterville, vice-president; Leon S. Merrill, Solon,

Live Stock.	Per cent. number compared with 1908.	Per cent. of standard condition.
Horses	101.75	98.58
Milch cows	98.56	97.92
Other horned cattle.....	92.80	97.70
Sheep	95.43	98.73
Swine.....	89.02	98.35

Rate of Seeding Alfalfa.

Southern Alberta seems rather far afield for most of our readers to go in quest of alfalfa information, but an experiment conducted on the Dominion Branch Experimental Farm at Lethbridge is worth noting. The experiment, which seems to have been on irrigated land, was to compare different rates of seeding alfalfa. While unusual conditions reduced the advantage commonly to be expected from thick seeding, still, the difference in yields, as indicated by the test, are quite sufficiently marked to point to the advisability of sowing not less than 20 pounds of seed per acre. Following is the statement, as announced by Superintendent W. H. Fairfield:

On account of not having any old land, it was not thought advisable to plant a very large acreage of alfalfa in the season of 1908, but in the latter part of May of that year a few acres were sown. One of the experiments was to determine the best quantity of seed to sow per acre. The following table gives the results obtained during the past season. It would be only fair to mention that an exceptionally fine stand was obtained. Just after the seed was sown, very timely rains came, and practically every seed grew, a condition that cannot always be relied upon. This should be borne in mind in studying the results:

Amount of seed.	1st Cutting June 24th.	2nd Cutting Aug. 4th.	3rd Cutting Sept. 13th.	Total yield for season.
Lbs. Tons	Lbs. Tons	Lbs. Tons	Lbs. Tons	Lbs. Tons
5 1	1,840 2	1,000 1	220 5	1,060 6
10 2	200 2	1,280 1	1,040 6	520 6
15 2	680 2	1,480 1	1,180 6	1,340 6
20 2	200 2	1,680 1	1,220 6	1,100 6
25 2	0 2	1,400 1	1,280 6	680 6
30 2	280 2	1,520 1	1,200 6	1,000 6

The second cutting was not cured quite as dry as it might have been before it was hauled to the barn, consequently the yield on the second cutting for all of the plots is a trifle high. As mentioned above, an extremely good stand was obtained on account of the rains coming when they did and the seed-bed being in such an ideal condition. Under ordinary circumstances, such conditions cannot be relied upon, and so five or ten pounds of seed, as a rule, do not give as good a stand as was here obtained. Observation and experience in the district would indicate that 20 pounds of seed on irrigated land is about the right amount to sow."

Hard vs. Soft Maples: Planting, Etc.

I have to put out six maple trees on my new lot, and I would like the following questions answered. The soil is real old clay: Which are the surest to live in low clay, hard or soft maple? What is best time to set them out? Can it be done at all in the fall? What is the largest size it is considered safe to move? Should anything be put in the ground as a fertilizer? What soil should I take them off? How much is it necessary to cut branches down if a good large root is taken? What I must have is some good shade in as quick a time as possible.

The most important difference between hard and soft maple as shade trees is that the hard maple, although slower in maturing, makes a much more durable and permanent tree, whereas the soft maple is more likely to be broken by storms. Either of them will thrive fairly well upon good clay loam, if it is not too stiff a clay. If the land is particularly heavy, I would recommend American elm, rather than maples. The best time to transplant trees is early in the spring, as soon as the ground can be conveniently worked. It might be done in the fall, but there is always more or less danger of losing trees transplanted at this time. The most satisfactory size of tree for transplanting is one from an inch to an inch and a half in diameter. The tops should be cut back more or less severely to correspond with the amount of root left when the trees are dug up. It is usually best to head them back to about five or six feet in height. I would not recommend putting fertilizer of any kind in the hole where the tree is to be placed, unless it has been thoroughly mixed with the soil some time previous to planting. A good plan is to spread a mulch of good stable manure on top of the ground after the tree has been planted, to act as a mulch and to retain soil moisture, which enables the trees to strike root readily.

H. L. HUTT.
O. A. C., Guelph.

Dominion Crops for 1909.

The fiscal estimates of production and value of the field crops, and the per-cent. number on hand, and conditions of live stock in Canada have been given out by the Census and Statistics Office at Ottawa.

The estimates are based on the reports of a large staff of correspondents in every Province of the Dominion. From the Northwest Provinces, in addition to the regular correspondents, the office received reports from over 1,000 postmasters.

An area of 30,065,556 acres of field crops has yielded a harvest which, computed at local market prices, has a value of \$532,992,100, as compared with \$432,534,000 from 27,505,663 acres last year. The details of area, yield and value for each kind of crop are shown in the following table:

	Area 1909 acres.	Yield 1909 bush.	Value 1909 \$
Fall wheat ...	662,100	16,095,000	15,842,000
Spring wheat. 7,088,300	150,649,000	125,478,000	
Oats	9,302,600	353,466,000	122,390,000
Barley	1,864,900	55,398,000	25,434,000
Rye	91,300	1,715,000	1,254,000
Peas	395,300	8,145,000	7,222,000
Buckwheat ...	282,440	7,806,000	4,554,000
Mixed grains. 582,100	19,391,000	10,216,000	
Flax	138,471	2,213,000	2,781,000
Beans	55,970	1,324,600	1,881,400
Corn, husk'g	352,570	19,258,000	12,760,000
Potatoes	513,508	99,087,200	36,399,000
Turnips and other roots. 248,047	107,724,600	18,197,500	
		Tons.	
Hay & clover 8,210,300	11,877,100	132,287,700	
Fodder corn... 269,650	2,779,500	15,115,500	
Sugar beets... 10,000	86,000	500,000	

The principal grain crops of the country are wheat, oats and barley, which this year aggregate in area 18,617,900 acres, and in value \$263,710,000, against 16,297,100 acres and \$209,070,000 in 1908. Hay and clover from 8,210,300 acres have a value of \$132,287,700, against 8,210,300 acres and \$121,884,000 in 1908. Rye, peas, buckwheat, mixed grains and flax, grown on 1,487,311 acres, have a value of \$26,707,000, as compared with 1,525,700 acres and \$23,044,000 in 1908.

The hoed and cultivated crops of beans, potatoes, turnips and other roots, corn and sugar beets, grown on 1,449,745 acres, have a value of \$84,852,500, as compared with 1,471,913 acres and \$78,535,000 last year. Fall wheat, with a yield of 24.31 bushels per acre, shows a value of \$23.93 per acre, as against 24.40 bushels and \$21.10 in 1908. Spring wheat, with 21.25 bushels, shows \$17.70, against 16 bushels and \$12.84 in 1908. The averages for both crops are 21.51 bushels and \$18.23 per acre, against 17 bushels and \$13.80 per acre in 1908. The total value of the wheat harvest in the Northwest Provinces is \$121,560,000, and in the rest of the Dominion \$19,760,000, as compared with \$72,424,000 and \$18,804,000 last year. For the other crops of the Dominion, oats show averages of 38 bushels and \$13.16 per acre, against 31.64 bushels and \$12.15; barley, 29.71 bushels and \$13.61, against 26.79 bushels and \$12.23; rye, 18.78 bushels and \$13.73, against 17.05 bushels and \$12.57; peas, 20.71 bushels and \$18.36, against 17.09 bushels, and \$14.46; buckwheat, 27.64 bushels and \$16.12, against 24.55 bushels and \$14.47; mixed grains, 33.31 bushels and \$18.75, against 32.73 bushels and \$17.43; flax, 15.98 bushels and \$19.94, against 10.76 bushels and \$10.46; beans, 23.67 bushels and \$33.61, against 27 bushels and \$33.08; corn for husking, 54.62 bushels and \$36.19, against 62.45 bushels and \$32.32; potatoes, 192.96 bushels and \$70.88, against 132 bushels and \$63.21; turnips and other roots, 434.29 bushels and \$73.36, against 373 bushels and \$64.58; hay, 1.41 tons and \$16.11, against 1.39 tons and \$14.84; fodder corn, 10.30 tons and \$56.06, against 11.27 tons and \$45.35; and sugar beets, 8.60 tons and \$50, against 10.07 tons and \$53.52 per acre.

The value of all field crops in Prince Edward Island is \$9,213,900; in Nova Scotia, \$22,319,300; in New Brunswick, \$18,150,900; in Quebec, \$90,071,000; in Ontario, \$200,398,000; in Manitoba, \$74,420,500; in Saskatchewan, \$97,677,500; and in Alberta, \$20,741,000. In 1908, the value of the crops in Prince Edward Island was \$9,408,000; in Nova Scotia, \$20,083,000; in New Brunswick, \$18,042,000; in Quebec, \$80,896,000; in Ontario, \$185,308,000; in Manitoba, \$66,660,000; in Saskatchewan, \$37,614,000, and in Alberta, \$14,522,000.

The condition of the new crop of fall wheat this year was 93.33 of a standard, as compared with 75 per cent. last year. In Alberta there is an increase of 21 per cent. of fall-wheat seeding, and in Ontario an increase of nine per cent. over the area sown last year.

The per-cent. number of live stock on hand this fall, compared with last year, and the per cent. of standard condition, are shown in the following table.

H. CLARKE,
Commissioner.

FOUNDED 1866

more serious ailment, such as a cold, while a cow is never known of the horse. The high prices is colleges that they are valuable than at by raising colts

the money exporting exporting horses. Horses sold in Ontario 10 per cent. before they of cattle sold in 39 per cent. before they

negative side: Oxen can do becoming obsolete and flying machines as much pleasure for cattle as for

the high prices have the tendency to, while cattle

affirmative side: For work, they are in favor of the will discuss "The intend to make

HN, Sec-Treas

M.

Clover for

and the United purposes? Is it countries of South is it grown to any you tell me. in the most alskemow, if I can get besides Canada alskiclover seed? And I prealskiclover seed all other kinds of W. D.

is grown to a countries having a quantity for d States, Great Denmark, Sweden, n Italy, Switzer- New Zealand and clover grown in extensive. Only e red clover seed

ter or less extent harvested for seed a temperate climate which produce al commerce are France, Germany, Scandinavia, Rus- Italy. Until re- t was commonly e for alskiclover scarcely second the matter of the crown alskiclover, because of um in European Germany, which centers in the beds, that, when alskiclover seed from do not make a Canada and the alskiclover seed available inconsiderable.

H. CLARKE,
Commissioner.

a welcome visitor. I think, if the spondents advo- rario might make producing what we reasons could be AMES GREEN

secretary; Rutillus Alden, Winthrop, treasurer; W. K. Hamlin, S. Waterford, trustee. Mr. Alden was also chosen on the staff of the Experiment Station council.

A committee was chosen to take Dr. Woods' suggestions relative to breeding under advisement. F. S. Adams, J. D. McEdward and R. W. Redman were appointed a committee to push vigorously the revision of the tariff on cream, with a view to making it consistent with that on dairy butter. Other moves had to do with broadening the society's scope of usefulness.

The exhibit of butter was a fine one, and was placed on tables where it could be seen and tested after the awards were made. Orin Bent, of Boston, was the expert judge on both cheese and butter. The highest scores were, 96½ on butter, and 98 on cheese. Prof. Weld judged the milk and cream; 87 dairymen submitted samples, and the 348 bottles made the largest collection of these commodities this country has ever seen.

Nearly 500 ears of corn were shown, the flint variety predominating. Dr. G. M. Twitchell had best full acre, the weight in ears being 6,325 pounds.

Maine.

Ice Houses.

No doubt many farmers who would be very glad to have a store of ice for summer use, and who would not begrudge the labor or slight expense involved, are deterred from making a beginning by an idea that it is a very difficult matter to keep ice; that to do so requires special knowledge and skill. That is a great mistake. The process is exceedingly simple. Good results are dependent upon three very easily understood principles.

The first is drainage. The ground underneath the ice, if not naturally dry, should be made so by drainage. In addition, it is well to raise it a few inches by a layer of cinders, stones, or other porous material through which the water may soak freely.

The second principle is ventilation. Not of the bottom or sides of the ice-block—that would be ruinous—but of the air-space above. Without ventilation, the enclosed air under the roof becomes very warm, as everyone knows; and there is another condition which is relieved by ventilation, which works more damage than does heat, and that is dampness. No one can dry ice, of course, by ventilation, but the sawdust covering should be kept as dry as possible. The drier it is, the better a non-conductor it is.

The third and main principle is insulation. To secure this, there is nothing better than sawdust. A foot thickness of it on bottom, top and four sides is sufficient. The fresher and drier it is, the better. If sawdust cannot be procured, cut straw or hay will answer very well. There needs to be, however, a double thickness of it to give as good results as sawdust. Two feet on all sides, is the rule.

A fine, costly building is not necessary. Any kind of a structure in which are observed the three above-mentioned principles will serve the purpose; that is, it will keep ice.

J. A. Ruddick, Dominion Dairy Commissioner, than whom there is no better authority anywhere, recommends a building with sills—set on short posts—plates, and 2 x 6 inch studding between, the inside boarding to be of rough inch lumber, the outside of lumber matched and dressed. This makes a satisfactory and very presentable building. If it is thought desirable to save expense, and appearance is not much considered, the outside boarding may, with scarcely any loss of efficiency, be dispensed with.

A description of an ice-house which was erected by a member of our staff over twenty years ago, and which seems good for as much longer, may be useful. The site is in an old orchard, and, by the way, a shady situation is desirable. The inside measurement is ten feet square, and the height from ground to plate the same. Instead of studding, sills, and short posts for the frame, four cedar posts about thirteen feet long were set up in line on each side, being made firm at the lower end by being set, like fence posts, about three feet into the ground. Two-by-six-inch plates were fitted and nailed on top of these posts, the ends being crossed and bolted strongly together at the corners. A single lining of unplanned inch boards was put on inside the posts. For ventilation's sake, on the east, west and north sides, a space of two or three inches was left between the top of the boarding and the plates. A gable roof, with simple ventilator in center of the ridge, was placed over all. An ordinary door on hinges, with short flight of steps leading up to it, was put on the outside, between the two central posts on south side. Inside the door and the posts, short boards, like bin-boards, hold back the sawdust, and can be taken out as the pile of ice lowers.

As has been indicated, this ice-house has served its purpose very well, and any such building in which the frame appears outside the boarding, if of somewhat rustic appearance, can be made to look quite respectable if the posts are carefully chosen.

For a combined ice-house and milk-stand for large dairy-patrons' farms, our readers are referred to a description of an excellent structure of that kind on page 1923 of the Christmas Number of "The Farmer's Advocate." Almost any factory patron could afford a smaller and plainer structure built on the same principle.

Creameries Discard the Oil Test.

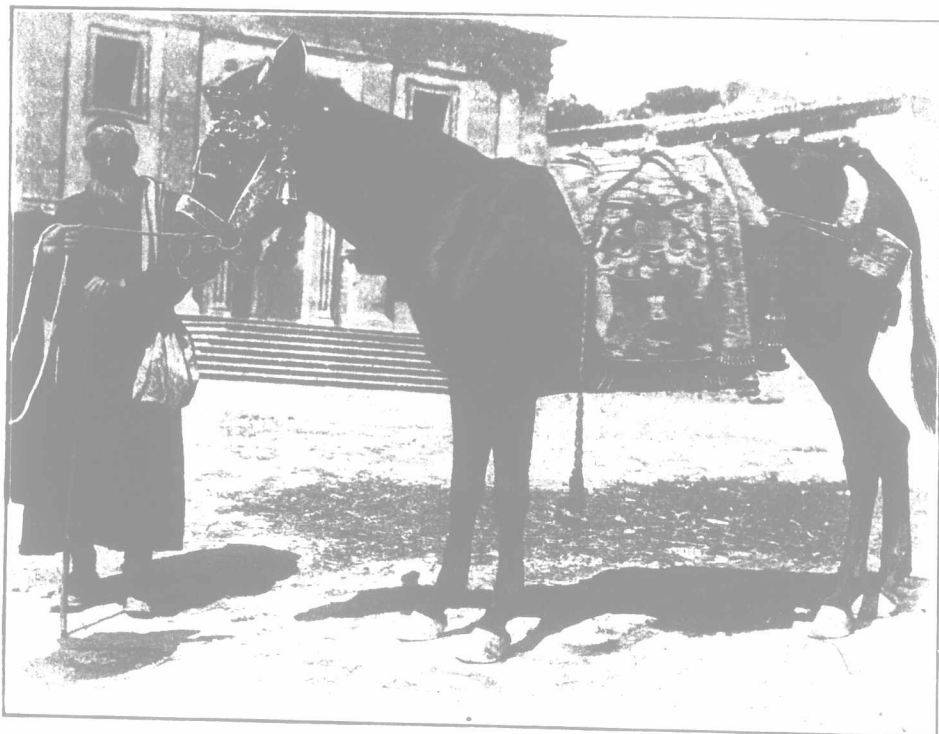
Four more Western Ontario creameries will change from the oil test to the Babcock test next season. A meeting of the officers and directors of the Alsfeldt, Saugeen Valley, Ayton and Egremont



A Family of Contadini.

creameries was held at Ayton, on November 4th, when it was decided to take up this question at the annual meeting of these creameries. The meetings were held on Dec. 14th, 15th, 16th and 17th, respectively, at which time the patrons voted in favor of the change. The following agreement was drawn up and signed by the presidents of the respective creameries:

"We, the officers, directors and patrons of the Alsfeldt, Saugeen Valley, Ayton and Egremont creameries, acting upon resolutions passed at our meetings, held on the 14th, 15th, 16th and 17th days of December, 1909, respectively, do hereby jointly agree to adopt the Babcock test as a basis of testing our patrons' cream, beginning with the



Italian Mule.

opening of the season of 1910. We solemnly pledge our business honor and integrity to carry out the above agreement."

Every good wish for continued prosperity of "The Farmer's Advocate" long may it continue to enjoy the confidence and gratitude of the farmers of Canada, whose advocate and helper it truly is. With the best wishes for a happy Christmas and a prosperous New Year to the entire staff of workers.

Chateauguay Co., Que.

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The Dairy Conventions.

Dairy conventions are the order of the day in Ontario this week and next. The Eastern Dairymen's Convention, at Belleville, will be on before this issue reaches its readers. The Western Ontario dairymen meet in St. Thomas on Wednesday and Thursday, January 12th and 13th. The patrons' session will be Wednesday afternoon. One feature of the convention programme will be, as usual, announcement of the results of the dairy-herd competition, for which, by the way, there have been ten applicants, not counting one who applied too late. Of the ten, only four are entered in the cheese-factory patrons' section, but there are an unprecedented number (six) in the creamery section. For the winter dairy exhibition, to be held in connection with the convention, there has been a very large entry, the number a week ago being already considerably in excess of the total last year. Butter shows an especially good increase, particularly the October makes which are already more than double the usual number.

GARDEN & ORCHARD.

Fruit-growing in Sicily.

A special correspondent of "The Farmer's Advocate," Chas. S. Williams, visited the Island of Sicily, off the south-west of Italy, in the Mediterranean, last season, before the tremendous earthquake that devastated the City of Messina, the remains of which were recently shaken by a seismic shock. Mr. Williams pictures it as a fertile and beautiful land, bedecked with flowers and clustered with the richest of fruits. Small wonder that the people love their home, despite the terrors of earthquake and volcano. We append his letter, illustrated from several original photographs:

Editor "The Farmer's Advocate":

The Canadian farmer, whether his were rolling stretches of prairie in the middle section, or the fertile valleys of the Eastern Provinces, to be tilled with our modern implements and labor-saving devices, would, I am certain, look askance at farming in Sicily. Yet, allowing for the lava-covered mountains, upheaved rocks older than history, and the scorching summer sun, this fascinating island exported seven billions of lemons last year, and produced oranges, grapes, mandarins, almonds, figs, olives, etc., in equally surprising quantities. For Sicily is not dependent on the tourist or the members of the family who have emigrated to America. Her three millions of people may be called truly agricultural. They are poor, but they work hard. Water, that prime essential, is to be had, but irrigation is only for the richer farmers, so much must be carted, by hand or by donkey, sometimes half a dozen miles from the village fountain, the natural center of native life in every Sicilian township; for, while grapes grow without water during the long summer droughts, lemons do not. So the public fountain becomes the center of news, and is to the Sicilian town what the club or "sewing circle" is with us. The lava Atna has thrown so lavishly over Eastern Sicily, makes retaining walls for miles of terraces covered with vineyards, and often is the peasant-farmer's house, as well as what he has left—his fertilizer. For quite wonderful powers rest in this brown pumice-stone-looking formation, which for two thousand years has, at intervals, poured out from the snow-covered peak of Mt. Atna, which dominates the whole island.

In the miles of vineyards which early October days see laden with the ripe fruit, is an unending interest. The vines are cut down to within three or four feet of the ground, that all the strength may go to the fruit. A dozen huge bunches of grapes to a vine, many of the bunches having each an hundred grapes, of a color unknown out-

ventions.

order of the day in the Eastern Dairy-ville, will be on before the Western Ontario Fair on Wednesday and 13th. The programme will be, as results of the dairy- by the way, there counting one who n, only four are en- patrons' section, but number (six) in the winter dairy exhibi- with the convention, entry, the number a liberally in excess of shows an especially the October makes, double the usual

RCHARD.

in Sicily.

"The Farmer's Ad- visited the Island of Sicily, in the Mediter- tremendous earth- ty of Messina, the shaken by a seismic it as a fertile and flowers and clus- s. Small wonder o, despite the ter- o. We append his original photo-

er his were rolling dle section, or the Provinces, to be ments and labor- tain, look askance owing for the lava- rocks older than er sun, this fasci- illions of lemons ges, grapes, man- etc., in equally Sicily is not de- members of the o America. Her called truly agri- they work hard, to be had, but ir- ation is only for e richer farmers, much must be rted, by hand or donkey, some- nes half a dozen les from the vil- ge fountain, the tural center of tive life in every ilian township; t, while grapes ow without wa- during the long mer drouths, ons do not. So e public fountain omes the center news, and is to e Sicilian town at the club or sewing circle" is h us. The lava na has thrown lavishly over stern Sicily. kes retaining ds for miles of ces covered h vineyards, and en is the peas- farmer's house, well as—what he left—his ferti- r. For quite won- an pumice-stone- thousand years from the snow- a dominates the

ch early October is an unending to within three all the strength huge bunches of bunches having or unknown out-

side Italy and France, with the rich greens of the leaves and the browns of the stones and earth, make artist's pictures on every side. For the vintage, the men, women and children of each farm and its neighborhood are organized to cut the grapes and make the wine. All is color, life and noise, for the Sicilian is not a quiet worker. From fifty to one hundred women, each with a half-bushel basket, heaped with the lovely grapes, on their heads, file along the walk, singing the songs of the country, to a huge room built for the purpose, where the men and boys, barefooted and barelegged, walk and sing in endless procession around the room, forming the human wine-press, which takes the last drop of juice from the grapes, and for which, as yet, no invention has improved upon.

Two days later the skins are returned to the ground, and, with leaf mould, enrich it for another year's growth; and the domestic animals, like those in this picture, are turned in to eat the grape-leaves, and help prepare the ground for the next season; for the goats and pigs together clear it of every leaf and weed.

I have often wondered what the results of a good Canadian plow would be in Sicily, on the people, as well as the land, for every bit of the plowing is done with the crudest spike of wood or iron, driven through a primitive joist-shaped, hand-hewed log, turning up a very meagre furrow.

But the universal implement with which the earth is turned over, prepared, and often planted with, is the common pick of Italy, which those of her sons emigrating to America continue to use there in the building of steam and trolley railways, better than those of any other race. This pick is often the plow, the spade, and the weeder, while next in utility is the broad, wooden hoe. Hand-hewn, rough, and apparently awkward to handle, it has a field all its own. With it, Aetna stone is forced into new terraces, which creep up a bare bit of mountain-side; and, as soon as built, earth is handed up with this same hoe, which is held there by the new wall, and each lot promptly produces something to repay the farmer for his time. At no season of the year is the earth idle in Sicily.

There are three gatherings of lemons annually, two of oranges and mandarins—the trees heavy with fruit and flowers at the same time.

February brings forth a wonderful carpet of wild flowers; the wealth of variety seems incredible, and with the almond blossoms the same month, it is as a bridal veil over the whole island. Then, indeed, the Sicilian farmer may forget some of his hardships, and revel in the beauty of his home-land and its scenery, and rejoice in its climate and fertility.

If his year has been prosperous, the family donkey is brought out, his gaily-decorated trappings adjusted, and the farm's products taken to market, always by three or four members of the family, often borrowing the high, two-wheeled Sicilian cart for the journey from some more prosperous neighbor. CHAS. A. WILLIAMS.

The Canadian Fruit Industry.

The above is the title of a paper read by W. A. Mackinnon, B. A., Dominion Trade Commissioner at Birmingham, at a meeting of the Royal Canadian Institute, held at Hotel Metropole, London, England, Tuesday, December 7th, 1909, Lord Strathcona in the chair.

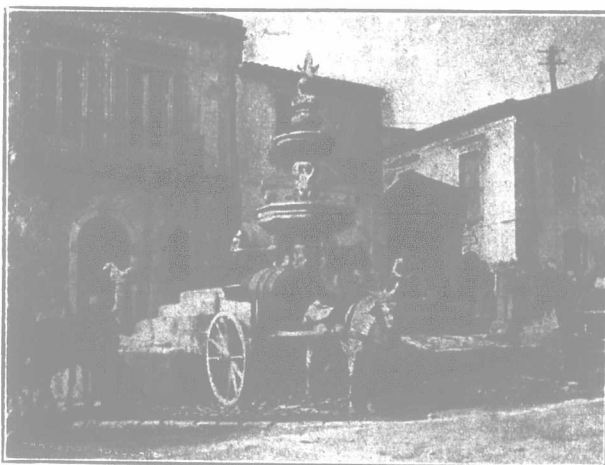
The topics dealt with in the paper are familiar to Canadian readers, and need only be mentioned in barest outline. The vast majority of people are engaged either in production or distribution; not, as a rule, in both. The modern Canadian fruit-grower is, however, an exception to this rule, for he must engage in both, and will, if successful, be master of both. Mention is made of the development of the export fruit trade of Ontario, and following close upon that, the growth of Nova Scotian fruit exports. The total value of green or ripe apples exported from Canada in the year ending March 31st, 1909, was \$4,823,645, Great Britain receiving practically the whole. Frauds in packing, and the appointment and work of inspectors in hindering and detecting these, are referred to. Government has aided considerably in securing better transportation facilities and in disseminating information by means of Experimental Farms, Illustration Stations, and Farmers' Institutes, also through spraying demonstrations.

A good word is said for the Canadian press. "The admirable service rendered by the press, more particularly by agricultural journals and those devoted to horticulture, is unequalled in any other country. Edited for the most part by men of practical experience and an agricultural-college training, printed on good paper, with excellent illustrations, these journals command the respect and attention of the interests they serve. Their broadening influence, and the practical help they afford by furnishing information, correcting errors, exposing or preventing frauds, reporting conventions, suggesting improved methods or supporting reforms, cannot be overestimated."

If asked, Where is fruit grown? the answer

would be, Nearly everywhere. Then follows mention of the special fruit districts of the country, the Niagara and Leamington districts, the Annapolis and Cornwallis valleys, and, in the far West, the Okanagan and the Kootenay sections. Added to these are nearly the whole north shores of Lakes Ontario and Erie, the Lake Huron and Georgian Bay districts, the Island of Montreal, the valley of the St. John, and Prince Edward Island, "The Garden of the Gulf," all becoming famous in fruit-growing.

An appreciative sketch of the season's work on a Canadian fruit farm follows, ending with this sentence: "And need I say more to commend the conditions, the activities, the fresh-air charm, the physical and mental wholesomeness of the fruit-growers' life?"



Village Fountain in Faormina.

Packing Frauds and Inspectors.

In an address by W. A. Mackinnon, Dominion Trade Commissioner, before the Royal Colonial Institute, of London, England, on the "Canadian Fruit Industry," to which we have referred elsewhere in this issue, there occurs a spicy passage on packing of barrelled apples, which we sub-join:

The packing is commonly done by men employed by apple-buyers or speculators, many of whom represent British firms, and operate with British capital. They begin work at the orchards, from which many of the early shipments are exported direct, and are later on engaged in warehouses, grading and re-packing fruit that has been



Sicilian Goat and Pig.

put up more or less loosely for storage. They are duly instructed to observe the amenities of the higher life, or at all events to keep within the limits of error allowed by law to the judgment of the ordinarily prudent man, and doubtless they begin their task with the best of resolutions, meaning well by the ultimate purchaser of their handiwork. But, just as the road to perdition is said to be neatly paved with good intentions, so the bottom of the barrel, which on sale will become the "face," is well and truly laid with fine, handsome fruit, evenly placed in narrowing circles of blushing red; hardly less attractive are the next two or three layers, also carefully placed by hand, wedging the first immovably. Then, alas! comes a falling-off; whether it be that a giddiness

caused by bending head and shoulders deep in the barrel induces loss of memory, or that an ardent discussion on high politics brings oblivion of common things, or merely that our packer is unable to retain the vision of that smiling "face" now hidden from view—whatever the cause, certain it is that he now becomes careless; basket after basket of uncertain quality is poured in, and only when the process of "tailing off" is reached does the memory return of that "No. 1" grade-mark, already pencilled on the "head." Then once more a couple of layers of the best are hand-placed—for might not some captious buyer demand to see the "tail"?—the barrel is pressed, nailed up, and ready for all comers. A fearful practice, you say, sign of commercial decadence and moral depravity—copied, surely, from the devious ways of the Red Man. True, though such things have been known, at rare intervals, even on the costers' barrows and in the shop-windows of this metropolis.

But I would not have you think that such methods are approved or even winked at by growers or dealers in Canada; on the contrary, both have strongly supported the Government in its campaign, educative at first, now punitive, to stamp out these frauds. Mr. McNeill, Chief of the Fruit Division at Ottawa, has an able staff of inspectors employed in detecting and prosecuting the offences of false marking and packing. The penalties have been gradually increased, and this (last) year the names of convicted packers have been published in a Government report. Some idea of the value and calibre of the inspectors may be gathered from the fact that, when not engaged in actual inspection, they are able to meet fruit-growers at orchard meetings, and in the winter at meetings of Farmers' Institutes, to discuss with them, not merely commercial problems, but those having to do with fruit culture in all its aspects. They give orchard demonstrations of spraying, of pruning and grafting, or, at other times, of packing apples in barrels and boxes, and always in the presence of assembled growers, than whom there are no keener critics. An inspector who did not thoroughly understand his work would have a most uncomfortable time, and would never have a second hearing.

History of Fruit-growing in the Annapolis Valley.—III.

By R. W. Starr.

Up to this time, 1860, nothing had been done to encourage the growing of apples for export to England. In that year was held the great International Exhibition, in London, and Nova Scotia was represented by many natural products, and

among them was a collection of ten or fifteen varieties of apples. These were well displayed, and received much attention and admiration.

During the next year inquiries were received from dealers in London, urging the consignment of apples to that market, but the freight rate by steam-boat was found to be prohibitory, and by sailing vessels was considered of too much risk, on account of the length of the voyage.

In the autumn of 1862, through the efforts of a few gentlemen in Halifax, a show of fruit and vegetables was held, for the purpose of making a selection to be sent to the Royal Horticulture Society Exhibition in London. This

show of fruit and vegetables made a great success, taking one silver and seven bronze medals, and received especial notice and praise from most of the leading papers. This success was the immediate cause of the formation of the Fruit-growers' Association and International Show Society of Nova Scotia, which was organized on March 3rd, 1863, and incorporated on the 10th of May, 1864.

This Association at once commenced holding annual exhibitions, and from them sending collections of fruit for "Show, Comparison, Nomenclature, and Report" to the Royal Horticulture Society, London; Massachusetts Horticultural Society, and American Pomological Society; also for exhibition to all the great shows in London, Paris, Birmingham, Philadelphia, Chicago,

Omaha, Buffalo, and the different Dominion exhibitions held in New Brunswick and Nova Scotia. These exhibits were successful in capturing a large number of gold, silver and bronze medals and diplomas. Thirteen, which were shown in a glass case at the World's Fair in Chicago, in 1893, and a number of others have been won since, bringing the number up to 19 or 20.

This work of the Association, by the annual exhibitions, continued for over 20 years, the large collections of fruit sent to foreign exhibitions, and the many public meetings held in various parts of the Province, and addressed by many of the largest and most successful fruit-growers, showing the farmers the advantages and profits to be derived from the careful cultivation of the old, and the best methods of planting new orchards, served to create a boom in orcharding, which is still continuing, especially in the County of King's. The census gives the acres of orchard and garden since 1871 as follows:

	1871	1881	1891	1901
	Acres.	Acres.	Acres.	Acres.
Annapolis	2,241	3,329	5,061	6,014
King's	2,916	5,179	8,481	12,944
Hants	1,105	1,960	2,256	3,089
Nova Scotia	13,614	21,624	30,036	32,814

And there is no doubt but that the census of 1911 will show a still greater percentage of increase in planting. In proof of this, we have a statement made by four of the largest nurserymen in the Valley, at the meeting of the Nova Scotia Fruit-growers' Association, on December 1st, that they were all sold out for spring delivery, and were importing largely to fill orders.

Now let us refer to the export trade in apples, and see what advance has been made. From 1860 to 1870 there was not much done beyond the supply of the local markets of the Maritime Provinces. A few small lots had been sent to London via mail steamship to Liverpool, and a considerable trade was being worked up in the export of Gravensteins to Boston, at good paying prices; but that market was afterwards shut by the Dingley tariff.

From 1870, the shipment of apples to London was rapidly increased; quite a number of small cargoes were sent by sailing vessels from local ports; some of these ships delivered the apples in good order, others turned out bad, owing to want of ventilation, and long voyages, with rough weather. This was soon found to be unprofitable. Several tramp steamers were loaded at Bay of Fundy ports, and arrangements were made with a line of steamships sailing from Boston to London to call at Halifax for part cargo of apples. But the trade has grown to much larger proportions, and the day of tramp steamers and borrowed Anchor liners is long passed. We have now a regular line sailing every ten days from Halifax to London, others to Liverpool and Glasgow.

This improved means of transport has stimulated and increased the export to England from 24,250 barrels, in 1880, to 125,121 in 1886; 177,500 in 1892; 500,000 in 1896; 536,267 in 1903; 651,465 in 1907; 675,463 in 1908, and for this year's crop it is estimated that from 750,000 to 800,000 will be available for export. Up to date of writing (Dec. 4th), 291,282 barrels have been shipped, and the various apple warehouses on the line of the Dominion Atlantic Railway are reported full to overflowing.

In addition to this, the local markets, which have been rapidly increasing, are largely supplied from this Valley, probably taking one-third of the average crop each year. Besides supplying our own towns, large quantities are sent to Newfoundland, to Prince Edward Island, and to New Brunswick, while, of late years, a few thousand barrels have been sent to South Africa, and some to the West Indies and Mexico.

The acreage of orchards is increasing very rapidly, not only in this Valley, but in several other counties. Lunenburg reported a surplus of 6,000 barrels for export last year; this year they estimate 10,000 of surplus. Pictou is coming up rapidly. Queen's, Shelburne and Yarmouth will supply themselves, and soon have a surplus. In fact, orcharding is increasing more or less all over the Province, and is making a success wherever the proper varieties and methods of cultivation are used.

Visit of Canadian Fruit-growers.

W. A. Mackinnon, Dominion Trade Commissioner at Birmingham, sends the following extract from a letter which he had just received from the Secretary of the National Fruit-growers' Federation: "I am instructed by the Council of the Federation to offer to Canadian fruit-growers a most cordial invitation to visit some of the chief fruit plantations of England. If this visit is arranged, and my Council sincerely hope it will be, they will feel greatly honored at this opportunity of welcoming Canadian fruit-growers."

The above followed a suggestion made by Mr. Mackinnon in one of his reports to the Department of Trade and Commerce, that Canadian fruit-growers ought to imitate the example of those

on the Continent, and visit the ports and markets of England. The President of the Federation, having the matter brought to his attention, himself proposed that an official invitation be sent, so that if such a party is organized, they should not only visit the markets, but one, at least, of the fruit-growing districts. It is to be hoped that advantage will be taken by our fruitmen of this courteous offer.

POULTRY.

Get the hens laying. There is money in winter eggs.

An evening feed of corn is a fine thing for cold weather. But use it sparingly towards spring.

Green-cut bone, in moderate quantity, is an astonishing egg-producer. Have it fresh and sweet, and do not feed to excess.

Laying hens need lime; more of it than they obtain in grain consumed. Crushed oyster-shell is cheap and good. Old plaster may also be used.

Those who think chickens do not require grit, should examine the crop contents of a bird just off the range. Gravel, coal cinders and hard stuff of all descriptions, shapes and sizes may be found, up to the dimensions of large grains of corn.

Variety in the grain ration pays well, but let the main reliance be on wheat-tailings, if available, but otherwise, good sound wheat. Notwithstanding the tempting price of this staple cereal, it is worth more in the form of eggs than as grain.

It is well to give the birds their morning feed at night, burying it deep in fresh, dry litter, renewed every two or three days, if the supply will admit. A flock of chickens are alarmingly disturbed by even the gentlest movement of litter during the day time, while they are on the floor.

Eye-opening opportunities for profit await the winter-egg producer within reach of cities who will take trouble to seek out and supply a strictly fancy trade in choicely-flavored, guaranteed fresh eggs. Eggs were thus sold last winter in Montreal as high as 75 cents and a dollar a dozen. Of course, the product was absolutely reliable, and a fastidious class of customers were supplied. The average citizen would not pay such prices, even for the finest hen fruit, though an increasing number of middle-class consumers are willing to pay a reasonable premium for a dependable article.

Profitable Poultry-keeping on the Farm.

Points from: Professor W. R. Graham's Address at the Ontario Winter Fair, Guelph, December 7th, 1909.

There is no fear of overproduction. In three years, the number of fowls kept in Ontario increased from nine to thirteen millions, and yet this year there has never been a glut of poultry on the Toronto market. In spite of increasing production, we have ceased to be an exporting country so far as eggs and poultry are concerned. It would be possible at present to sell Irish eggs in our markets at a profit.

There is no great difficulty in producing either eggs or chickens. Farmers have the best chance of anybody in this business. Yet we often hear farmers complain of how hard it is to get hens to lay. I will tell you straight what is the trouble with you farmers; you don't half feed your hens. Some, of course, will object, and talk about hens getting too fat to lay. That happens very seldom. If a hen is really overfat, hanging down behind, it is a pretty sure sign that she is a poor layer, and she may as well be put out of the way at once. There is scarcely any danger of a good hen, on free range, getting into that condition. The rule is, the more feed she gets, the more eggs she will lay.

There is no place like the farm for chickens. On poultry farms, where large flocks are kept, "slum" conditions exist. A chicken on free range, hatched in May, will be as good by October as one hatched a month earlier but kept in an enclosure, and will have cost but two-thirds as much. At Guelph, we aim to raise fowls under farm conditions.

One hundred chickens can be reared, either in brooders or with hens, in a colony house 6 x 8 ft., and 4 to 5 ft. high. When the cockerels reach the weight of three pounds, they may be sold, and the remaining fifty or so will have ample room until they are full-grown. It is understood, of course, that the house is merely for roosting and laying purposes; the chickens live outdoors.

On the College farm, one man cared for 2,500

chickens reared in this way. Food in self-feeders, and water, are constantly accessible. To produce one pound of chicken after this method costs 3.2 to 3.4 pounds of grain.

The past fall has been the best yet for pullet-laying. Forty-six pullets, hatched the first of April, had to date laid 1,118 eggs. Butter-milk-fed pullets laid best. Sour milk is better for fowls at any time than sweet.

In regard to cost of keeping fowls, he said that last year they had 25 White Wyandottes, which were fed all they wanted, and the feed for them cost 10 cents per head per month.

In answer to a question as to how combs can be kept from freezing, the reply was: If your house is really cold, keep fowls with rose combs, or cut the combs down. The combs of fowls injured to cold do not freeze easily, however, even in a temperature that would nip at once the combs of birds that had been kept warm.

THE FARM BULLETIN.

Prosperity in Essex.

The present season should be recognized as an opportune time for renewing the past season's exploits, so that we may ascertain what lines of industry have proven profitable, and also determining, as far as possible, those worthy of following during another season. No class of laborers will receive greater benefit from such a process than farmers. Too few ever think of taking stock. Note requires to be taken of those pursuits which have been losing investments, and steps pursued for their improvement or elimination.

That success crowns the efforts of the wise, careful, judicious, up-to-date farmer has again been clearly demonstrated by the record of farming during the past twelve months in Essex. The energetic, cautious, economic husbandman is jubilant over the returns for 1909. Pessimistic notes come from those who, through lack of energy, carelessness, slovenliness, or slipshod methods, have failed to secure what they consider to be sufficient remuneration for labor expended. That rapid progress in the direction of prosperity is being made by the farming community of Essex, is easily recognized. Indications of good times are in evidence, when comparing the present season with that of one year ago. Improvements have multiplied rapidly in that period. Many homes have been beautified; neat, comfortable, commodious houses erected, with a view to utility, substantiality and comfort, rather than size, style, or outward extravagances. Barns have been built or remodelled; in many cases reared upon cement-block foundations, affording ample opportunity for stable accommodation. Liberal applications of paint have not only added materially to the outward appearance of farm buildings, but also increases the powers of resistance against the ravages of physical elements.

Another striking manifestation of prosperity is witnessed in the large area which has been under-drained since crops were removed, and also in the huge piles of tile awaiting weather suitable for their burial. Leading farmers are recognizing the advisability of pushing forward more rapidly a system of drainage which will enable them to avoid in large measure the "lottery" aspect of corn-growing. Still another evidence of material progress is noted in the advanced price of farm property. Several properties have changed hands lately at prices which a few years ago would have been considered almost fabulous. John Hope, one of our most successful fruit-growers, disposed of his fifty acres for \$1,500, a sum far in advance of its appraised value five years ago. The main feature in bringing about a sale at such a price was an orchard of peach trees, 14 acres in extent, six years old, from which, in the past season, he realized the handsome sum of over \$800. Property along Lake Erie front is even much higher, \$7,000 being paid for a fifty-acre farm on Talbot street, while as much as \$200 per acre was refused for property in the neighborhood of choice peach farms. Extensive preparations are being made for an ample increase in the peach area of 1910. A Fox has over 8,000 young peach trees, suitable for transplanting in the spring.

In your December 23rd issue appears an article entitled "Corn-growing in Essex," containing certain statements which to many readers of "The Farmer's Advocate" may seem extravagant. For their benefit, I wish to substantiate what the writer has so forcefully presented. Corn-growing in Essex has not yet reached its highest stage of development. In fact, it has scarcely passed the initial stage. What shall be the condition when the final stage is reached, no sane man dare prophesy. By the use of better methods in cultivation, made possible by the most improved style of labor-saving machinery; application of knowledge communicated through the experience of others; in selection of varieties best suited to the soil and climate of our peninsula, a remarkable increase per acre may be the result. That 100 bushels per acre is quite common, is testified by numerous reports. Prof. Evans' estimate is much too small for Essex. J. S. Ainslie reports a large field yielding over 130

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ULLETIN.

Essex.

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bushels, while there are many ranging from 105 to 125 per acre.

The hog-raising industry has received a great uplift during the past month, which will have a tendency to increase the production, and establish beyond a doubt our claim to being the banner county in this line of farm product, as well as that of corn throughout the Province. Prices ranged from \$7.75 to \$8.15 per cwt. during December. Thousands of dollars were paid to farmers of Mersea and Gosfield during December for hogs delivered at stations on the C. M. and P. M. railways. David Coulter, 8th con. Mersea, is credited with making the largest shipment at one time, receiving, as his share of the plunder, about \$1,000. There are many different opinions as to the best breed of pigs for the market. Some choose the Tamworth, others the Jersey Reds, but Mr. Coulter still clings to the old Berkshire.

Beef cattle for local trade are very scarce, and animals are being slaughtered that are far from being in prime condition. Many farmers have not the shelter necessary for young stock, and the cold weather which has prevailed during the past three or four weeks is causing them to part with those for which accommodation cannot be found. Farmers often fail to recognize the fact that animals compelled to stand shivering in a cold wind for hours both night and day, not only require more fuel to keep up the animal heat, but also cannot lay on flesh as those which are comfortably housed.

A little judicious foresight would bring many a dollar into some men's pockets. Roads have been excellent in our locality during the past season, and now we are enjoying a season's sleighing.

A. E.

West Durham Farmers' Institute.

We have just closed a very successful series of meetings in connection with our Farmers' Institute. The deputation was Mr. Gavin Barbour, of Crosshill, whose subjects were Draft horses and how to raise them, and Beef cattle, and Mr. Esdon, of Bainsville, whose subjects were Rotation of crops and Poultry for profit.

Mr. Esdon gave an exhibition of some useful inventions of his own in connection with poultry-raising. He seems to be able to talk to any length on the subject. Everybody was pleased with the man from Glengarry.

Mr. Barbour showed a jointed spout for filling a silo, which was commented on very favorably as being labor-saving and evenly distributing the corn in the silo. Mr. Barbour is an easy speaker, is brimful of information about either the cow or the horse, and was listened to with close attention. The only difficulty seemed to be the afternoons were too short. He said, "Good breeding is incorporating good qualities and sticking to it." "Breed for a type and be persistent."

In closing his series of addresses he asked the young men to take an interest in all that goes to make for our country's good; to bear their full share of the responsibility that may come, taking a strong stand against anything that makes against the good of mankind. SECRETARY.

Eastern Ontario Winter Fair.

A total of \$8,000 is offered in prizes for horses, beef and dairy cattle, sheep, swine and poultry at the Eastern Ontario Live-stock and Poultry Show, to be held in Ottawa on January 17th to 21st. A large number of copies of the prize list have been mailed on application, and the prospects are bright for a better show and a larger attendance than ever before. Breeders or owners having stock to show should send for the prize list at once, to D. T. Elderkin, Secretary, 21 Sparks Street, Ottawa, as entries close on Jan. 8th. There will be single fare on all railways, and Ottawa is an attractive city to visit while Parliament is in session, as indeed at any season.

Rabies Rampant.

A dog which had last week bitten eight persons in the neighborhood of Galt was killed, and an after examination proved him to have been affected with rabies. At the request of the child's parents the head of the animal was sent to Ottawa for further examination.

The unusual number of instances reported the past year of dogs affected with rabies biting persons and farm stock reveal that the malady is not restricted to hot summer weather as was formerly believed, but is liable to break out at any season, and should serve as a warning to owners to observe necessary precautions.

Dr. Jas. W. Robertson, Principal of Macdonald College, Quebec, expects to leave shortly on an extended tour, beginning with Switzerland. While abroad he will perfect himself in the usage of the French language and study European agricultural and economic conditions in Europe, in order more effectually to enhance his efforts for the advancement of education and the agricultural interests of Quebec.

Esteemed Old Subscriber.

Wm. Francis, whose portrait, reproduced from a photograph taken some years ago, appears herewith, is one of the many valued old friends whose support of "The Farmer's Advocate" has been continuous. He has been a subscriber for forty years. Mr. Francis has been a resident of Caradoc Township, Middlesex County, Ont., since 1839. At that time, the Longwoods Road was the only one in the township, and all settlers of that period underwent the full measure of pioneer ex-



Wm. Francis, Mt. Brydges, Ont.

Subscriber to "The Farmer's Advocate" for about forty years.

periences. As a farmer, Mr. Francis won many prizes for stock of various kinds, but his specialty was the breeding of Shropshire sheep, in which he was very successful.

A zealous Anglican, he is yet liberal towards those of other denominations.

He occupied the position of treasurer of the township for twenty-six years, being trusted and respected by all; and now, in his old age, having retired to the village of Mt. Brydges, their good wishes for long life and comfort follow him.

J. W. Richardson's Holstein Sale.

The sale of Holstein-Friesian cattle on December 30th, held by J. W. Richardson, at Riverside Farm, Caledonia, Ont., was a decided success. About half of the herd was offered and sold, numbering 46 head, only five of which were mature cows; 29 were one year or under. The 46 head sold for \$6,290—cash sale. The bull, Prince De Kol Posch, went to Dr. English, Hospital for Insane, Hamilton, Ont., for \$525. A. C. Hardy, Brockville, secured four females for \$940. Prof. Dean, O.A.C., Guelph, opened the sale with an address. Arrangements for the sale were most complete in every particular, being held under a large tent, 40x90 ft. Trains stopped at the farm. Over 500 people were present. Col. Welsby Almas, of Brantford, the veteran auctioneer, conducted the sale, assisted by E. J. Wigg & Son, Cayuga, and disposed of all in a little over two hours. The signal success of this sale is a fitting tribute to the proved excellence of the Holstein cow as a profitable producer of dairy stock and products. It was observed during the course of the sale that those having the strongest official backing and of well-known families of merit secured a brisker bidding and an ultimately higher price.

Following is the sale list:

FEMALES.

Jemima Wayne Aaggie De Kol, 6 years; A. C. Hardy, Brockville	\$215
Elsie Mac of Grand View, 2 yrs.; T. F. Patterson, Thorold	160
Toitilla Johanna of Riverside, 1 year; A. J. Davis, Woodstock	140
Toitilla Echo De Kol 6th, 3 yrs.; Munro & Lawless, Thorold	200
Hulda De Kol Princess, 9 yrs.; H. F. Patterson, Alford Junction	245
Ormsby Veeman De Kol, 2 yrs.; Chris. Edmonston, Brantford	180
Nancy Wayne of Riverside 3rd, 5 yrs.; A. C. Hardy	215
Mechthilde De Kol Daisy, 3 yrs.; W. J. Thompson, Langton	140
Posch Wayne of Riverside, 1 yr.; N. Mitchener, Red Deer, Alta.	165

Cassy Netherland, 9 yrs.; J. McKenzie, Wil- low Dale	\$110
Jemima Wayne Johanna 3rd, 2 yrs.; F. Leeson, Aylmer	200
Lillie Mercedes Johanna, 1 yr.; Thos. Oliver, Maple	100
Helen Johanna Mercedes, 1 yr.; E. P. Ede, Oxford Centre	140
Lady Wayne of Riverside, 1 yr.; Dr. English, Hamilton	215
Aaggie of Riverside 3rd, 1 yr.; D. A. Mc-Phee, Vankleek Hill	195
Alfaretta Netherland, 2 yrs.; J. Ashford, Ryckman's Corners	120
Helen Pietertje 3rd's De Kol, 3 yrs.; W. J. Thompson	105
Trixie Clothilde De Kol, 3 yrs.; N. Mitchener, Red Deer, Alta.	120
Daisy Mechthilde Posch, 2 yrs.; A. C. Hardy	240
Sylvia Mechthilde, 3 yrs.; P. Merrit, Beams- ville	95
Daisy Mechthilde De Kol Pietertje, 7 yrs.; A. C. Hardy	300
Aaggie Emily of Riverside, 1 yr.; T. W. Hutchinson, Aurora	155
Daisy De Kol of Riverside, 1 yr.; Richard Stevenson, Ancaster	180
Lady Johanna Rue Lass, 1 yr.; F. Passmore, Brantford	130
Nancy Wayne Posch, 10 mths.; A. J. Davis	105
Aaggie of Riverside 4th, 10 mths.; A. J. Davis	205
Ormsby Lady De Kol, 9 mths.; G. H. Mc- Kenzie, Thornhill	60
Toitilla of Riverside, 8 mths.; G. H. Mc- Kenzie	120
Clothilde Schulling, 1 yr.; Robt. Atkinson, Caledonia	110
Lady Mercena of Riverside, 2 mths.; Ezra Smith, Nebo	75
Lady Teake of Riverside, 3 mths.; S. Best, Cayuga	60

MALES.

Prince De Kol Posch, 4 yrs.; Dr. English, Hospital for Insane, Hamilton	\$525
Sir Wayne of Riverside, 11 mths.; Munro & Lawless, Thorold	110
Riverside Wayne Lad, 11 mths.; D. A. Mc-Phee, Vankleek Hill	100
Riverside Sir Mercedes, 8 mths.; Colin Camp- bell, Martintown	90
Riverside Victor De Kol, 7 mths.; D. B. Mc- Eachern, Vankleek Hill	100
Riverside Sir Axie, 7 mths.; A. J. Davis, Woodstock	100
Daisy Teake Johanna Lad, 11 mths.; Archie Phillips, Dunnville	55
Riverside Sir Johanna, 7 mths.; A. E. Robinson, Markham	80
Riverside Posch Lad, 9 mths.; Walter Mar- tin, Fullerton	65
Riverside Lad Wayne, 7 mths.; Austin Dedrick, Pt. Rowan	55
Sir Paladin of Riverside, 9 mths.; Peter Smith, Sebringville	50
Sir Burke Abbekerk De Kol, 9 mths.; J. W. Westbrooke, Cainsville	50
Prince Calamity Netherland, 9 mths.; Henry McNally, Ryckman's Corners	50
Riverside Lad Johanna, 8 mths.; A. J. Alexander, Brantford	60
Riverside Sir Burke, 8 mths.; Sidney Best, Cayuga	50

The Dangerous Fly.

In an evening address at the recent annual meeting of the Ontario Entomological Society, Dr. Hewitt, the new Dominion Entomologist entertained and instructed a very large audience by an account of the common house fly. He said that these insects were among the most dangerous of all, chiefly through the part they played in spreading disease. Numerous cases of typhoid were caused by them, and the death of thousands of infants was shown to have been brought about by their agency. The main way in which the flies carry disease is by first frequenting excrement from sick patients, or filth laden with disease germs, or sores on animals of any kind, and thus getting thousands or even millions of the germs on their legs, tongue and body. Then, alighting on the food and drink, they contaminate it with these germs, and thus introduce them into the human system. All mothers and housekeepers should see that food, and especially milk for infants, is kept where flies cannot get access to it. More- over, no filth of any kind, but especially horse- manure, should be left exposed, because it is in these that the flies lay their eggs and breed. A single fly may lay about 1,000 eggs, and these may all turn into full-grown flies in about ten days after they are laid.

The Dominion Government is seeking to recover payment of some extended promissory notes for seed grain distributed to needy Alberta farm-set- tlers two years ago.

THE
Bank of Toronto

HEAD OFFICE: TORONTO, CAN.

**Record for Year Ending
30th November, 1909,
Being the 54th Year
of Business.**

DEPOSITS\$34,573,897
Increase for year, \$7,694,092

LOANS AND
INVESTMENTS }\$37,438,588
Increase for year, \$6,186,300

TOTAL ASSETS\$47,989,693
Increase for year, \$8,234,090

Capital\$4,000,000
Reserved Funds, 4,818,871

Incorporated 1855.

Interest Paid on Savings Deposits
at Our 77 Branches in Canada.

MARKETS.

Toronto.

LIVE STOCK.

At West Toronto, on Monday, Jan. 3, receipts of live stock at the City and Union Stock-yards last week were 32 cars, comprising 1,326 cattle, 9 hogs, 214 sheep, 5 calves. Trade brisk for all classes. Prime butchers', \$5.50 to \$5.75; good, \$5.25 to \$5.50; medium, \$4.80 to \$5.25; common, \$4.25 to \$4.70; cows, \$3 to \$4.80; milkers, \$35 to \$60; calves, \$3 to \$7.25 per cwt. Sheep—Ewes, \$4.50 to \$4.75; lambs, \$6.25 to \$7. Hogs, \$8.25, fed and watered, and \$8, f. o. b. cars at country points.

REVIEW OF LAST WEEK'S MARKET.

It being the holiday season, the receipts of live stock at the City and Union Stock-yards were light. A few loads of exporters of good quality were on sale at the Union yards. Trade was good for every class of stock, at firm prices; equal to those paid during the previous week.

Exporters.—Export steers sold from \$5.50 to \$6; export heifers, \$5.75, and export bulls at \$4 to \$5 per cwt.

Butchers'.—Prime picked lots sold at \$5.50 to \$5.75; loads of good, \$5 to \$5.25; medium, \$4.75 to \$5; common, \$4 to \$4.50; cows, \$2 to \$4.50.

Stockers and Feeders.—Few, if any, of either class, were on sale. Prices unchanged.

Milkers and Springers.—The supply, although light, was greater than the demand. Prices ranged from \$35 to \$65, and only one cow at the latter price.

Veal Calves.—Receipts light; prices very firm, at \$3 to \$7.25 per cwt.

Sheep and Lambs.—The run of sheep and lambs was small, which caused prices to be strong, as follows: Ewes, \$4.25 to \$4.65; culls and rams, \$3.25 to \$3.50; lambs, \$6.50 to \$7 per cwt.

Hogs.—The hog market, also, was firm, at \$8 for selects, fed and watered; \$7.75, f. o. b. cars at country points.

Horses.—Considering that it is the holiday season, there was an active trade at the Union Horse Exchange last week. Two carloads were shipped to Saskatchewan; two carloads to the lumber camps, and one carload to New Brunswick. A few extra-quality drafters sold up to \$235, but the bulk of sales ranged from \$180 to \$220; general-purpose, \$130 to \$160; drivers, \$100 to \$150; wagon horses, \$140 to \$200; serviceably sound, \$25 to \$60.

HAY AND MILLFEED.

Hay.—Baled, car lots of No. 1, on track, Toronto, \$13 to \$14; No. 2, \$12 to \$12.50.

Straw.—Baled, car lots, on track, Toronto, \$7.50 to \$8.

SEED MARKET.

The seed market is quiet, at following quotations: Alsike, No. 1, bushel, \$6.25; alsike, No. 2, \$5.25 to \$5.75; red clover, No. 1, bushel, \$7.50 to \$8.25; red clover (containing buckhorn), bushel, \$5.50 to \$6; timothy, per bushel, \$1.40 to \$1.60.

BREADSTUFFS.

Wheat.—No. 2 white, \$1.07, outside; No. 2 mixed, \$1.06 to \$1.07. Manitoba—No. 1 northern, \$1.15; No. 2 northern, \$1.13, all rail. Rye—No. 2, 70c., outside. Peas—No. 2, 86c. to 88c. Buckwheat—No. 2, 52c. to 53c., outside. Corn—American, No. 2 yellow, 73c.; new No. 3 yellow, 69c. to 69½c., Toronto. Oats—No. 2 white, 36c. to 36½c., at points of shipment. Barley—No. 2, 60c.; No. 3X, 57c. to 58c.; No. 3, 50c. to 51c., outside. Flour—Ninety per cent. Ontario patents, \$4.20 to \$4.25, in buyers' sacks, outside. Manitoba first patents, \$5.60; second patents, \$5.10; strong bakers', \$4.90.

COUNTRY PRODUCE.

Butter.—Market unchanged. Creamery pound rolls, 27c. to 29c.; separator dairy, 25c. to 26c.; creamery solids, 26c.; store lots, 22c. to 24c.

Eggs.—Market about steady. Strictly new-laid, in case lots, 35c. to 37½c.; cold-storage, 26c.

Cheese.—Market dull and lifeless. Large, 13c.; twins, 13½c.

Honey.—There is little doing, all, or nearly all, last season's crop being in the hands of the dealers. Prices steady, at 10c. to 10½c. for strained, and \$2.50 to \$3 per dozen sections, for combs.

Beans.—Market dull. Primes quoted at \$1.75 to \$1.80; \$1.90 to \$2 for hand-picked.

Potatoes.—Trade dull, with prices easy, at 45c. to 50c. per bag, for car lots, on track, Toronto.

Poultry.—Market easier, with prices lower. Turkeys dressed, 18c. to 20c.; geese, 13c. to 15c.; ducks, 15c. to 16c.; chickens, 14c. to 15c.; fowl, 10c. to 12c.

HIDES AND WOOL.

E. T. Carter & Co., 85 East Front street, have been paying the following prices: Country hides, cured, 11c.; green, 10c.; calf skins, 12c. to 14c.; horse hides, No. 1, \$2.75 to \$3; horse hair, per lb., 32c.; tallow, per lb., 5½c. to 6½c.; sheep skins, 85c. to \$1. Wool and raw fur prices on request.

Montreal.

Live Stock.—The offerings of cattle were well sold out previous to Christmas, and as receipts have been light since, the market was firm, whereas it is generally the opposite immediately after Christmas. Butchers were apparently in need of stock, and the bulk of the offerings consisted of ranchers, the quality of which was good. Choice steers sold at 5½c. to 6c. per lb., fine being about 5½c., good selling at 5c. to 5½c., medium stock at 4c. to 4½c., and common at 3½c. to 4c., inferior selling down to 3c. Lambs were in good demand, and prices ranged from 6½c. to 7c., sheep being 4c. to 4½c. per lb. Calves were scarce, and everything offered was taken at 4c. to 6c. per lb. The market for hogs showed a stronger tone, and prices advanced fractionally, selects from Western Ontario being about 9c. per lb., weighed off cars, those from further east being about the same.

Horses.—There was exceptional activity in general trade previous to Christmas, this occasioning a greater use for horses than usual. Very little, if any, business resulted, so far as horse-dealers were concerned, but an occasional animal was wanted. Trade has been quite light during the past week, but no lighter than expected. After the New Year gets well started, a fresh demand will, in all probability, spring up. Meantime, prices show no change, being as follows: Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$225 to \$300 each; light draft, 1,400 to 1,500 lbs., \$180 to \$240 each; smaller animals, 1,000 to 1,100 lbs., \$100 to \$160 each; old, broken-down animals, \$75 to \$100 each; choice saddle or carriage horses, \$350 to \$500 each.

Dressed Hogs and Provisions.—Owing to the firmness in the price of live hogs, prices for dressed have advanced somewhat. Sales of abattoir-dressed, fresh-killed stock are being made at 12½c. to 12c. per lb., country-dressed being 11½c.

to 12c. per lb. There has been a fair demand for barrelled pork, and prices are ranging from \$28 to \$32 per barrel, prices of beef ranging around \$15 per barrel. There is no alteration in the price of lard, sales being made all the way from 11½c. to 12½c. per lb for compound, and from 16½c. to 17½c. for extra-pure. Demand for hams and bacon is excellent, and prices hold fairly steady. Heavy hams, weighing 25 lbs. and more, sell at 14½c., those weighing from 18 to 25 lbs. selling at 15½c., and smaller at 16c., hams with bone out, rolled, being 17c. to 17½c. per lb. Choicest bacon is 16½c. to 17c., inferior being 14½c.

Poultry.—There was some disappointment over getting rid of stocks of turkeys previous to Christmas, and quite a lot have been left over. The market for well-fatted, fresh-killed, unfrozen stock holds fairly firm, at 20c. to 21c. per lb., but first-class frozen stock may be had at 19c. to 20c., and the next grade of stock at 17c. to 18c., while inferior stock sells as low as 15c. Geese are in good demand, this being New Year's week, at 12c. to 14c., while ducks continue scarce and firm at 16c. to 17c. Chickens have declined, also, and it would be hard to get 17c., prices ranging from this down to 14c. per lb., while fowl range from 10c. to 13c., there being considerable difference in quality. Retailers were offering poultry, in some cases, at a loss, on Christmas Eve.

Apples.—The market is easy in tone, but about steady in price, at \$2 to \$2.25 per barrel for No. 2 stock, auction prices, and \$2.50 to \$2.75 for No. 1. Selects would, of course, bring considerably higher.

Potatoes.—There is a fair turnover of potatoes, and prices are steady. For white potatoes, such as Green Mountains, prices are 55c. to 57½c. per 90 lbs., carloads, track, and for Quebecs 50c. and better is paid. Mixed reds and whites, however, sell at 45c. to 48c.

Eggs.—The demand for eggs continues very active, and the tendency of prices is upwards. Some report advances, but it would seem that No. 1 stock may still be had at 26c. per dozen, and selects at 29c. to 30c., while new-laid, that indefinite quality, range around 40c. and higher or lower, according to quality.

Butter.—The market is dull and unchanged, at 24c. to 24½c. for fresh receipts of creamery, in a wholesale way, and 25½c. to 26c. for choicest fall makes, dairies being 21c. to 23c.

Cheese.—The market is very dull and featureless, prices ranging from 11c. to 11½c., and being nominal.

Grain.—Market for oats strengthening, and prices of No. 2 Canadian Western are now 42½c. to 42c. per lb., No. 3 being 41½c. to 41c., No. 2 barley being 66c. to 67c., and Manitoba feed barley being 52c. to 53c.

Flour.—The market holds steady, and demand fair, at \$5.70 per barrel, in bags, for Manitoba first patents, and \$5.20 for seconds, strong bakers being \$5. Ontario unchanged, at \$5.50 to \$5.60 for patents, and \$5.10 to \$5.25 for straight rollers.

Millfeed.—Demand for bran, both for home and foreign trade, active, and prices firm, at \$21 per ton for Manitobas, and \$21.50 to \$22 for Ontarios, Manitoba shorts being \$22 to \$23. Ontario middlings, \$23 to \$23.50; pure grain mouille, \$32 to \$33; mixed mouille, \$25 to \$27; gluten meal, \$31 to \$32; oil cake, \$35.50 to \$36.

Hay.—Prices were firm and unchanged, No. 1 hay being \$13 to \$13.50 per ton, carloads, Montreal, No. 2 extra being \$12 to \$12.50; No. 2, \$11 to \$11.50; clover mixed, \$10 to \$10.50, and clover, \$9 to \$10 per ton.

Hides.—The predicted decline took place, and dealers now look for steadiness. Hides were 11c., 12c. and 13c. per lb. for Nos. 3, 2 and 1, respectively, calf skins being down to 12c. and 14c., for Nos. 2 and 1, respectively, and dealers are selling to tanners at ¾c. advance. Sheepskins are 90c. to \$1 each, and horse hides \$1.75 to \$2.25; tallow, rendered, 5c. to 6c., and rough, 1½c. to 3½c. per lb.

Hogs Sell High.

Following the lead of recent 10-cent cattle sales on the Kansas City market, hogs there last week brought \$8.60, the highest price since 1882, and deliveries were heavy. Packers say hogs are steadily increasing in value.

**IMPERIAL BANK
OF CANADA**

CHARTERED 1875

Capital Authorized, \$10,000,000.00
Capital Paid Up, 5,000,000.00
Reserve, 5,000,000.00

SAVINGS DEPARTMENT

\$1.00 opens an account. Interest paid at highest current rate from date of deposit.

Farmers' sale notes discounted. Branches throughout the Dominion of Canada.

Chicago.

Cattle.—Steers, \$5 to \$6.75; cows, \$3.50 to \$5.50; heifers, \$3.40 to \$6; bulls, \$3.50 to \$4.75; calves, \$3 to \$9.50; stockers and feeders, \$3.75 to \$5.50.

Hogs.—Choice heavy, \$8.55 to \$8.65; butchers', \$8.40 to \$8.60; light mixed, \$8.20 to \$8.40; choice light, \$8.20 to \$8.45; packing, \$8.30 to \$8.55; pigs, \$7.50 to \$8.30; bulk of sales, \$8.25 to \$8.50.

Sheep and Lambs.—Sheep, \$4 to \$6; lambs, \$6.50 to \$8.65; yearlings, \$5.25 to \$7.85.

Buffalo.

Hogs.—Heavy, mixed Yorkers and pigs, \$8.80 to \$8.85; roughs, \$8 to \$8.25; stags, \$6.75 to \$7.50; dairies, \$8.75 to \$8.80.

Sheep and Lambs.—Sheep slow; lambs, \$5.25 to \$8.75; yearlings, \$6.25 to \$7.50.

British Cattle Markets.

Liverpool and London cables quote live cattle lower, at 11½c. to 12½c., dressed weight; refrigerator beef, demoralized, and selling at 9½c. to 9½c. per pound.

GOSSIP.

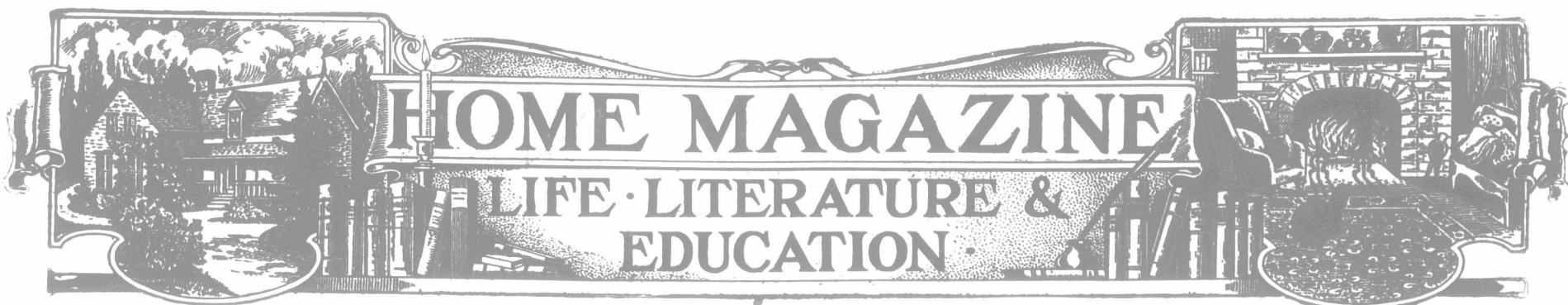
J. H. Patrick, Ilderton, Ont., has purchased from John Gardhouse & Sons, Highfield, the imported Shire stallion, Royal King 3rd, champion stallion of the breed at the Ontario Winter Fair at Guelph last month. Mr. Patrick now owns two champion stallions, having last year purchased from Graham Bros., Claremont, the Toronto and London champion Clydesdale, Sir Marcus. Mr. Patrick advertises that he is prepared to buy Clydesdale and Shire stallions two to five years old, Canadian-bred.

Arthur Johnston, of Greenwood, Ont., as will, doubtless, have been noticed from the announcement in our advertising columns, purposes holding a dispersion sale of his entire herd of Shorthorn cattle on March 9th. It will be remembered that a couple of years ago, Mr. Johnston advertised and held a sale which was intended to be a dispersion of the herd, but owing to a number of the cattle, including several of the best in the herd, having contracted indigestion, induced by the feeding of a consignment of heated corn, these were not in condition to be sold, and were withheld. These, with their produce, and a number purchased since that time, principally of desirable Scotch families, are included in the sale, together with a few English-bred dairy Shorthorn cows and their progeny. The herd, we are assured, is at present in fine health and condition, numbering about fifty head, about half a score being young bulls of superior breeding and individuality. Mr. Johnston's extended experience, knowledge of pedigrees, and discriminating judgment in the selection of foundation stock, and of suitable sires, may be trusted to ensure the offering at this sale being up to a high standard of excellence.

Wife—"A tree, you know, gets new clothes every spring—hat, parasol, everything!"

Husband—"Yes, darling, and makes them all itself."

BANK
NADA
D 1875
\$10,000,000
5,000,000
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PARTMENT
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Women's Institute Convention at Guelph.

(Concluded.)

Most interesting was the discussion on "The Day's Work," carried on on the morning of December 9th, in Massey Hall, of the O. A. C. Mrs. Bacon, of Orillia, presiding.

Mrs. W. W. Farley, Smithfield, was the first speaker. She believed in system from start to finish, and enumerated the day's work and the week's work, as she considered they should be done in order to have everything in its proper time and place. When baking pies, she always made enough pie-crust to last three or four days, keeping it in the refrigerator, and baking the dough as necessary. In winter, she made a practice of canning pumpkin, chicken and meat, and found her cans invaluable during the hot, busy days of summer. Mrs. Farley very kindly sent a written account of her method of canning to "The Farmer's Advocate." This appears in the Ingle Nook Department of this issue.

Mrs. Farley did not believe in working much after tea. During a married life of 43 years, she had always found it possible to save the evenings for reading or recreation. She recommended the mothers to hear the children's lessons at home. The consciousness of knowing their lessons sends the little ones willingly and happily to school. If there is a time when mothers need health more than another, it is while the children are young. Mothers should strive to live hygienically. The speaker believed strongly in taking an interest in whatever work one had to do. "Glad service" means everything. Our work is hard or easy, according to the spirit with which we enter into it. If we think it is drudgery, it is drudgery. When housecleaning, she had found it advisable to do but one room at a time. She always poured boiling water, at this time, into the crevices of the attic and along the edges of the base of floors below, and had no trouble with moths. During holiday time the general work must be increased by reason of guests. She advised her hearers not to make a drudgery of entertaining. Guests did not mind being left alone occasionally in the company of a good magazine.

As a last word, the speaker advised her audience not to consider work a hardship. A middle-aged woman, keeping twenty boarders, had been called in to settle a discussion as to what is most necessary to happiness. "Work" had been the answer, and it was a good one.

Mrs. Jno. Cumberland, Brampton, was not quite as strong on "system" as the preceding speaker. She believed in keeping all rules elastic to meet circumstances. The chief note of her address was a warning to farm women not to despise, but to appreciate their life, work, and all. She had spent thirty years on a farm, and for the last four had been in town. Were it possible to have the outside work done for her, which she cannot now do, by reason of ill-health, she would gladly go back to the farm to-day. She drew a humorous comparison of the way in which the day is spent in town and country; and bewailed the fact that in town so many steps must be taken, "with nothing to show for them." We need to plan for our work, and do two things at once oftentimes;

e.g. work that demands attention in the kitchen while cooking or bread-baking is on hand. We need to master our work, but we must not let it master us. Work is one thing, drudgery another. If we let our work master us, all our time is taken up in the physical part, leaving no time to cultivate the mental and spiritual part of our nature. If we do not neglect these last, we shall have pleasant thoughts which will help to make the physical work more easy and pleasant. She knew a woman who was so glued to system that she would have the washing done on Monday, even if it had to go on the line after ten p. m. This woman died early, but happily, no doubt, because she did it systematically. (Laughter.) She had known another woman, who had attempted to work off grippe by doing a big washing. This woman had died early, too.

Mrs. Cumberland proceeded to enumerate different ways by which she had found it possible to save time. She now mixes the bread stiff at night, and in the morning it is ready to be worked up for the pans; sometimes she mixes twice. When ironing, she had found it advisable to cover the irons with an old spider, thus economizing in fuel. Ironing and baking are done the same day, and on other days a roast is cooked, or potted meat made of a shank, or soup-stock prepared. She makes a practice of rubbing off the linoleum with a broom-bag. When washing, she invariably uses borax or ammonia; Cut down the soap, put on the clothes in lukewarm wa-

come, as she said, "just a city lady," was the next speaker. She advised saving strength, even though everything were not kept absolutely shining. The kitchen stove would do well enough if just rubbed off with a cloth most of the time. She always made a practice of resting a while after dinner, and had found that it was wise to do so.

THE DEVELOPMENT OF A SOUND BODY.

This subject was taken up by Mrs. F. C. Hart, Galt. She showed that the work of developing a sound body must be carried on continuously through childhood, and even before birth. The overwork of our parents and grandparents has made the present generation weaker. We should plan better. Care of the eyes, nose, throat, teeth, positions of the body at play or in sleep—these are questions which every parent should understand. The careful mother will look to the conditions at school—heating, lighting, seating, ventilation, etc. A 15-minute recess in a forenoon is not enough for children. They need, in addition, brisk exercises, with open windows and deep breathing, at least twice in a forenoon. Frequent change of position and freedom to move are very necessary to children. A child's nose and throat should be watched, so that adenoids and enlarged tonsils may be attended to if they appear. These often cause mouth-breathing, listlessness, and ill-health. Curvature of the spine is often induced by children sitting on seats and at desks that

as well as the minds, of children improve. Free physical exercise is absolutely necessary for a sound body and mind. Keep that as a basis to work from.

QUESTION DRAWER.

This department of the programme, which is always followed with attention, took up a considerable part of the day, the answers being given by the Misses Watson, Miss Graham, Mrs. McTavish, Mrs. Graham, and Mr. Putnam. Miss Watson gave information re the courses at Macdonald Institute, and recommended farmers' daughters who contemplate attending to apply early, as applications require to be in months ahead. A question re paraffine washing brought the answer that it is regarded as a real labor-saving device.

Miss Graham, in reply to a query as to what a society should do where recipes and demonstrations were no longer required, thought that society must be "Heaven." She knew of one society that is studying Canadian trees and forest resources, and is persuading the local authorities to take better care of the trees. Mrs. McTavish approved of social evenings at intervals, and Miss Watson, of Ayr, disapproved of many debates. She had noted that they often arouse too strong feelings.

"How can you make members stop talking in a meeting?" brought the ready response, "Have the proper person for president. No woman should go to a meeting if she can't hold her tongue at the right time."

DEMONSTRATION OF LABOR-SAVING INVENTIONS.

An exhibit of several labor-saving inventions—a box for raising bread, a dustless vacuum cleanser, a denatured-alcohol iron, etc., was followed with much interest. The vacuum dustless sweeper, costing from \$15 to \$25, and operated by two people, was very strongly recommended as being easily operated and a consumer of dust. It takes the dust from wall paper, upholstering and curtains, as well as from carpets. In some places two or three women have clubbed together to buy one.

A cake-mixer has been found a valuable help; also a good thermometer, which secures uniform results in bread, butter and cheese making; 70 to 80 degrees is the best bread temperature. The alcohol iron has not yet arrived at a wholly satisfactory stage, but will, no doubt, be perfected at an early date.

NERVES.

The last address of the session was given by Dr. Helen MacMurchy, of Toronto, who had chosen the subject, "Nerves." This country, she said, is very full of work to do. Everywhere are signs of things awaiting work—people to be taught, character to be built—things of far greater importance than mines and forests. Sometimes, when we read the newspapers, there comes a sickening sense of the failures of the lives of a great many people.

The work of a physician is to make people adequate for their work. "Nerves," so-called, lessen the adequacy of the people of this country more than any other thing. There were seven different things that the speaker wanted to dwell upon: (1) Want of Sleep. Two varieties of nerve trouble are neurasthenia and hysteria. Hysteria is a disease that we don't understand very well as yet, but neurasthenia is better understood. Lack of sufficient sleep in childhood



The House-mother.

ter, with soap and borax in it, then let simmer; finally, put through the washing-machine, rinse, blue, starch, and put on line. When cleaning windows, bon ami is used, and, for sweeping bare floors, a new invention called "dust-bane," which takes the place of the old-time "tea-leaves," or shredded paper. Save steps and time, develop all sides of your nature, and don't be in a hurry to leave the farm, was her concluding injunction.

Mrs. Howell, of West Toronto, who had spent 28 years on a farm, 20 in a country village, and had finally be-

are too high or too low. Adjustable seats and desks should be introduced in every schoolhouse. The children should also be given individual drinking cups. The "High School Age" is a time of fast physical development, and especial care should be taken that sufficient sleep, wholesome food, gymnastic and out-of-door exercises are a part of the daily programme.

Let us see to it that we go ahead in the next generation. Prevention, instead of cure, is the watchword in the medical profession to-day. Let us help in the good work. With better physical conditions, the morals,

go.
to \$8.75; cows,
\$3.40 to \$6; bulls,
\$3 to \$9.50;
\$3.75 to \$5.50.
\$8.65 to \$8.65,
\$6.60; light mixed,
\$8.20
\$8.80 to \$8.55;
bulk of sales, \$8.25
Sheep, \$4 to \$6;
yearlings, \$5.25
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is a very common cause of inadequate nerves—nerves that are not adequate to the reasonable demands of life. A child at first sleeps nearly all the time; about 8 hours' sleep per day is about right for the adult. (2) Want of Food: The majority of nervous people do not eat enough. The mother sometimes sacrifices herself for the rest. Again, she has cooked the meal, and has no appetite for it; when you begin to feel like that, just go out to tea. One of the most important elements in the Rest Homes is nourishment. Things are made so tempting that the patients want to eat. A little of this might be very well introduced into homes in general. If you are nervous, get some member of the family to cook for a while—do anything to create a relish for your food. (3) Change: This is a very important element in everyone's life. People wear out on the spot that is always being rubbed. If we could send people away for perhaps a day in every month—even to walk in the fields with a friend, they would be fresher, and more able for life. (4) Fresh Air: Put all you have eaten for a day in one scale of a balance. I will put in the other the oxygen you have breathed, and it will weigh more than the food. Fresh air is the most important food we have, and you must get out of doors frequently to get it. People cannot be well without fresh air. (5) Environment: Have your surroundings as beautiful as you can, and put your house where its windows will command a beautiful view. Such a view is helpful to the nerves. (6) Do Not Worry: The power to avoid doing so gives one power to be steadfast against self, the greatest power of all. She would recommend her hearers to read a book bearing on this: "The Tracks We Tread," by G. B. Lancaster. . . . Take a holiday frequently. A business man whom she had known, who hadn't taken a holiday for 15 years, sat down one morning and cried, instead of going to his office. He takes holidays now, and takes his wife for a trip, and finds that he has gained in every way.

Sometimes conditions seem adverse. If we can change them, we should; if we can't, we should accept them as Job did. It is possible for us, by training ourselves, to sail the ship, and to gain power that is able for all the occurrences of life. . . . Other people have sometimes made the trouble. We can't make other people do as they ought, but we can make ourselves. We can change our own attitude. Have we dignified in our own minds our own work? Have we said, "I'd rather be a mother and keep a home than anything else"? Mothers should make themselves happy by remembering that theirs is the greatest work of all. If they have that in their hearts, there is not much danger of their falling victims to nerves.

Before closing this, one of the most successful conventions in the history of the Institute, it was decided that the next annual convention be held in Toronto, in November, about the time of the Horticultural Convention and Fruit, Flower and Honey Show, a decision that will, no doubt, recommend itself to many.

On Thinking Glad.

Never mind a change of scene.
Try a change of thinking.
What if things seem sordid, mean,
What's the use of blinking?
Life's not always storm and cloud,
Somewhere stars are shining.
Try to think your joys out loud,
Silence all repining.

By degrees, by thinking light,
Thinking glad and sweetly,
You'll escape the stress of night,
Worry gone completely,
Get the habit looking for
Sunbeams pirouetting,
Tapping gaily at your door—
Surest cure for fretting.

—John Kendrick Bangs.

Hope's Quiet Hour.

Is This Waste?

There came unto Him a woman having an alabaster box of very precious ointment, and poured it on His head, as He sat at meat. But when His disciples saw it, they had indignation, saying, to what purpose is this waste?—S. Matt. xxvi.: 7, 8.

I am writing this two days after Christmas, having just made some attempt to tidy the house, which was—of course—littered with the delightful disorder of tissue-paper, colored string, bits of baby ribbon and Christmas seals. There are people in the world still—people who look down in lofty scorn on the childlike spirit of Dickens—who say (or think)—"To what purpose is this waste?" Think of the quantity of ribbon and tissue-paper, cut up to wrap about Christmas presents, and then tossed carelessly into the waste-paper basket. Think of the money spent on Christmas labels and seals! Why, it probably amounts to thousands of dollars in Canada alone. Is this waste? Might not this "wasted" money be gathered into a heap and given to the poor? So might some disciples of Christ echo the lament of those other practical disciples long ago.

But we are not concerned with the opinion of the servants of our Lord—what does the Master Himself say? Does He think the money spent in dainty wrappings is wasted? He evidently did not think the alabaster box and precious ointment were wasted, when they were joyously sacrificed in loving lavishness by Mary of Bethany. That apparent "waste" has been an inspiration to loving hearts ever since. Let us carefully examine the question of dainty accessories to gifts.

The other day, as we gathered round the table, and unfastened one parcel after another, we found that the youngest member of the party had taken special care to have each of her gifts daintily done up. She had bought a fresh supply of paper, ribbon and seals, because the first lot had been used up for gifts outside the home. Do you think she considered that "anything would do" for the home people? Not she! In all the rush of Christmas Eve, she found time to take particular and special delight in all the sacramental outward tokens of the inward grace of beautiful family affection. And I, for one, did not consider the time and money were wasted. The gifts would have been as practically useful—perhaps—if wrapped in common brown paper, but they would not have been the outward signs of overflowing, considerate love—love that scorned to consider expense or trouble. And the thought came to me to have a chat with you about the value of keeping our perfume fittingly shrined in an alabaster box when we offer it to our Lord. Think of our gifts to Him, through His poor. Some people find it hard to accept a much-needed Christmas basket. They feel that the gift is "cold as charity"—real charity is never cold. But if the basket be daintily packed, with mysterious packages slipped in here and there, properly boxed or wrapped, and labelled with cheery Christmas wishes—how delightful the task of unpacking it will be. Five cents' worth of paper and ribbon will give far more joy to a lonely, hungry heart, than the same five cents spent on sugar or meat. Of course, one must not overdo this matter of tissue-paper. The outside must not be a fair covering of a worthless gift. The "alabaster" box held "very precious" ointment, which filled the room with its perfume. We must be careful to do unto others as we should like them to do unto us. If the daintiness is not an expression of kindly goodwill, it is indeed "waste." Instead of a holy sacramental token, it may be only a hypocritical shell, without a precious kernel.

Do you think God cares about the accessories to our gifts? Does He care about clothes? When the people were invited to meet with Him at Sinai, they were told to sanctify themselves, and to wash their clothes. It is not a meaningless custom to prepare for the Sunday worship by bathing and putting on clean clothes. The "Sunday-go-to-meeting" suit may be simply finery, or it may be the preparation of a King's daughter,

who is careful to be "all glorious within" and also dressed in her very best clothing—"clothing of wrought gold . . . raiment of needlework."—Ps. xlv.: 13, 14.

The wise men brought gifts of frankincense and myrrh to present to the King, and they did not consider that such offerings were wasted on the Child in His lowly home. Gold was, evidently, useful—some would have said of the other gifts, with their symbolic meaning: "To what purpose is this waste?" Were they wasted?

There may even be some followers of "Mr. Gradgrind," who consider it "waste" to have candies and nuts at Christmas time. Just fancy a Christmas with only necessaries and no luxuries! It might be sensible and practical, but it certainly would be a very poor imitation of a real, old-fashioned, hearty Christmas. It would be all outside—body without spirit, head without heart.

God might—as has been quaintly said—have made us in such fashion that our food could have been shovelled into us at regular hours, as coal is dumped into a stove. Then life would have been bare of the sacramental fellowship of the daily meals. Does God believe in dainty wrappings? Look at His gifts and see. Think how the rich juice of the grape is contained in a beautiful case. Think of the peach and plum and apple, and countless fruits. How very different the world would be if these were all a dull black, or brown, or gray.

How tender and considerate God is in His numberless ways of wrapping His gifts in dainty ways to give His children pleasure. The world is full of delightful things, which are luxuries, rather than necessities. There are the various sounds of bird and insect, which blend into the pleasant harmony of a summer evening. There are the beautiful colors and shapes of flowers and birds and animals of all kinds. There are the varying colors of the sky, the solemn grandeur of mountains, and the beauty of numberless landscapes. There is the beauty of water—sea and lake and river; and the musical "sound of many waters" which is like God's own voice bringing to us messages of tenderness.—Rev. I.: 15.

God shows plainly that He enjoys giving to us—do we show Him as plainly that we enjoy giving to Him? It has been suggested that the organist in a church plays a voluntary, while the offertory is being taken up, in order to soothe the sufferings of the congregation. Anyone who does not offer "willingly," need not expect God to take pleasure in His gifts. God loveth a "cheerful" giver, and I think He is pleased when we save our brightest, cleanest money, to present joyously to Him, as an outward visible sign of our love. When the Church lifts up her gifts to her Royal Bridegroom, neither He nor She can be satisfied with a cold formality. He gives Himself to her "to the uttermost"—shall She measure her self-surrender for fear of giving more than is absolutely necessary?

"Thou hast shone within this soul of mine
As the sun on a shrine of gold.
When I rest my heart, O Lord, on Thine,
My bliss is manifold.
My soul is the gem on Thy diadem,
And my marriage robe Thou art."
DORA FARNCOMB.

Editor "Hope's Quiet Hour":

In "The Farmer's Advocate and Home Magazine" of October 21st, you request your farmer friends to give their opinion regarding the startling changes occurring in Ontario in the last thirty years—they are changes that are to be expected.

They are the result of old things passing away, and can be traced back to the year 1757, when a momentous change was effected in the Spiritual World, by the separation of the Good and Evil spirits. Heaven drew nigh unto man again. This gives rise to much questioning, distrusting, and otherwise, effected by the descent of the New Jerusalem in which God will dwell with man.

The startling changes, spiritual earthquakes, and upheavels of this age, which bring dismay and discouragement to many hearts who solemnly ask the questions, "What is it coming to? Is

Christianity a failure? Is the Bible a book of myths? Is it a book of speculations of men only? Is higher criticism going to bring more light out of the clouds of the letter of the written word?" Is Prof. Elliott's announcement of the religion of the future, the hope that will satisfy? Oh, never!

The religion of the future will be characterized by more wisdom in hearing the Lord's sayings, and in doing them. It is in the doing we realize the life of love to God and man, and have a better knowledge of our God in Christ.

While the farmer plows and sows, and devotes his time and talents to a useful life, as all religion has relation to life, he becomes wiser and humbler in the presence of his Lord. His mind is in communication with his Helper and Sustainer, and by doing His will he builds his house on a rock. The foolish man's house is built without any effort on his part; he hears the sayings, but does not do them, while the wise are continually doing and working. In loving kindness and compassion, the Son of Man again came to mankind as the Spirit and Life of the written word, in the clouds of the letter, to make all things new, and the old to pass away. Hence the startling changes, the questionings, the quakings, and the disturbances above mentioned, on account of their passing away. He saith, "Shall I find faith?" indicating the absence of it, and his rejection, or rather rejection.

And yet, many who are leaders of men, and should know these things, doubt, deny, and scoff at such a coming of the Lord. But the invitation is now going throughout all the world, to come to the Lord and learn of the many things He is saying unto us, out of the clouds of the letter of the written word, as in those clouds He has again appeared as the Son of Man. The mystery is finished, and we now know Him as our Father who art in Heaven. He is revealed to us plainly, "Let him that heareth come, and him that is athirst come and drink of the waters of Life freely." JNO. BROADFOOT.

Brussels P. O.

The Beaver Circle.

The Prize Compositions: Picture Competition.

(SENIOR BOYS.)

What a Gun Did.

As Told by Its Victim, a Squirrel.
"One day in May, when the birds were all singing merrily, and the flowers and trees were so beautiful, I found in the crotch of a tree a little heap of beech-nuts. I joyfully filled my pouches, and was hurrying home with them to my three sweet little children, when I met a huge creature called a man. He carried a curious stick, called a gun, and was followed by another monster called a dog. I, thinking I was safe, stopped in the crotch of a big elm tree and chattered impudently at him, but he only pointed his gun at me. Then, before I had time to think, I heard a great noise, and felt a terrible pain in my hind leg. I would have fallen to the ground if the crotch of the tree had not held me, for I was so weak and crazed with pain and loss of blood that I lost consciousness.

"How long I lay there I do not know, but when I came to myself I was so weak and stiff that I could hardly move. I thought of my poor little babies at home, knowing that by this time they would be starving. However, I was so hungry that I could not keep from eating some of the nuts I was saving for the little things. I then tried to crawl down from the tree, but in so doing I lost my footing and fell to the ground, increasing my pain a great deal. But mother-love is stronger than everything else, and, after much crawling, I reached our snug little home. There was a feeble groaning within, which made my heart bleed, but I was so crippled that it took me some time to get into our nest. There I found two of my babies stiff and cold, and the remaining one nearly dead with hunger. I was heart-broken, but I tried my best to get my remaining child to eat the few nuts which I had saved. However, it was so

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weak that it would not eat, and, in spite of all my efforts, it died soon afterwards.

"I was wild with grief; I could not believe that my poor children were dead. I licked them tenderly and tried to warm them, as if that would bring them back to life. At last I rushed out of the house, because I could not bear to be near the bodies of my children, who such a short time ago had been so active and merry.

"I lived outside for many days, not caring whether I lived or died, for all that I held dear in life was gone forever. Then I was caught by a young boy, oh, so different from the man who had shot me, and, as a result, had killed my children. My protector tenderly cared for my wound, which gradually healed, and I grew to love him. But I never have been able to forget my three innocent children, who had suffered such painful deaths through the wanton act of an unthinking man."

ROBERT H. ROBINSON (age 15).
Fergus, Ont.

John Muskrat.

"Good morning, sir; what is your name?"

"My name is Beaver Circle; and yours?"

"O, mine is just John Muskrat. My home is in the bank of Hunter's River, just back of the old willow tree. I have a wife and five children, who live with me in a comfortable hole lined with dry grass and roots."

"But why, may I ask, is your one foot missing?"

"Come down to my home and I'll tell you all about it."

This little conversation took place between two old friends which had met for the first time since they made mud-pies together on the river bank long ago; and on reaching John's home and making themselves comfortable, he related his adventure.

"After spending a cold, but yet exciting day, among the reeds just across the river, I returned to my home (which was then about a mile down the river), and went directly to sleep (not having a wife and family to entertain).

"The next thing I knew I felt cold, and, jumping up to see the cause, I found that my home was being fast filled with water, and that if I did not get out I would be drowned. Mustering all my strength and courage together, I made a rush for the outside air, and, to my astonishment, next moment I found myself in mid-stream, surrounded by great blocks of ice. I swam with all my strength for the shore, and after a desperate struggle I gained a landing-place.

"I ran up on shore, and was looking around to see where I was, when on a sudden I heard a terrible report and—that was the last I knew until I found myself in a box (lined with hay and a screen on top) surrounded by a crowd of noisy children all looking in blank amazement at me.

"I soon felt a smarting pain in this leg, and on examining it I found that it was all tied up with a rag; of course, I ripped the rag all off in a moment and found, to my sorrow, that my foot had been shot off.

"After washing the wound I looked about my new home. I found in one corner a pile of nice, juicy roots, and, being very hungry, I ate heartily.

"On finishing my repast, I went and lay down in a corner and went to sleep, for I was very weak from loss of blood.

"I passed many days in misery in my box, viciously snapping at anyone who dared to put his hand near me.

"There was one little boy who secretly fed me from his hand, and in him only I had confidence, thinking that he might some day take pity on me and let me go, and he did.

"One day I heard him coming more quickly than usual to my pen, and, on reaching it, he opened the lid and picked me up, hastily, but yet gently, taking special care of my wounded leg, and put me under his coat, and ran as fast as he could towards the river.

"When he reached it he put me down and said, 'My friend, my father is angry to-day, and he said he was going to kill you soon, but I have saved your life, so run off and make your home, for I must be off. Good bye.'

"I watched him till he was out of sight and then started to hunt for a hole where I could spend the night. After hobbling about on my three remaining feet for a little while, I found this hole, and with a little trouble I got enough dry grass for the night, which was fast approaching.

"Nearly a year passed away before I saw any of my friends. The first one was a nice-looking muskrat, in the prime of life and unmarried.

"After a time we were married, and we have lived in this little home ever since. The oldest of my family I named after his father, John Thomas Fritz Alexander Roy Henry Muskrat. I always tell this one to keep out of the way if he sees the man with the gun."

GLEN HOLTERMANN (age 14).
Brantford, Ont.

The Rabbit's Dreaded Enemies.

One morning (I was told afterwards by my brother rabbit that it was Thanksgiving morning) as I was getting my breakfast in a clover field beside the swamp, a farmer with a gun over his shoulder, a large game bag hanging by his side, and four dogs running snuffing and snorting along, and giving an occasional bark, came over the hill.

I sprang up and headed toward the swamp as fast as my legs could carry me. I had only gone a few jumps when I heard a loud bang behind me, and a rifle ball whistled over my head. The next I heard was the man calling to his dogs, and just then I gained the bush and began making my way through the underbrush as fast as possible, and as I went along I could hear the dogs coming after me, but the swamp was large.

As it was our custom, I made a large circuit, and as I neared the place where I started, I thought of starting off another direction, but before I had time there came that loud sound again, and a ball went through the muscle of my thigh. I managed to hide in a brush-heap which was near-by. The report of the gun started a fox, and he crossed my track just in front of the dogs and they followed him, so the farmer with his gun left the bush in hot pursuit.

Much relieved by his departure, my mind went instantly to my wound. It was very painful, but, fortunately, there was no great loss of blood. As I sat there in a blur of mind I heard a rustle, and, looking round, I saw my brother coming into the brush-heap, and he much relieved me when he told me that all the rest of the family were safe.

After I had a long rest I managed with great difficulty to hobble to a more secluded spot of the swamp, away from our most dreaded enemies.

JOHN CUSICK (age 16).
Walton, Ont.

The Wounded Fox.

"Well, old fellow," said a farmer with a single-barrelled gun, "you are nearly done-for. I should like to hear about your life before you die."

"All right," said the wounded fox, but I shall have to hurry up. I was born in a snug nest which was dug in my swamp. Before I was a month old my mother had taught me several tricks how to avoid enemies. One night when I was still young, I missed my mother. Finding she was away when I woke up, I went out to search for her. I searched till about noon, then gave it up for hopeless. When I reached home I found Mr. Bunny waiting to tell me some news.

"I suppose you have heard the sad news about your mother?" "No," I answered, "what is it?" "Last night," he said, "as your mother was coming home with a nice fat chicken, a man who carried a single-barrelled gun shot her in the leg. She tried to run, but before she went a rod, three dogs (which the man had with him) tore her to pieces."

"After hearing the sad news, I did not venture out of my home until I was forced to seek for a breakfast in order to keep from starving. I had fairly good luck until this morning I was quietly walking towards your barn. I heard a rattle of the bushes near-by, stopped, listened, and turned to run. Just as I was starting to run, the report of a gun rang out, and I fell, stunned.



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Beware of imitations of **Diamond Dyes.** Imitators who make only one kind of dye, claim that their imitations will color Wool, Silk, or Cotton ("all fabrics") equally well. This claim is false, because no dye that will give the finest results on Wool, Silk, or other animal fibres, can be used successfully for dyeing Cotton, Linen, or other vegetable fibres. For this reason we make two kinds of **Diamond Dyes**, namely: **Diamond Dyes for Wool**, and **Diamond Dyes for Cotton**.

Diamond Dyes for Wool cannot be used for coloring Cotton, Linen, or other Mixed Goods, but are especially adapted for Wool, Silk, or other animal fibres, which take up the dye quickly.

Diamond Dyes for Cotton are especially adapted for Cotton, Linen, or other vegetable fibres, which take up the dye slowly.

"Mixed Goods," also known as "Union Goods," are made chiefly of either Cotton, Linen, or other vegetable fibres. For this reason our **Diamond Dyes for Cotton** are the best dyes made for these goods.

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"Now, you know the rest, but before I die, I would like to ask you if you will be kind to my friends in the swamp."
LESLIE WRIGHT (Senior 4th Book).
Nestleton, Ont.

The Partridge.

Very early one morning this spring I was feeding near a small clearing with my brood of nine young chicks when we were startled to see a large dog come running towards us.

I at once gave the signal for my chicks to hide; and they all ran among the dead leaves and lay so close to the ground that they couldn't be seen. Then I flew off a short distance and started to flutter near some dead brush, so as to get the dog's attention away from my chicks. By this time, three other dogs had come within a short distance and were barking very loudly, when I noticed a man coming with a gun to see what the dogs had found.

By this time I had begun to feel somewhat frightened, knowing that hunters had not much mercy on us partridges, who never did them any harm. As he came closer, I tried to make my escape by flying, but it was too late, for I had no sooner started till "bang" went the gun, and I fell to the ground more dead than alive.

Then he came and picked me up, and, thinking I was quite dead, put me into a bag that he had over his shoulder. He carried me for a long time, till I lost consciousness with the pain in my wing, and I remembered nothing more till I came to my senses in the corner of a little log shanty with two rooms in it. When I was wondering what was going to become of me, a boy came into the room, and when he saw that I was alive, he picked me up and examined me, and found that I had been shot in the wing, but was not so badly hurt but that I might still recover. He gave me some breadcrumbs to eat, and after a while I felt well enough to walk around.

When the old man came in the house again, the boy asked him to let me go, as I might have a young brood of partridge, and they would die if I did not get back to them. After a while he gave his consent.

Then the boy took me away back to where I had been shot. I tried to thank him as best I could, then I went off to find my young birds. I soon found them, still lying where I had left them, all ready to welcome me back.

We are now full-grown partridges, and we all feel kindly towards the boys, for we feel certain they will not harm us.

JOSEPH HODGSON (age 14).
Mindemoya, Manitoulin Island.

The Ingle Nook.

[Rules for correspondents in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen-name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on. (4) Allow one month, in this department, for answers to questions to appear.]

Christmas is over, and New Year's Day is past, that day whose especial consecration to the forming of new resolutions has been so caricatured as to make it almost a joking matter. But never mind, forming resolutions is not such a bad practice—the thing necessary is to see that every day shall be made a New Year's Day in this respect. Our will is a curious thing; sometimes it needs prodding up every hour, rather than every day.

The really beneficial part of forming new resolutions lies in the fact that before doing so, one must be conscious of some defect in one's self—in one's disposition, or mental condition, or manner of doing work. Sometimes the realization is not pleasant, but, after all, don't you know, the becoming thoroughly disgusted with one's self is often the very best thing that can happen to one. For instance, suppose you have got into the habit of continual fault-finding—"nagging." It's an ugly word, but the uglier you can make it look to yourself, the better. Nothing suits you, and you whinge and carp, and look at the black side of everything. All at once you wake up to realize just how narrow and

disagreeable you have been. You despise yourself, and see your little, black, wizened-up bit of a heart in all its narrowness. Perhaps you feel like having a good cry over it, and you don't exactly enjoy the sensation. But remember, that tear, whether mental or visible, is just the beginning of a few showers of gentleness that will coax your little wizened-up member to develop into the big, warm, generous thing that it should be. And so you make your resolution, and perhaps the children whisper among themselves, "Mother's far jollier than she used to be," or, "I wonder what's making sister so good to us now."

Or, again, perhaps you have got to be just a little careless about how things look about your house. Hardly anyone ever "comes" in the cold weather, and so you let ashes lie on the stove some times, and let the walls get dingy, and the furniture dusty. You forget to tidy up your hair afresh after dinner, and wear a soiled apron all day long. One day you go to visit Mrs. B., and find everything so sweet, and cheery and bright. When you go home again, everything looks so cheerless and bleak, and you think what a "horrible" housekeeper you are. You feel ten degrees lower in the social scale than Mrs. B., and look down upon yourself accordingly. Then your resolution comes. Next morning finds you "right into it," and how you do enjoy yourself, water flying, "suds" steaming, until you look around with satisfied face, feeling, "Why, my house looks just as nice as Mrs. B's." And then, at six, someone comes in remarking, "Been cleaning up, I guess,"—then steps surreptitiously out to clean his feet at the back door. Of course, that touches you a bit, and you are glad you made your resolution.

There's an old adage to the effect that only "stagnant waters become foul." Of course, there's no proof in analogy, but the simile is sometimes effective, and we may apply it to ourselves by remembering that just according as we keep prodding ourselves up to see our defects and deficiencies, and making continuous efforts to overcome them, shall we keep ourselves bright, rippling, generous, energetic, and happy in the satisfaction that comes with the consciousness of moving forward. There is nothing so deadly to improvement as feeling that there is no need for improvement. D. D.

My Dear Ingle Nookers,—The shades of 1909 are forever hidden from our view, and another mile-stone on the toiling path to Eternity is reached. Time, with its golden plumage spreading over the mighty firmament, is not content to fold its wings, but glides gently along as the unruffled wave over the vast and fathomless ocean. The curtain of 1910 is raised, and other scenes in each of our lives must be enacted.

We all remember that unique "Conference of the Shades" last year. What a veritable gathering of the clans it proved to be, and how many resolutions we registered to frequently visit the Ingle Nook during the year. But alas! Frail human nature is so prone to that universal evil—procrastination! Dame Durden, can you not suggest another interesting proposition to have an Ingle Nook reunion? Holly, Dapple Grey, Jack's Wife, Anxious Mother, Ruby, Scottie, Exit, Maple Leaf, and all the other chatters, will you not begin the New Year by a contribution to our cozy corner?

I have been wondering how all those Ingle Nook babies are progressing, after the interesting discussion re modified milk. Apropos of the subject, shall I whisper a little secret: Forget-me-not also possesses one of those little cherubs—now, Chatterers, what do you know about that? By the way, I did not intend to divulge this secret, were it not that our worthy Women's Institute Secretary made direful threats to "give me away" if I remained silent. But, never mind, babies are very sweet and interesting little creatures, even if they do have a tendency to make our work less systematic. Three cheers for all the Ingle Nook babies!

Our Women's Institute is flourishing, the membership reaching almost one hundred. We sent two delegates to Guelph Convention in December, who will give their report at our annual "At Home" in January.

Allow me to congratulate you, Dame Durden, on your various delightful trips

been. You despise your little, black, heart in all its narrow feel like having a you don't exactly But remember, that or visible, is just showers of gentle-ur little wizened-up to the big, warm, should be. And resolution, and pers-isper among them- joller than she onder, what's mak- us now."

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ate you, Dame delightful trips

during the summer! How interesting and educative was your description of that Gowganda trip!

By the way, my husband and I took in the London Fair in September—it was my steadfast resolve to call on you in your den, but alas! the afternoon at my disposal glided away in that interminable weakness of woman—shopping.

Wishing you and all the Nookers a happy and prosperous New Year, I shall leave my card. FORGET-ME-NOT.

Congratulations, Forget-me-not, on your addition to the list of Ingle Nook babies. Here's wishing it (him or her?) health, long life, and prosperity.

Canning of Meats in the Farm Home.

Canning of different kinds of meat is done much in the same way. Chickens are cooked as you would for pressed chicken, or until the meat drops easily from the bones, salt and pepper to suit the taste being added while cooking, and only a small amount of liquid remaining when properly cooked. In preparing it for the cans, leave nothing but the bones, pressing the meat into the cans, adding some of the liquid as they are being filled, and enough to cover chicken when filled. After it becomes cold, clean off the cans thoroughly and put the small tin in place. It is now ready to be soldered, and it is important that it be well done, for if not air-tight, it will spoil. We take it to the tinsmith, who makes only a small charge. After being soldered, the corn-size can is boiled for three hours, and the tomato-size four, and it is very important to keep them boiling the length of time mentioned. One of the Institute delegates at Guelph (I did not learn her name), said a good test to see if can was air-tight was to throw can into hot water, and, if it bubbled, would have to be re-soldered before boiling. Beef, pork, veal, head-cheese, in fact, any meat, will be a success if these instructions are closely followed. In packing beef or pork in tomato-size can, put in as large pieces as possible, as it turns out nicer for a stew. When a can of meat is to be used cold, both ends of the can are cut very closely to the edge, and slowly pushed through, slicing it as it comes from the can.

J. A. FARLEY.

Mrs. Farley was one of the speakers at the Women's Institute Convention recently held at Guelph.

The "Farmer's Advocate" Fashions.



DESIGN BY MAY MANTOX. 6618 Child's Double Breasted Coat.



6620 Child's Dress, 1, 2 and 4 years.

Price of above patterns, 10 cents for each number. Kindly state number and age when ordering. Address: Fashion Dept., "The Farmer's Advocate," London, Ont.

Current Events.

As a result of intrigue and the opposition of the Young Turks Party, the Turkish Cabinet has resigned.

Over 90,000 Americans emigrated to Canada during the past year, most of them going on to Western land.

Plans are out for the re-erection of the Quebec Bridge over the St. Lawrence, at an estimated cost of \$10,000,000.

Sir R. W. Perks is coming from England to Canada again this month to promote the Georgian Bay Canal project.

The biggest British mail that ever reached Canada arrived in Montreal on December 26th, by special train of twelve cars.

John Ross Robertson, of the Toronto Telegram, put \$10,000 in the stocking of the Sick Children's Hospital at Christmas.

Rev. Dr. John Currie, an eminent Greek scholar, of Pine Hill Presbyterian Theological College, Nova Scotia, is dead.

Over \$1,000,000 damage was done by a recent storm on the New England seacoast, and over 30 people lost their lives.

About 25 persons coming from the Northwest to enjoy Christmas in Ontario, were injured in a derailling accident on the C. P. R. at Chapleau.

The centenary of the birth of William Ewart Gladstone was fittingly celebrated in England and many other lands throughout the world on December 29th.

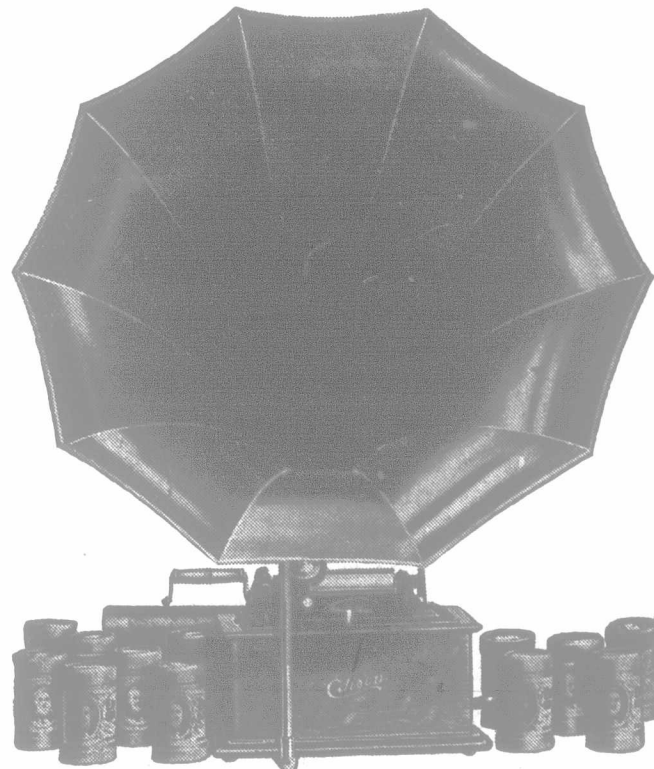
The Christmas and New Year's holiday traffic on the Canadian railways was the heaviest on record—one evidence of the buoyancy induced by prosperity.

The Jacques Cartier and Frontenac Gas Co., of Quebec, distributed \$4,000 at Christmas among 50 employees, according to position and length of service.

King Leopold II., of the Belgians, who died in December, has been succeeded on the throne by Prince Albert, son of the late King's brother, Philippe, Count of Flanders.

The Canadian Government has begun its navy by buying from Great Britain the cruiser "Rainbow," 3,400 tons, built at a cost of \$920,000, which will be used as a training-ship for recruits.

Hon. Rudolphe Lemieux, the Cana-



You, Too, Should Have This Grand Edison Phonograph on a

FREE LOAN

Yes, an absolutely free loan, the world's greatest phonograph, our new No. 10 model, 1910 outfit, now offered on a free loan.

This outfit includes the great Fireside Edison machine, the new machine on which Mr. Edison has been working for several years—the climax of this inventor's skill. It eclipses all former phonographs, it has improvements all its own never before seen in a talking machine. You must get one of these phonographs on a free loan to learn what Mr. Edison has accomplished in perfecting the greatest, the most wonderful talking machine ever made.

When we say free loan, we mean free loan. We will ship you a machine without a cent down, and without any C.O.D. payment to us, so you can take it right to your home and play the music there. You can hear vaudeville sketches, minstrel shows, comic operas, grand operas, waltzes, the old-fashioned hymns, all kinds of comic and serious music and songs right in your own home. All this on a free loan. Then when you are through with the free loan, simply return the phonograph outfit to us at our expense.

Is there a catch in this? No, there is no catch; but I will tell you my reason for this extra liberal offer. For I have a business reason, aside from my desire to see the great, new invention known among the public. I feel that when I ship you a phonograph on a free loan, you will help me advertise it, by letting your friends and neighbors hear the great concert. I do not ask you to sell any machines for me, in fact, we do not have any agents. But I know that when your friends and neighbors hear the machine, someone somewhere will want to buy one of these phonographs; perhaps several people will want to buy. You, yourself, can keep it if you want to on terms of \$3.00 a month, and absolutely at the rock-bottom price, the lowest possible price at which this outfit can be sold anywhere. But I do not ask you to buy it, I simply want you to get it on a free loan, and help me advertise in that way. It is the quickest and easiest method of introduction that I can find for this great, new phonograph.



Mr. Edison Says:
"I want to see a Phonograph in every Home"

The phonograph is his pet and hobby, and it is true that there should be no home in the country without this grand and magnificent entertainer. At any rate, you ought to seize this opportunity to have a phonograph free for awhile and hear all the music at least a few times before shipping back the phonograph.

And remember, please, you can't imagine what a talking machine is like, what the latest improvements mean, until you have heard our outfit No. 10. It is so far superior to the ordinary talking machine you may have heard in your town that there is absolutely no comparison. Convince yourself on this free loan offer.

NOW Write For the Free Catalog!

I want to send you absolutely free our great new Edison catalog, containing the list of records and a full description of the new Fireside Machine. I ask you as a favor to me to read this catalog anyway, even if you should decide that you would not want a free loan. After seeing the catalog, you will perhaps select a list of records you want on the free loan, then you will want a free loan. But anyway let me send you this catalog today, absolutely free, prepaid, without any charge. I want you to see what Mr. Edison has accomplished in talking machines. I want you to appreciate what the talking machine means to the farm home and the village home.



Sign the Coupon

with your name and address—no letter necessary; or, if you want, you may send a postal card or letter instead of the coupon—either way. But let me have your name and address today. Will you write at once?

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Do you know how much you are losing by not owning an Edison Phonograph?

• This instrument was made for you by Mr. Edison. It is intended to bring music into your home. It will help you entertain your guests. It will amuse you during your leisure hours. It will help you to bring up your family to love music.

This is what Mr. Edison meant when he said that he would like to see a Phonograph in every home.

How can you let any consideration of money stand in the way of your owning one of these great entertainers? The Phonograph will give you so much more in return for the money than you can get by spending it in any other way.

Do not take our word for it. Go to a dealer today and hear the Edison Phonograph play the Amberol Records, and you will know why we are so positive that you cannot afford to do without it.

Edison Phonographs - - \$16.50 to \$162.50
Edison Standard Records - - - - - 40c
Edison Amberol Records (twice as long) 65c
Edison Grand Opera Records - - - - - 85c

There are Edison dealers everywhere. Go to the nearest and hear the Edison Phonograph play both Edison Standard and Amberol Records. Get complete catalogs from your dealer or from us.

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More bread and Better bread —And the Reason for it

A STRONG FLOUR can only be made from strong wheat. Manitoba hard wheat is acknowledged the strongest in the world—and that is the kind used for Purity Flour.

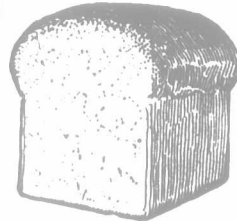
But that's not all. Every grain of this wheat contains both high-grade and low-grade properties. In separating the high-grade parts from the low-grade the Western Canada Flour Mills put the hard wheat through a process so exacting that not a single low-grade part has the remotest chance of getting in with the high-grade.

Of course this special process is more expensive to operate but it means a lot to Purity flour users—that's why we use it.

It means that Purity Flour is made entirely of the highest-grade flour parts of the strongest wheat in the world.

It means a high-class, strong flour and therefore yields "more bread and better bread."

Purity may cost a little more than some flours, but results prove it the cheapest and most economical after all.



PURITY FLOUR



WESTERN CANADA FLOUR MILLS COMPANY, LIMITED
MILLS AT WINNIPEG, GODERICH, BRANDON

The Annual Sale of Breeding Stock (BEEF BREEDS)

CONDUCTED BY THE GUELPH FAT-STOCK CLUB,
Under the auspices of the Dominion Live-stock Associations, will be held in the

Winter Fair Building, Guelph, Wednesday, March 2, 1910

Entries close 20th January, 1910. For further particulars apply to the Secretary.

W. R. ELLIOTT, President.

J. M. DUFF, Secretary.

dian Postmaster-General, has succeeded in arranging with the British authorities a reduction from 18 cents to 12 cents per pound, parcel post, to Canada, 11 pounds being the maximum limit of weight. Similar rates to the West Indies are also provided.

The rejection of the Budget by the House of Lords has precipitated the most momentous election of many generations in Great Britain. The whole country is a gigantic debating club, with the world looking on. During a single week over 10,000 meetings were held. Democracy is on trial, and January decides the issue.

The University of Copenhagen, Denmark, to which the official records of Dr. Frederick S. Cook's alleged discovery of the north pole were submitted, has rejected his claims, and the New York Explorers' Club have expelled him from its membership for having perpetrated a fraud in claiming to have reached the summit of Mt. McKinley.

The Census and Statistical Office, Ottawa, reports an increase of over \$1,000,000 in the value of Canada's field crops for 1909 over 1908. As usual, Ontario leads, with crops valued at \$200,598,000, double that of any other Province, more than that of the three Western grain-growing Provinces combined; and if the increased percentage, as a result of feeding into the form of dairy products, meat, poultry, etc., were added, Ontario's total would be easily half that of entire Canada.

The Golden Dog

(Le Chien D'Or.)

A Canadian Historical Romance.

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CHAPTER XLVI.—Continued.

"And finding them?"
"Not yet, master, but ere long—finding all ere long," replied she, in a dreamy manner. "But go not to the market to-morrow."

"These are strange fancies of yours, Dame Rochelle. Why caution me against the market to-morrow? It is the day of St. Martin; the poor will expect me; if I go not, many will return empty away."

"They are not wholly fancies, master. Two gentlemen of the Palace passed to-day, and looking up at the tablet, one wagered the other on the battle to-morrow between Cerberus and the Golden Dog. I have not forgotten wholly my early lessons in classical lore," added the dame.

"Nor I, dame. I comprehend the allusion, but it will not keep me from the market! I will be watchful, however, for I know that the malice of my enemies is at this time greater than ever before."

"Let Pierre go with you, and you will be safe," said the dame, half-impudently.

The Bourgeois laughed at the suggestion, and began good-humoredly to rally her on her curious gift and on the inconvenience of having a prophetess in his house to anticipate the evil day.

Dame Rochelle would say no more. She knew that to express her fears more distinctly would only harden the resolution of the Bourgeois. His natural courage would make him court the special danger he ought to avoid.

"Master," said she, suddenly casting her eyes in the street, "there rides past one of the gentlemen who wagered on the battle between Cerberus and the Golden Dog."

The Bourgeois had sufficient curiosity to look out. He recognized the Chevalier De Pean, and tranquilly resumed his seat with the remark

that "that was truly one of the heads of Cerberus which guards the Friponne, a fellow who wore the collar of the Intendant and was worthy of it. The Golden Dog had nothing to fear from him."

Dame Rochelle, full of her own thoughts, followed with her eyes the retreating figure of the Chevalier de Pean, whom she lost sight of at the first turn, as he rode rapidly to the house of Angelique des Meloises. Since the fatal eve of St. Michael, Angelique had been tossing in a sea of conflicting emotions, sometimes brightened by a wild hope of the Intendant, sometimes darkened with fear of the discovery of her dealings with La Corriveau.

It was in vain she tried every artifice of female blandishment and cunning to discover what was really in the heart and mind of Bigot. She had sounded his soul to try if he entertained a suspicion of herself, but its depth was beyond her power to reach its bottomless darkness, and to the last she could not resolve whether he suspected her or not of complicity with the death of the unfortunate Caroline.

She never ceased to curse La Corriveau for that felon stroke of her mad stiletto, which changed what might have passed for a simple death by heartbreak into a foul assassination.

The Intendant, she knew, must be well aware that Caroline had been murdered; but he had never named it or given the least token of consciousness that such a crime had been committed in his house.

It was in vain that she repeated, with a steadiness of face which sometimes imposed even on Bigot, her request for a lettre de cachet, or urged the banishment of her rival, until the Intendant one day, with a look which for a moment annihilated her, told her that her rival had gone from Beaumanoir, and would never trouble her any more.

What did he mean? Angelique had noted every change of muscle, every curve of lip and eyelash as he spoke, and she felt more puzzled than before.

She replied, however, with the assurance she could so well assume, "Thanks, Bigot; I did not speak from jealousy. I only asked for justice and the fulfilment of your promise to send her away."

"But I did not send her away. She has gone away, I know not whither—gone, do you mind me, Angelique? I would give half my possessions to know who helped her to escape—yes, that is the word—from Beaumanoir."

Angelique had expected a burst of passion from Bigot; she had prepared herself for it by diligent rehearsal of how she would demean herself under every possible form of charge, from bare innuendo to direct impeachment of herself.

Keenly as Bigot watched Angelique, he could detect no sign of confusion in her. She trembled in her heart, but her lips wore their old, practiced smile. Her eyes opened widely, looking surprise, not guilt, as she shook him by the sleeve or coquettishly pulled his hair, asking if he thought that "she had stolen away his lady-love!"

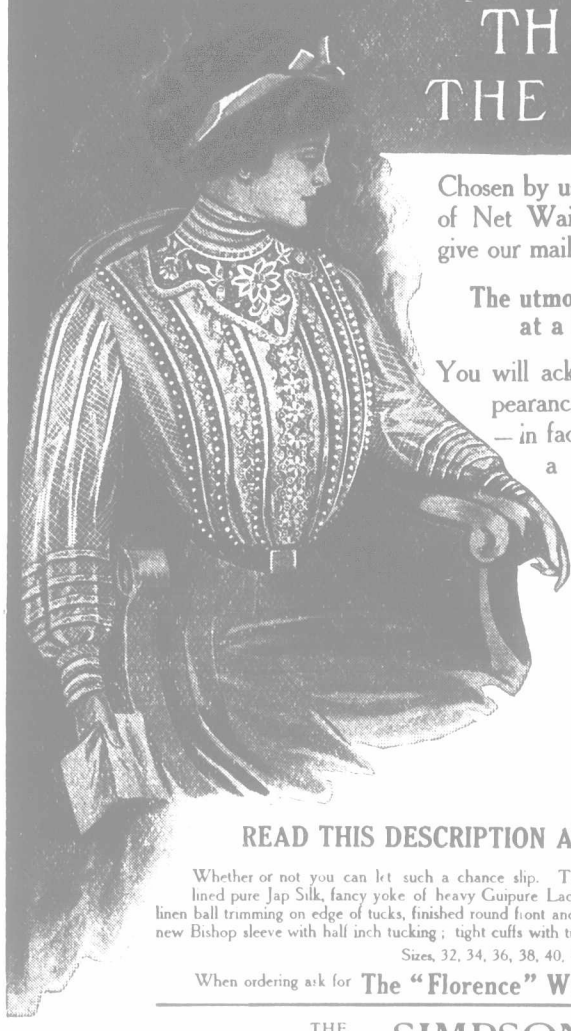
Bigot, though only half-deceived, tried to persuade himself of her innocence, and left her, after an hour's dalliance, with the half-belief that she did not really merit the grave suspicions he had entertained of her.

Angelique feared, however, that he was only acting a part. What part? It was still a mystery to her, and likely to be, she had but one criterion to discover his real thoughts. The offer of his hand in marriage was the only test she relied upon to prove her acquittal in the mind of Bigot of all complicity with the death of Caroline.

But Bigot was far from making the desired offer of his hand. That terrible night in the secret chamber of Beaumanoir was not absent from his mind an hour. It could never be forgotten, least of all in the company of Angelique, whom he was judging incessantly, either convicting or acquitting her in his mind as he was

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The utmost in Style and Value at a Reasonable Price

You will acknowledge that, to all appearances, it is a five dollar waist — in fact you don't often see such a beauty offered even for that price; but counting on a tremendous demand, we've marked the price on this

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READ THIS DESCRIPTION AND THEN DECIDE

Whether or not you can let such a chance slip. This waist is made up in Ecru Net only, lined pure Jap Silk, fancy yoke of heavy Guipure Lace, front elaborately embroidered, with linen ball trimming on edge of tucks, finished round front and collar with Silk Soutache Braid; the new Bishop sleeve with half inch tucking; tight cuffs with tucking and Soutache Braid.

Sizes, 32, 34, 36, 38, 40, 42.

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There are forty-seven other pages in this Catalogue that are just as interesting. Men, women and children all have been remembered in this price-reducing carnival.

This Catalogue is now going out to all the addresses on our mailing list. If your address is not there, just write it on a post-card addressed to the Company, and a copy will be sent to you.

THE ROBERT SIMPSON COMPANY LIMITED TORONTO

alternately impressed by her well-acted innocent gaiety or stung by a sudden perception of her power of deceit and unrivalled assurance.

So they went on from day to day, fencing like two adepts in the art of dissimulation, Bigot never glancing at the murder, and speaking of Caroline as gone away to parts unknown, but, as Angelique observed with bitterness, never making that a reason for pressing his suit; while she, assuming the role of innocence and ignorance of all that had happened at Beaumanoir, put on an appearance of satisfaction, or pretending still to fits of jealousy, grew fonder in her demeanor, and acted as though she assumed, as a matter of course, that Bigot would now fulfil her hopes of speedily making her his bride.

The Intendant had come and gone every day, unchanged in his manner, full of spirits and gallantry, and as warm in his admiration as before; but her womanly instinct told her there was something hidden under that gay exterior.

Bigot accepted every challenge of flirtation, and ought to have declared himself twenty times over, but he did not. He seemed to bring himself to the brink of an avowal, only to break into her confidence and surprise the secret she kept so desperately concealed.

Angelique met craft by craft, duplicity by duplicity, but it began to be clear to herself that she had met with her match, and although the Intendant grew more pressing as a lover, she had daily less hope of winning him as a husband.

The thought was maddening. Such a result admitted a twofold meaning; either he suspected her of the death of Caroline, or her charms, which had never failed before with any man, failed now to entangle the one man she had resolved to marry.

She cursed him in her heart while she flattered him with her tongue, but by no art she was mistress of, neither by fondness nor by coyness, could she extract the declaration she regarded as her due, and was indignant at not receiving. She had fairly earned it by her great crime. She had still more fully earned it, she thought, by her condescensions. She

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B. H. TWEDDIE, SANDY POINT, N.S. I started the machine with 100 eggs. At the end of ten days I tested out twenty-eight and opening the shells I found every one infertile. This left 72 in the incubator; of these 61 came out fine healthy chickens, and the balance added in the shell or were too weak to get out.

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About The Only Business That Isn't Overdone Poultry-raising. The Peerless Way, in good money out of it. It is the one business, and the Peerless Way the one way, that calls for very little capital and no expert knowledge. You certainly ought to learn all about it quick! Ask us to tell you all the facts—they probably will make you open your eyes to the real profit in poultry.

Your Credit is Good With Us—Use It Now! You need not let your means limit your ambition. You, or any other honest person, can have a Peerless Outfit on credit, terms that make it so easy to start poultry raising you never feel the outfit at all. And when you do start, you are entitled FREE to the advice and help of our Board of Experts—men who developed The Poultry Yards of Canada, Limited, the largest poultry farm in Canada, and one of the most successful in the world. These men will help you over the rough spots; will tell you in detail just what to do and what not to do in order to make a go of poultry-raising for profit. Their knowledge and experience is at your command, free. This alone is worth dollars.

We Prepay The Freight To Save You Bother You need not even pay the freight on the outfit—we pay that for you, just to save you bother. We do more than that—we will agree to find you a spot-cash buyer who will pay the highest market prices for any poultry or eggs you want to sell. You needn't worry, you see, over finding a market. So, no matter how far away from a town you live, you are sure of a good taker for all you raise. Sit down NOW and ask for the full details of this rare offer. Use a post card if you haven't a stamp handy. Don't wait any longer. You run no risks at all, first or last, and the profit is waiting for you. Write for the book to-day. Just Address:

LEE Manufacturing Co., Limited 450 Pembroke Avenue PEMBROKE ONTARIO CANADA

regarded Providence as unjust in withholding her reward, and for punishing as a sin that which for her sake ought to be considered a virtue. She often reflected with regretful looking back upon the joy which Le Gardeur de Repentigny would have manifested over the least of the favors which she had lavished in vain upon the inscrutable Intendant. At

such moments she cursed her evil star, which had led her astray to listen to the promptings of ambition and to ask fatal counsel of La Corveure. Le Gardeur was now in the swift downward road of destruction. This was the one thing which caused Angelique a human pang. She might yet fail in all her ambitious prospects, and have to fall back upon her

first love—when even that would be too late to save Le Gardeur, or to save her.

De Pean rode fast up the Rue St. Louis, not unobservant of the dark looks of the Honnetes Gens or the familiar nods and knowing smiles of the partisans of the Friponne whom he met on the way.

Before the door of the mansion of the Chevalier des Meloises he saw a valet of the Intendant holding his master's horse, and at the broad window, half hid behind the thick curtains, sat Bigot and Angelique, engaged in badinage and mutual deceiving, as De Pean well knew.

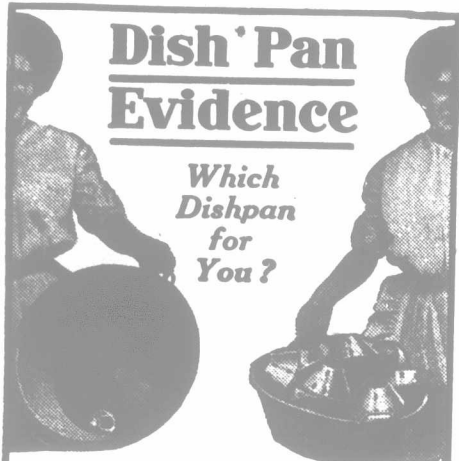
Her silvery laugh struck his ear as he drew up. He cursed them both; but fear of the Intendant, and a due regard to his own interests, two feelings never absent from the Chevalier de Pean, caused him to ride on, not stopping, as he had intended.

He would ride to the end of the Grande Allee and return. By that time the Intendant would be gone, and she would be at liberty to receive his invitation for a ride to-morrow, when they would visit the Cathedral and the market.

De Pean knew enough of the ways of Angelique to see that she aimed at the hand of the Intendant. She had slighted and vilipended himself, even while accepting his gifts and gallantries. But with a true appreciation of her character, he had faith in the ultimate power of money, which represented to her, as to most women, position, dress, jewels, stately houses, carriages, and, above all, the envy and jealousy of her own sex.

These things De Pean had wagered on the head of Angelique against the wild love of Le Gardeur, the empty admiration of Bigot, and the flatteries of the troop of idle gentlemen who dawdled around her.

He felt confident that in the end victory would be his, and the fair Angelique would one day lay her hand in his as the wife of Hugues de Pean. De Pean knew that in her heart she had no love for the Intendant, and the Intendant no respect for her. Moreover, Bigot would not venture to marry the Queen of Sheba without the sanction of his jealous patroness at Court. He might possess a hun-



Dish Pan Evidence

Which Dishpan for You?

The practically empty pan contains the only piece used inside Sharples Dairy Tubular Cream Separator bowls. It is smooth, tiny, instantly removable. The full pan contains the disks from a single common cream separator—one of thousands of the common sort that are discarded for Tubulars every year.

The simple, sanitary Sharples Dairy Tubular is the only modern, easy-to-clean cream separator—has twice the skimming force—lasts a lifetime. The dishpans show one reason why every woman should insist on a Tubular.



The manufacture of Tubulars is one of Canada's leading industries. Sales easily exceed most, if not all, others combined. Tubulars probably replace more common separators every year than any one maker of such machines sells. Write for catalog No. 133.

THE SHARPLES SEPARATOR CO.
Toronto, Ont., Winnipeg, Man.

The confidence felt by farmers and gardeners in Ferry's Seeds to-day would have been impossible to feel in any seeds two score of years ago. We have made a science of seed growing.



always do exactly what you expect of them. For sale everywhere. **FERRY'S 1910 SEED ANNUAL** Free on request.
D. M. FERRY & CO., Windsor, Ont.

Nitrate of Soda

Nitrate Sold in Original Bags

NITRATE AGENCIES CO.

- California.....321 Stimson Block, Los Angeles
-520 Bank San Jose Bldg., San Jose
- Georgia.....36 Bay Street, East, Savannah
- Illinois.....1204 Hartford Building, Chicago
- Louisiana.....305 Baronne St., New Orleans
- New York.....62 Stone Street, New York
- Virginia.....Citizens Bank Bldg., Norfolk
- Washington.....603 Oriental Block, Seattle
- Canada.....1103 Temple Bldg., Toronto
- Cuba.....Havana

Address Office Nearest You
Write for Quotations

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

BUFF ORPINGTONS—100 pure-bred, stout, vigorous cockerels, \$2; yearling hens, pullets, \$1.50 each. Order early. Get choice. Satisfaction guaranteed. Hugh A. Scott, Caledonia, Ont.

FOR SALE—M. B. turkeys. Fine heavy birds, bred from first-prize winning stock. R. G. Rose, Glenworth, Ont.

TOULOUSE geese, two dollars each; Columbian Wyandottes, one dollar and fifty cents each. Emerson Tofts, Welland, Ont.

Maple and Rock Elm Logs Wanted

300 Maple Logs 10/16 feet long, 22 inches and up diameter small end.
600 Rock Elm Logs 16 feet and up long, 12 inches and up diameter small end.

The Bradley Co., Hamilton, Ontario.

dred mistresses if he liked, and be congratulated on his bonnes fortunes, but not one wife, under the penalty of losing the favor of La Pompadour, who had chosen a future wife for him out of the crowd of intrigantes who fluttered round her, basking like butterflies in the sunshine of her semi-regal splendor.

Bigot had passed a wild night at the Palace among the partners of the Grand Company, who had met to curse the peace and drink a speedy renewal of the war. Before sitting down to their debauch, however, they had discussed, with more regard to their peculiar interests than to the principles of the Decalogue, the condition and prospects of the Company.

The prospect was so little encouraging to the associates that they were glad when the Intendant bade them cheer up and remember that all was not lost that was in danger. "Philibert would yet undergo the fate of Actæon, and be torn in pieces by his own dog." Bigot, as he said this, glanced from Le Gardeur to De Pean, with a look and a smile which caused Cadet, who knew its meaning, to shrug his shoulders and inquire of De Pean privately, "Is the trap set?"

"It is set!" replied De Pean, in a whisper. "It will spring to-morrow and catch our game, I hope."

"You must have a crowd and a row, mind! This thing, to be safe, must be done openly," whispered Cadet, in reply.

"We will have both a crowd and a row, never fear! The new preacher of the Jesuits, who is fresh from Italy, and knows nothing about our plot, is to inveigh in the market against the Jansenists and the Honnetes Gens. If that does not make a crowd and a row, I do not know what will."

"You are a deep devil, De Pean! So deep that I doubt you will cheat yourself yet," answered Cadet, gruffly.

"Never fear, Cadet! To-morrow night shall see the Palace gay with illumination, and the Golden Dog in darkness and despair."

(To be continued.)

QUESTIONS AND ANSWERS.

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

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

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

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

Miscellaneous.

FARMERS UNREPRESENTED.

Will you kindly answer the following questions, or recommend some book which treats this subject in a concise manner:

1. What proportion of the entire population of Canada and Ontario are farmers?
2. What per cent. of the total revenue of Canada and of Ontario is it estimated the farmers pay both by direct and indirect taxation?
3. What proportion of the Federal and Ontario Legislatures and Senates are composed of truly farmer representatives?
4. What proportion of the public wealth is spent by the Government directly in the farmers' interests; and to what extent, if any, does the Government influence the distribution of private wealth?
5. What would be a few of the principal benefits derived by farmers, by a political organization that would control the Government, and how would these benefits be secured if such an organization were possible?

INQUIRER.

Ans.—1. According to the census of 1901, the rural population of the Dominion numbered 3,349,516; the urban, 2,021,799. That, of course, does not give the exact proportion of farmers, as a percentage of those living in the country do not farm. There were in the

POTASH MEANS PROFIT

Every farmer, market gardener and fruit grower, who has not already done so, should test the truth of this statement by using POTASH this year.

NO BETTER RESOLUTION CAN BE MADE FOR THE NEW YEAR.

Potash is an absolutely Indispensable Ingredient of a Complete Fertilizer, and may be obtained from all leading fertilizer dealers and seedsmen in the highly-concentrated forms of

Sulphate of Potash and Muriate of Potash.

If there is no dealer in your locality who handles fertilizers, write us, and we shall advise you where you can get supplies. For the benefit of dealers and others requiring POTASH in CAR-LOAD LOTS, we would mention that our Head Office has established a Sales Agency at Baltimore, which will sell such quantities at CONSIDERABLY REDUCED PRICES.

Write us for particulars and FREE copies of our bulletins, including:— "Fertilizers: Their Nature and Use"; "Fertilizing Orchard and Garden"; "The Potato Crop in Canada"; "The Farmer's Companion," etc., etc.

The Dominion Agricultural Offices of the Potash Syndicate,
1102-1105 TEMPLE BUILDING, TORONTO, ONTARIO

PSORIASIS

Of the skin or scalp can be cured. If others have treated you without success, see us before the trouble gets worse. We have had seventeen years' experience in treating and curing this and other Skin, Scalp, Hair and Complexional Troubles.

Pimples,

Blotches, Blackheads, Etc., can all be successfully treated at home under our advice and instruction, and a healthy condition obtained. Consultation invited. No expense.

Superfluous Hair,

Moles, Warts, Etc., eradicated forever by our reliable method of antiseptic Electrolysis. Booklet "E" mailed on request.

Hiscott Dermatological Institute,

61 COLLEGE ST., TORONTO, ONT.
Established 1892.

Cowan's Perfection Cocoa

is made from the finest carefully selected cocoa beans, roasted by a special process to perfect the rich chocolate flavor. Cowan's is most delicious and most economical.

The Cowan Co. Limited, Toronto.

WANTS & FORSALE

CARPENTER—18 years' experience in building trade—seeks situation with farmer intending building this coming season. Geo. Harvey, care W. Graham, Ursa P. O., N. Gooderham, Ont.

FOR SALE—100,000 feet iron pipe—good as new—for water, steam, fencing and fence posts, drains, etc. Any size. Write for prices, stating sizes. Imperial Waste & Metal Co., 13 Queen St., Montreal.

WANTED—Creamery! An experienced creameryman of good financial standing seeks information regarding a community that might prove a suitable field for a creamery. Address: Creamery, Farmer's Advocate, London, Ont.

Delhi Tannery Custom robe and fur tannery. If you have a cow hide or horse hide you want tanned or made into a robe or a fur coat, or have any kind of hides, skins or furs you want tanned, send them to me and have them dressed right. **B. F. BELL, DELHI, ONT.**

Please Mention Farmer's Advocate.

Dominion in 1900, 471,833 occupiers of farms; in Ontario, 185,415.

2. It is impossible to get at the amount paid by indirect taxation, except as a whole. Some sort of idea of the percentage that farmers thus pay to the Dominion revenues may be had from the relative numbers living in the country and in the towns and cities, but it is far from precise.

So far as the Provinces are concerned, in most of them direct taxation, with the exception of succession duties and for municipal purposes, is unknown. In Prince Edward Island, the farmers pay into the revenue of the Province about \$50,000 yearly in land, personal and horse tax. Each man between the ages of 21 and 60, pays \$1.00 road tax, and the horse tax is 25 cents per animal.

3. The House of Commons is composed of 221 members. Of this number, 25 classify themselves as farmers. The Senate consists of 87 members; at present, owing to vacancies, there are but 84, of which 8 are farmers.

Farmers have a better percentage in the Legislative Assembly of Ontario. Out of 106 members, there are 18 who are actual farmers, and two or three others who have a more or less intimate connection with agriculture.

4. The Dominion appropriations for the purpose of aiding agriculture, e.g., keeping up experimental farms, help to dairy and fruit industries, enforcement of Seed Control Act, establishing cold-storage warehouses, health of live stock, etc., etc., amounted for the year 1908 to 1909, to \$1,053,000. The salaries of many of the officials are paid out of Civil Government, and are not included in the appropriation. Appropriations from Provinces for like purposes:

Ontario	\$ 747,970
Quebec	261,300
Nova Scotia	68,700
New Brunswick	35,465
Prince Edward Island	9,528
Saskatchewan	224,889
British Columbia	31,980
Manitoba	94,700
Alberta	162,764

Total for Provinces\$1,637,296
Including Dominion appropriation, grand total\$2,690,296

The Government's influence in the distribution of wealth is probably less than is generally supposed. Prosperity depends chiefly on individual initiative and industry. There is no denying the fact, however, that customs duties give opportunity to a limited number of the population to become wealthy at the expense of the many. Bounties and bonuses, though in a much less degree, have influence in the same undesirable direction.

5. Correspondence is invited on this subject.

The Point of View, Sept. 2nd, 1909.—
Father—"Did you know, Helen, they've discovered the North Pole?" Little Helen—"And did they find Santa Claus?"

PROFIT

who has not already
 POTASH this year.
 THE NEW YEAR.
 Complete Fertilizer,
 and seedsmen in the
 of Potash.
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 TO, ONTARIO

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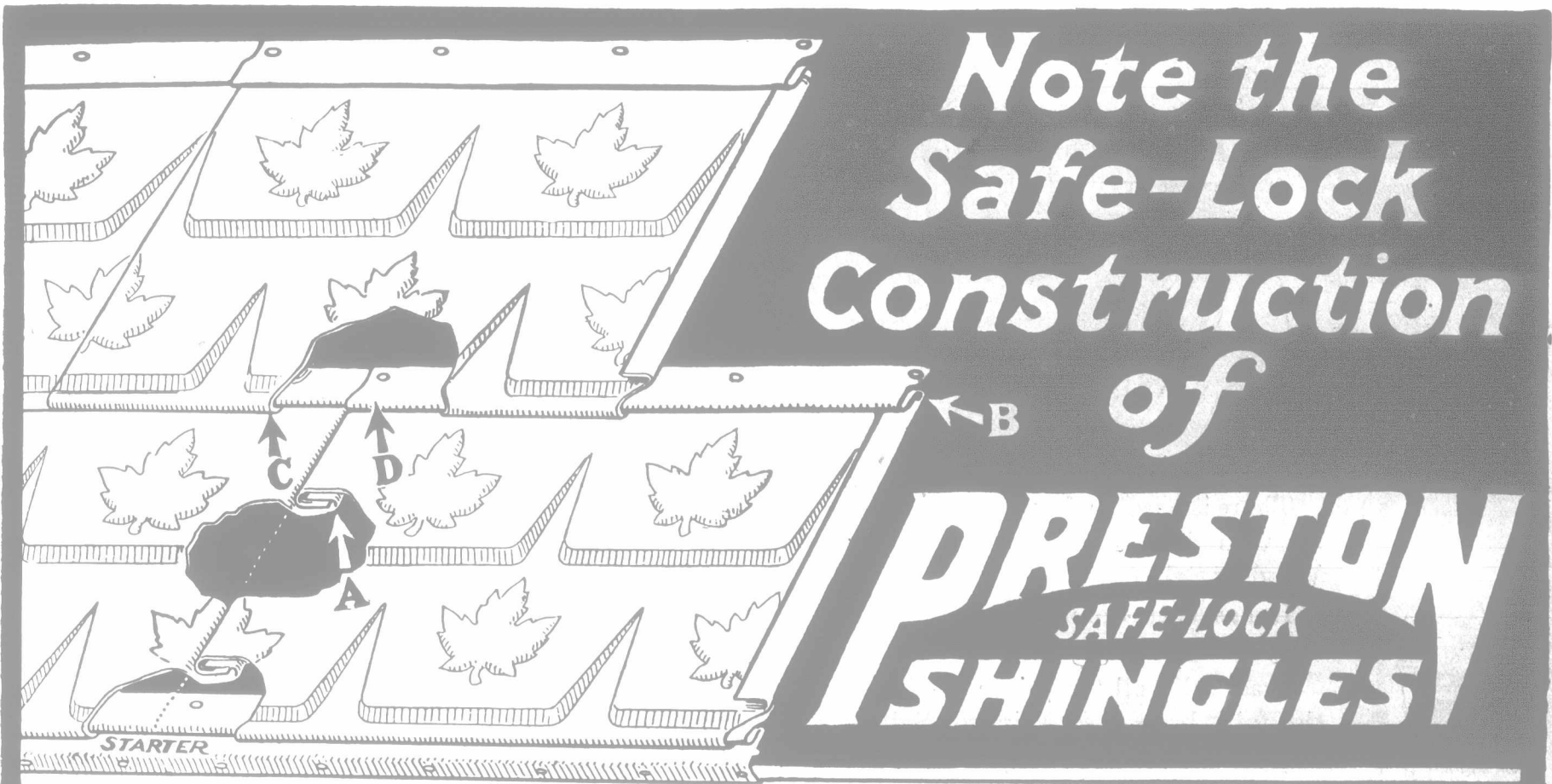
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Sept. 2nd, 1909.—
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Safe-Locked on All Four Sides

Don't make the mistake of thinking that all makes of metal shingles are very much alike. There is a vast difference between PRESTON Safe-Lock Shingles and others.

Unlike other Shingles, PRESTON Shingles do not merely slip or slide together. Instead, they are SAFE-LOCKED on all FOUR sides. The picture above shows how.

Look at ARROW A. See how the sides of the shingles hook over each other. This is on the principle of the "sailor's grip." It is utterly impossible for shingles locked in this way to pull apart. The heavier the strain, the firmer the grip.

Twice as Strong

The top lock of PRESTON Shingles is TWICE as strong as our wonderfully secure side lock. It consists of three thicknesses of sheet steel—see ARROW B.

The top of the shingle is where the greatest strain falls. Yet the top lock of most other metal shingles isn't as strong as the side lock of ours.

ARROW C shows how the shingles above hook over and lock securely to row below.

Nailing Is Protected.

ARROW D shows the method of nailing together the top locks of two adjoining shingles. The top lock of the right hand shingle overlaps the one on the left. The nail goes through both shingles.

All nails on the flange of the top-lock are covered by the shingles on the row above. Thus all nails are protected from exposure to the weather. They cannot rust or work loose. They are there for keeps.

So strong are our locks that there has not yet been a gale

powerful enough to rip off a roof covered with PRESTON Safe-Lock Shingles. The terrific wind storm that swept over Ontario on April 8, 1909 ripped off scores of wooden, metal and prepared roofings. Yet not one of these metal roofs was a PRESTON Safe-Lock roof.

Gale-proof Shingles

So close do PRESTON shingles lay to the sheeting and so secure are the Safe-Locks that even if some of the shingles were not nailed the roof would be solid and wind-tight.

It is utterly impossible to get PRESTON Shingles off the roof in any other way than by removing the nails one by one and unlocking each shingle separately. When you put PRESTON Shingles on your roof they are on to stay.

Snow-proof, too

No snow can be driven up PRESTON side locks and on to the sheeting below. The fold of our top lock closes right down over the end of the side lock. No rain or snow can be forced past this fold of sheet steel, unless you drill a hole through it first.

Just how easy it is for snow or rain to be driven up the side joints of other shingles you can readily see for yourself.

Simply fasten the sides of two ordinary shingles together. Then hold the shingles up and look through the joint. You can see daylight through it. That means there is an unobstructed passage through which rain or snow can be driven by the force of the wind.

Make the same test with PRESTON Shingles. You cannot see daylight through our side locks. That means the ends of our side locks are closed securely against wind and weather.

Generous Folds

The folds of PRESTON Safe-Locks are of such generous size that there is room and to spare for expansion and contraction due to excessive heat and cold.

Even the shrinking of the wood sheeting or the heavy strain due to the settling of the building is not sufficient to make any difference to our safe-locks, whereas other shingles will pull apart and leave spaces for leaks.

Patented Construction

You understand now why PRESTON Safe-Lock Shingles are so different in construction from other metal shingles. They will always be different and better, too. We were the originators of the interlocking Shingles. The patents we hold prevent others from making as good a shingle.

British Government Specifications

It is a well known fact that the British Government is the most particular buyer in the world. Ordinary metal shingles could not pass their Acid Test for galvanizing. This test is more severe on the galvanizing than twenty years of Canadian weather. Yet PRESTON shingles will easily pass this test.

PRESTON Shingles are made and galvanized according to British Government Specifications.

Twice the Service

Shingles galvanized according to these specifications are good for twice the service of shingles galvanized in the ordinary way.

Metal Shingle and Siding Co.

Head Office, Queen Street Factory, Preston, Ont. Limited
 Branch Office and Factory, Montreal.

Lightning Guarantee, Free

We have been making PRESTON Safe-Lock Shingles for eleven years. In all that time we have never heard of lightning damaging a building roofed with PRESTON Shingles.

So positive are we that a roof of PRESTON Shingles is lightning-proof that we give you a lightning guarantee free. This proves to you our unlimited confidence in the lightning-proof quality of PRESTON Shingles.

Most Quickly Laid.

As PRESTON Shingles are cut accurately to size, and the locks carefully made, they lock together quickly.

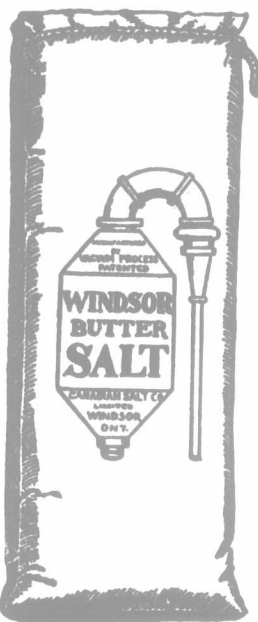
A man and a helper can lay 10 squares of PRESTON Safe-Lock Shingles in a day, whereas 5 or 6 squares would be a good average with ordinary metal shingles. If you have a large surface to roof that saving of time and labor means a good deal to you.

Booklet Reward

We have just issued a new booklet, "Truth About Roofing." We should charge something for this, as it contains information of real value to anyone who has a building to roof. But we will send it FREE as a reward to all who cut out, fill in and mail the coupon to us. Just you mail it today, or you'll forget it.

Please send me your new booklet, "Truth About Roofing." I am interested in roofing and would like complete information about PRESTON Shingles, British Government Specifications and Free Lightning Guarantee.

Name _____
 P.O. Address _____
 County _____ Prov. _____

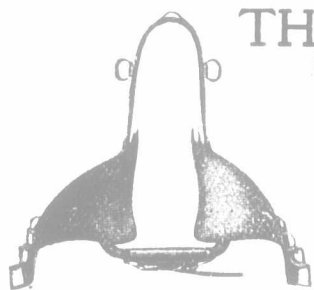


There is hardly a farmer's daughter in Canada who does not know Windsor Salt.

It has been the universal standby for years.

Practically all the prize winners at the fairs have used Windsor Salt—last year, 95% of those winning cash, medals and premiums, made their prize butter with Windsor Salt.

If you have not been using Windsor Salt for butter making, get a sack and try it. You will then see why the prize butter makers use it.



THIS IS A REAR VIEW
OF

The Humane Horse Collar

SOMETHING no thoughtful farmer can afford to be without at least ONE, if he owns one pair of horses, or TWO if he owns more. Now, why? you ask. FIRST, because owing to the high price of horses, and all products raised on the farm this year, above all others. It is absolutely essential from a monetary standpoint that the horse should be kept well and busy. THE HUMANE COLLAR is the only one made to-day that is guaranteed to do this. If your horse should be idle for one day, it will more than pay for the collar, but when he gets sore shoulders it takes more than one day to cure him.

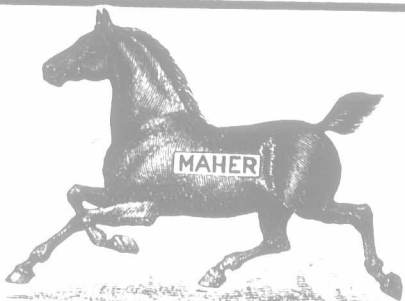
SOLD BY OVER 5,000 HARNESS DEALERS.

Over 60,000 sold in the U. S. last season. The Humane Horse Collar has 40 square inches of pulling surface to 10 inches on the old-style collar. The pulling is all done where the shoulder is the strongest, and where it is best protected by heavy layers of muscles. NO grinding from one shoulder to the other. NO pressure on top of the neck. NO hot sweat pads to chafe the horse. NO choking on going up hill. NO sweened horses, and NO sore shoulders or necks with THE HUMANE HORSE COLLAR.

It is adjustable to any horse from 16 to 26 inches, and is put out on 15 days' free trial; if not entirely satisfactory your money cheerfully refunded.

Write to-day for free catalogue describing and giving testimonials, then order one from your dealer for the spring work. If he cannot supply you, order direct from us. Address:

The Whipple Horse Collar Co., Limited,
HAMILTON, CANADA.



THE HORSE MARKET OF CANADA.

Maher's Horse Exchange

16 to 28 Hayden Street TORONTO
(Near cor. Yonge and Bloor)

Auction Sales every Monday and Thursday. We have always 1-300 horses on hand for auction or private sale. We have the biggest and best sale ring and stables in the Dominion. Special sale on Monday, Jan 10, of 50 horses consigned to us by The T. Eaton Co., Limited, to be sold without reserve.

P. MAHER, Proprietor. GEO. JACKSON, Auctioneer.

GOSSIP.

The attention of farmers and stockmen is directed to the advertisement of the Warren automatic feed rack and manger, manufactured by the Page Wire Fence Co., of Walkerville, Ont., which, it is claimed, will pay for its cost in a few months by avoiding waste, and keeping feed clean. It is made of steel and strong wire, and is, therefore, durable. See the advertisement and write for descriptive booklet.

The announcement published in these columns a few weeks ago, taken from a Chicago paper, that Richard Gibson, of Delaware, Ont., was at the annual meeting of the International Exhibition Association, held during show week, elected second vice-president, was an error, Mr. Gibson having been chosen as first vice-president, a decidedly complimentary acknowledgment of his interest in and contribution to the success of the great show.

Colin C. Munroe, of Kilmartin, Ont., has purchased of W. S., J. B. & B. Dunham, of Wayne, Ill., the pure-bred registered Percheron stallion, Gatignol 62595 (73187). This is a very fine three-year-old, coming four, gray stallion, and beyond question, the breeding of mares to him will greatly improve the horse stock of Mr. Munroe's vicinity. Canadian farmers are every day realizing more and more the advantages of having the best work horses obtainable, and the demand is therefore becoming stronger than ever for the very best type of breeding stallion procurable. Mr. Munroe's community is to be congratulated on having such a good horse on the stand. The Dunhams, from whom Mr. Munroe purchased this stallion, have been headquarters for Percherons in the United States for 45 years, and state that Gatignol is one of the very best horses brought over.

O. Sorby, Guolph, Ont., reports the following recent sales of Clydesdales: To L. N. & A. McLean, of Glamis, Ont., the two-year-old imported stallion, Overtown (9926). His pedigree is of the best, being by the celebrated Highland Society first-prize winner, Pride of Bacon. Overtown is a large colt, full of quality, and should make close to a ton when matured. Those wishing to breed to the best should see this horse before spring. To W. & R. Dingwall, of Hopeville, Ont., Diadem, a beautiful son of Hiawatha. His dam is the prize mare, Airies Maisie, one of Mr. Lockhart's breeding, and sold at his sale as a yearling filly for 125 guineas. Diadem stood in Scotland for one pound at the end of season, and three pounds when mare proves in foal. He should please the most exacting of Messrs. Dingwall's patrons.

THE TORONTO SHORTHORN SALES.

The announcement in our advertising columns of the great joint sale of Shorthorns, to take place at the Union Stockyards, West Toronto, on February 2nd and 3rd, following the annual meeting of the Dominion Shorthorn Association, will be an unusually interesting event to breeders and farmers contemplating the founding of herds, or requiring first-class young bulls to head their herds. The acknowledged shortage of good beef cattle of the commercial class, not only in Canada, but also in other countries, at present, and the high prices prevailing for such cattle, and reasonably certain to continue, makes the outlook for a strong demand for Shorthorn bulls and females of the better class very promising. The selections from the same herds put up at the sale at West Toronto last February were of a very superior class, and we are assured the offering this year will be up to quite as high a standard, as it is stipulated that only high-class animals shall be listed. Parties interested should make early application for the catalogue to Robert Miller, Stouffville, Ont., mentioning "The Farmer's Advocate."

The programme of the Eastern Ontario Live-stock and Poultry Show, to be held at Ottawa, January 17th to 21st, shows that the judging of beef cattle, sheep and hogs will commence at 2 p. m., on Tuesday, January 18th, and will be continued on Wednesday at 9.30 a. m. The judging of horses will commence at 2 p. m., on Wednesday. At 8 p. m., on Tuesday, at a public meeting, the show will be officially opened, when addresses will be delivered by Hon. J. S. Duff, Minister of Agriculture, and the Hon. Mr. Justice Riddle. Addresses on various subjects of interest to farmers and stock-breeders will be delivered by experts during Wednesday and Thursday, on the following topics: Soiling Crops, Silos and Silage, Cow Records, Seed Corn, Purchasing Seeds, Fattening and Marketing Poultry and Eggs, Feeding Breeding Sheep and Market Lambs, Pork Production, Management of Swine, Market Classes of Horses, Underdraining, Feeding Beef Cattle, etc.

QUESTIONS AND ANSWERS. Miscellaneous.

WHEAT YIELD OF SASKATCHEWAN.

What is the estimated wheat yield for 1909 for the Province of Saskatchewan?
J. S. E.

Ans.—The estimated yield of wheat for Saskatchewan in 1909 is 85,197,000 bushels.

FEED RATIONS FOR COWS, HORSES AND HOGS.

1. What other feed would it pay me to get for milking cows and fattening two-year-olds? I have corn unhusked, clover hay and oat straw.

2. Am feeding horses hay in the morning, corn in sheaf at noon, and straw nights, with three quarts bran and oats twice daily, with two tablespoonfuls of raw linseed oil in meal each night, yet one mare, three years old, is hidebound, and lacks life. What else can I do? They get salt every other day.

3. I have oat and barley chop to feed my pigs, have bought some shorts and mixed with the other chop; pigs weigh about seventy pounds and are thrifty. Can I do anything to improve their feed? I feed them water first, and put the meal on top.
L. H. V.

Ans.—1. Buy corn or barley meal, or a little of both, and along with it feed cottonseed or oil-cake meal, using three pounds of the corn or barley to two pounds of the other meal. It will probably be well, also, to feed a little bran or crushed oats to lighten up the heavier meal mixture. If you have oats on hand, considerable use might be made of these, along with a smaller quantity of the heavy meal mixture first mentioned. Pea meal might be used to substitute the oil cake or cottonseed, but a larger amount of it would be needed, say equal parts of corn (or barley) and of peas.

2. If the horses are large and working hard, the feeding is not sufficiently nourishing. In that case they should each have a gallon of oats, and one or two quarts of bran, three times a day. Ground oil cake, a teacupful with the night feed, would, we think, be better than the oil.

3. There is not much wrong with this ration, though, of course, if you had skim milk to substitute for the water, it would be a great improvement. We have seen pigs make fine growth in winter, fed their meal dry, and water given in a separate trough. In the absence of milk, a little oil cake added, say one pound to four of the other mixture, would be an improvement.

"Let me ask you one question," said the leader of the suffragettes to an attentive masculine listener. "Would you give up your seat in a street car to a woman?"

"No, ma'am," the man replied. "I wouldn't."

"And why not?" the suffragette demanded.

"Because I'm a motorman," the man replied.

Eastern Ontario Show, to be held on 21st, shows cattle, sheep and p. m., on Tues- will be con- 9.30 a. m. The onnence at 2 p. At 8 p. m., on eting, the show when addresses on. J. S. Duff, and the Hon. Mr es on various rners and stock- ured by experts hursday, on the ng Crops, Silos ds, Seed Corn- ing and Market- eeding Breeding bs, Pork Pro- Swine, Market rdraining, Feed-

FARMERS AND DAIRYMEN
IF YOU WANT THE BEST ASK FOR



Eddy's Fibreware Canada's Standard

Pails, Tubs, Milk Pans, Handy Dishes, etc., etc. Eddy's Fibreware lasts longer than any other, and COSTS LESS. It is seamless. Has no hoops. Never leaks. Does not rust. Will not taint water, milk or other liquids.

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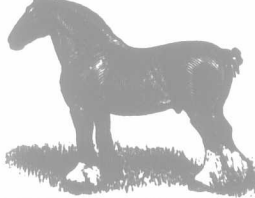
E. B. Eddy Company, Ltd., Hull, Can.

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THE FARMER'S ADVOCATE
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WANTED IN EVERY LOCALITY.


Send for terms and sample copies. Specially liberal commission allowed for obtaining new subscribers.

The Farmer's Advocate, London, Ont.



WILLOWDALE CLYDESDALES
are from such sires as Baron's Pride, Up-to-Time, Benedict, etc. None but the best imported. Stallions and fillies for sale. At Great Eastern Exhibition seven entries took six firsts, two seconds, gold medal and diploma.

J. H. M. PARKER, LENNOXVILLE, QUE.



Clydesdales and Percherons
To my many friends, and the public generally, I wish to say that in my stables at Weston, Ont., I have my 1909 importation of 10 Clyde-dale and 8 Percheron stallions; a lot that for true draft character, faultless underpinning, choice quality and breeding were never surpassed. Terms to suit and prices right.

J. B. Hogate, Weston, Ont., & Brandon, Man.
W. B. COLBY, MANAGER WESTON, ONT.

Imported Clydesdales!
I wish to thank my many customers for their patronage the last year. I start for Scotland about December 1st for a new importation. I intend to select the best available. Keep an eye out for my announcement on returning.

C. W. Barber, Gatineau Pt., Que.



CLYDESDALES WITH SIZE AND QUALITY.—My new importation is now in my stables. Several of them are up to the ton and over in weight. Their breeding is unexcelled; their type and quality all that could be desired. If you want the best come and see them. Terms to suit. Phone connection.

WM. COLQUHOUN, Mitchell, Ont.

CLYDESDALES and HACKNEYS
We have for sale a few choice Clyde dale mares, imported and Canadian-bred; also some Canadian-bred Clydesdale stallions. Hackney stallions and mares for sale always. Long-distance phone. **Hodgkinson & Tisdale, Beaverton, Ont. G. T. R. and C. N. R.**



HIGH-CLASS French Coach, Hackney and Clydesdale Stallions.
DRIVERS
HENRY M. DOUGLAS, Box 48, Stayner, Ont.

Imported Clydesdales I have lately landed an importation of 4 young stallions and 5 fillies, whose breeding is unsurpassed. They are the kind the country wants. Big, smooth, stylish, full of quality and straight movers. Will be sold right and on easy terms. **Geo. G. Stewart, Howick, Que. Phone.**

Clydesdales Home from the Shows
Intending purchasers would do well to see them before buying. Prices moderate. **Myrtle, C. P. R. SMITH & RICHARDSON, Columbus, Ont. Brooklin, G. T. R.**



ORMSBY GRANGE STOCK FARM, Ormstown, P.Q.
DUNCAN McEACHRAN, F. R. C. V. S., D. V. S., Proprietor.
Importer and breeder of high-class pure-bred **Clydesdales.** Farmers or ranchmen starting breeding Clydes., pure or grade, specially invited to correspond.

Clydesdales, Percherons and French Coaches
My 1909 importation of Clydesdale stallions and fillies, Percheron stallions and fillies, French Coach and Hackney stallions are now in my stables. In this lot I can supply the most exacting. Size, style, character, quality and breeding. Will sell on terms to suit. Phone connection. **T. D. FLETT, BOLTON, ONTARIO.**

Please Remember to Mention "The Farmer's Advocate" When Writing

QUESTIONS AND ANSWERS.
Miscellaneous.

BLOATING.

Bull two years old bloats badly, is fed oat and wheat chop; eats very little hay. Has been bloating, off and on, for a month. Have given salts and oil, but it does not stop the bloating. G. A.

Ans.—This is due to a weakness of the glands of the stomach. Cut out the wheat and give bran instead. Take equal parts sulphate of iron, gentian, ginger and nux vomica; mix, and give a heaped tablespoonful three times daily in a quart of water as a drench, or in food, if he will take it. Add to his drinking water one-sixth of its bulk of lime water. Be careful to not allow him water to which the lime water has not been added. If bloating occurs, give one pint of raw linseed oil and two ounces oil of turpentine. Feed in small quantities and often.

CHURNING DIFFICULTY.

Having failed the last three times to obtain butter when churning cream separated by separator, kept as usual, please state in your next issue what might be the cause and remedy.

A FARMER.

Ans.—Had our correspondent detailed the conditions somewhat, we might have given a more helpful answer. Common causes of difficulty in churning are thinness of cream, and churning at too low a temperature for the richness. Cows advanced in lactation, especially when fed on dry feed, give milk with a hard butter-fat, which makes the cream more difficult to churn. Have the cream tested, if possible, for percentage of butter-fat, and if it tests below thirty per cent., adjust the outlet of the separator to take a richer cream. With the churn filled less than half full of cream, testing thirty per cent. fat, and brought to a temperature of about sixty degrees, more or less, varying according to conditions, you should have no particular difficulty, unless there are several strippers in the herd. Perhaps one may be causing all the trouble. Give the cows succulent feed, if possible; also some bran and gluten- or oil-cake meal.

DISTRICT AGRICULTURAL REPRESENTATIVES.

In some counties we understand there is placed a graduate of the O. A. C., or other qualified man, for the purpose of assisting the agriculturists. Can you name these counties, give us the duties assigned to these men, and the arrangements for remuneration. Also state whether the Government sends them where requested, or on what principle or basis they are placed. D. R.

Ans.—The High-school teachers of agriculture have been placed at various points in Ontario by arrangements made with the Ontario Minister of Education and the Minister of Agriculture. The salaries are provided through the Department of Education. The office expenses, services of assistants, and other contingencies, are provided by the Department of Agriculture. By statute, the County Council is required to contribute \$500 annually, which is available for equipment and teaching expenses. Eleven such teachers have been located so far. The six originally established were at Perth, Morrisburg, Lindsay, Collingwood, Galt, and Essex. Already requests, backed up by delegations, have been received for two or three additional representatives.

At the thirty-fifth annual meeting of the American Ayrshire Breeders' Association, held in Philadelphia, Pa., on Dec. 16th, 1909, about one hundred members and men interested in Ayrshire cattle were present. The Secretary reported a greatly-increased interest in the breed, and an increasing inquiry among dairymen all over the country. He attributed this general interest to the way the breeders had brought out the dairy ability of the breed, through the official tests made by the Association, under the management of the Experiment Stations, and also through the high class of the animals shown by the breeders at the leading fairs of the country. The Secretary reported 33 new members joined during the past year. John R. Valentine, Bryn Mawr, Pa., was elected president, and C. M. Winslow, Brandon, Vt., secretary and editor.

Warranted to Give Satisfaction.
Gombault's Caustic Balsam



Has Imitators But No Competitors.
A Safe, Speedy and Positive Cure for Curb, Splint, Sweny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circular, testimonials, etc. Address **The Lawrence-Williams Co., Toronto, Ont.**



Bog Spavin
Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be irritated. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser describes and illustrates all kinds of blemishes and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write. **FLEMING BROS., Chemists, 75 Church St., Toronto, Ontario**

THICK, SWOLLEN GLANDS
that make a horse Wheeze, Roar, Have Thick Wind, or Choke-down, can be removed with



ABSORBINE
for any Bunch or Swelling, No Blister, no Hair gone, and horse keeps at work. \$2.00 per bottle, delivered. Book 3 D free.

ABSORBINE, J.H., for manking, \$1.00, delivered. Reduces Gout, Tumors, Wens, Varicose Veins, Ulcers, Hydrocele, Varicocele. Book free. Made only by **W. F. YOUNG, P.O. 258 Temple St., Springfield, Mass. LYMAN Ltd., Montreal, Canadian Agents.**

Peachblow Clydesdales AND AYRSHIRES
Clydesdale stallions and fillies, imported and Canadian-bred. Ayrshires of high-class quality and productiveness, 40 to 50 lbs. of milk a day; females of all ages and bull calves. My prices are right.

R. T. BROWNLEE, Hemmingford, Que.
NOTICE TO HORSE IMPORTERS!
GERALD POWELL
Commission Agent and Interpreter, LILLE, FRANCE
Will meet importers at any port in France or Belgium, and assist them to buy Percherons, Belgians, French Coach horses. All information about shipping, banking and pedigrees. Many years' experience; best references; correspondence solicited.

SHOEMAKER'S BOOK ON POULTRY
and Almanac for 1910 has 224 pages with many colored plates of fowls true to life. It tells all about chickens, their prices, their care, diseases and remedies. All about breeders, their prices and their operation. All about poultry houses and how to build them. It's an encyclopedia of chickendom. You need it. Only 15c. **C. C. SHOEMAKER, Box 874, Freeport, Ill.**

A girl from a village not far from Glasgow had gone to London as a general servant. She was away some six months, when she returned home, and, of course, she desired to "show off" as much as possible. Alighting from the train she addressed the porter in her very highest-flown English—"I say, porter, do you know where I can get a cab to take my luggage home?" "Oh, weel, no lassie," said the porter, who knew the girl well, "but yer mither's here wi' the barrow."

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Would you like a calendar handsome enough to hang up in your parlor? Such a one is our 1910 Calendar. The picture entitled "Homeward Bound" is a typical farm scene, done in eight beautiful colors and giving one of the richest effects that has ever been produced in a calendar. We ask you to pay 2 cents postage, simply as a proof that you value a picture of real artistic merit. As there is always an enormous demand each year for our calendars, yours may be a few days late in reaching you, but no one will be overlooked. The sooner you fill out and send the coupon, the earlier the calendar will reach you. Be sure to write your full address distinctly.

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For Dept. F59I enclose 2 cents postage for which send me by earliest possible mail a copy of your handsome new calendar.

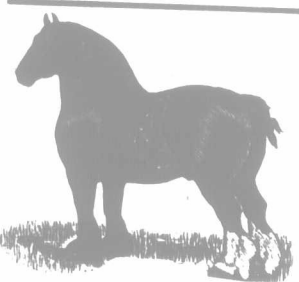
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FROST & WOOD FARM MACHINERY



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9	10	11	12	13	14	15	16
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22 Imp. Clydesdale Stallions



Just landed, ages from 2 to 5 years old. A number of them are premium horses. Several are over the ton, or will make it. A number of them are grandsons of Baron's Pride. All are for sale. Prices are reasonable. Intending purchasers will find it to their interest to see these horses before purchasing. Farm two miles from the end of street-car line.

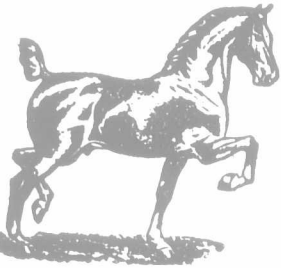
O. SORBY, Guelph, Ont.
Long-distance 'phone.



20 Imp. Percheron Stallions 20

Our 1909 importation of 20 Percheron stallions, from 1 to 5 years of age, are now in our stables. Up to over a ton in weight. Big, stylish, choke-full of flashy quality, and faultless movers. Prizewinners among them. The best lot ever imported to Canada. All are for sale on terms to suit.

HAMILTON & HAWTHORNE, Simcoe, Ontario.



UNION STOCK - YARDS Horse Exchange WEST TORONTO, CANADA.

The Greatest Wholesale and Retail Horse Commission Market. Auction sales of Horses, Carriages, Harness, etc., every Monday and Wednesday. Horses and harness on hand for private sale every day. The largest, best equipped and most sanitary stables in Canada. Half-mile of railway loading chutes at stable door. Quarter-mile open track for showing horses. Northwest trade a specialty. **HERBERT SMITH, Manager.** (Late Grand's Repository.)

T. H. HASSARD'S NEW IMPORTATION!

MY NEW IMPORTATION OF **Clydesdale Stallions and Fillies** are now in my stables at Markham, Ont., and, as usual, I have a big range for selection, of a type, breeding and quality seldom equalled, never excelled, by any previous importation. Call and see them. Phone connection. **T. H. HASSARD, Markham, Ont.**

Imported Clydesdales We have a number of newly-imported stallions on hand in our stables in London, Ont., including some very large and heavy horses, several prizewinners. Another consignment, stallions and fillies, sailed Saturday, October 16th, from Glasgow. **DALGETY BROS., LONDON, ONTARIO.**

MY NEW IMPORTATION TO HAND. In my new importation of 4 Clydesdale Stallions and 6 Clydesdale Fillies, I have material that will stand comparison with anything ever imported. They have great size, beautiful mould, full of quality, right fashionably bred and perfect action. **JOHN A. BOAG & SON, QUEENSVILLE, ONTARIO.**

QUESTIONS AND ANSWERS. Miscellaneous.

FEEDING CALF.

Having sold a bull calf to one of my neighbors, dropped in April, owner wishes to know what to feed, and how much, to fit him for service next summer. Abundance of farm produce is in his barn.

Ans.—Feed him good clover hay, a mixture of ground oats and bran, equal parts, and a moderate supply of sliced turnips or mangels, twice a day; as much of each as he will clean up in half an hour to an hour. A couple of closed handfuls of ground oil cake, mixed with each feed of the oats and bran, will also be good for him.

BOOKS ON FRUIT-GROWING.

We planted out about 700 young apple trees last year, as well as raspberries, plums and cherries. Now I would like to get a reliable book dealing with the care of those trees and bushes. W. A.

Ans.—Popular Fruit-growing, by Samuel B. Green, is a useful manual, recently published, and reviewed in these columns. Price, \$1.00, p. p. Principles of Fruit-growing, by Bailey, price, \$1.50, p. p. is another excellent little work; a standard authority in its way. The Ontario Department of Agriculture has published a splendid bulletin, entitled Fruits of Ontario, giving brief, but reliable cultural instructions, along with illustrated descriptions of many varieties.

FOUR-YEAR ROTATION.

Kindly suggest a four-year rotation of crops for a farm of fifty acres, divided into four fields. Would like to have one-half in grass and balance in crops, such as oats, barley, wheat, corn and roots. The land is of a gravelly loam, and in fair state of cultivation.

The accompanying diagram (unpublished) will give an idea of what shape fields are in at present time.

A BEGINNER.

Ans.—The ideal rotation is a three-course or four-course one, arranged as follows, with such modification as may be necessary to meet particular requirements: First year after sod, corn, roots—roots may not do very well after an old sod, but are all right on a fall-plowed clover sod of only one or two years' standing—potatoes, peas, soiling crop, rape, and any such miscellaneous crops. If not enough of these are needed to fill out the acreage, spring grain may be sown on the balance; second year, wheat, oats and barley, seeded down to clover, with a little timothy. The wheat will naturally come after the peas, if any are grown, or otherwise may be made to fit in after barley, or even after oats. Third year, hay; fourth year, hay, pasture, or hay and pasture. To begin with, perhaps it will be best to put the first-year crops on the fall-plowed sod, and the second-year course on the root and stubble land.

Veterinary.

LAME IN FRONT.

My aged mare has been lame off and on from navicular inflammation for four or five years, but always recovered. For the last month she has been quite sore in front, rests one foot, then the other, drops feet when backing, and seems to suffer considerably. J. H.

Ans.—No doubt she has navicular disease, which has become chronic. It is not probable a cure can be effected, but the symptoms can be mitigated by repeatedly blistering the coronets. Remove the shoes, and pare heels well down. Clip the hair off for two inches high above the hoofs all round, get a blister made of two drams each of biniodide of mercury and cantharides, mixed with two ounces vaseline. Tie so that she cannot bite the parts. Rub well with the blister once daily for two days; on the third day apply sweet oil. Turn loose in a box stall now, and oil every day. As soon as the scale comes off, tie up and blister again, and, after this, blister every four weeks until you have to put her to work next spring. Then shoe with bar shoes, and keep hoofs soft by poulticing or standing in water occasionally. V.

I Cured My Rupture

I Will Show You How To Cure Yours FREE!

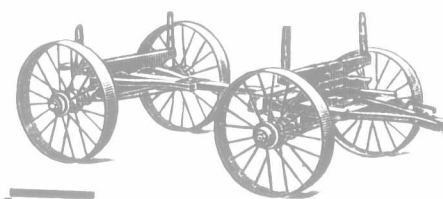
I was helpless and bed-ridden for years from a double rupture. No truss could hold. Doctors said I would die if not operated on. I fooled them all and cured myself by a simple discovery. I will send the cure free by mail if you write for it. It cured me and has since cured thousands. It will cure you.

Fill out the coupon below and mail it to me today

Free Rupture-Cure Coupon

CAPT. W. A. COLLINGS, Box 30, Watertown, N. Y.
Dear Sir:—Please send me free of all cost your New Discovery for the Cure of Rupture.

Name _____
Address _____



If any of your farm wagons need new wheels, don't use wooden wheels again. Put on Dominion Low Wide-tire Steel Wheels. They are cheaper, lighter and stronger than wooden wheels. Guaranteed not to break in coldest weather, or on rockiest roads. Wide tires save roads, and make pulling easier for horses. Will last a lifetime. Made to fit any axle. Pay for yourselves first season.

The Dominion Handy Wagon saves half your labor and time in loading and unloading. Wide-tire, low wheels save roads and horses. Parts are arranged for easy draft. Saves its own cost first season, like our Low Wide-tire Steel Wheels. Write for free booklet.

Dominion Wrought Iron Wheel Co., Ltd., Orillia, Ont.

Try a McPherson Climax Humane Speculum 30 Days FREE.



Every farmer, liveryman and veterinary surgeon should have a Climax Speculum for administering medicine or getting at the teeth or mouth of horses and cattle. Every one agrees that it is more durable, more easy to use, more satisfactory in operation than any other on the market. We are so certain that you will be satisfied with it that we make this special offer. Send us \$6.50 by Post Office or Express Order and we will send you a Climax Speculum at once. If, after 30 days' trial, you are not convinced that it is the best speculum you could have, send it back to us, and we will refund the purchase price. SEND FOR DESCRIPTIVE BOOKLET

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Don't Have a Blind One

Wonderful Discovery "VISIO" 
MOON BLINDNESS and all Diseases of the Eye successfully treated with this **NEW REMEDY.** Money Back if it fails to cure. \$2.00 per bottle postpaid on receipt of price. **Visio Remedy Ass'n, Dept. 8, 1933 Wabash Av., Chicago, Ill.**

DUNHAMS' PERCHERONS

 Fourth large importation within the year arrives November 23rd, which, added to our present stock, offers intending purchasers the finest collection in America. If you want the best horses, horses with bone, quality, size, action, and best breeding, stallions or mares; if you want fair and liberal treatment; if you want lowest prices consistent with good merchandise, visit Oaklawn. Catalog shows the place and the horses. **W. S., J. B. & B. Dunham, Wayne, Ill.**

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LEARN TO MOUNT BIRDS

We guarantee to teach you by mail with complete success how to mount Birds, Animals, Fish, Game Heads, Tax skins for tags, robes, etc. Easy, fascinating work for men, women and boys. Quickly learned, by our exclusive system, teaching only the latest and best methods. Make handsome presents for your friends and beautifully decorate your own home, or make big money mounting for others.

Sportmen and Naturalists everywhere should know this wonderful art. You learn in a few lessons how to mount all your own trophies and specimens as well as a professional. **BIG PROFITS** Good taxidermists are scarce and in great demand. Many of our graduates are making \$12.00 to \$30.00 a week in their spare time or \$3,000 a year and more as professionals. You can do as well. **FREE** Elegant new catalog and Taxidermy Magazine sent absolutely free. Write today. **NORTHWESTERN SCHOOL OF TAXIDERMISTRY** 5081 Elwood Building OMAHA, NEB.

Marlin



The 12 gauge Marlin repeater is a gun of perfect proportions, and has one-third less parts than any other repeater. It handles quickly, works smoothly and shoots close and hard.

The Marlin solid top prevents powder and gases blowing back; the side ejection of shells allows instant repeat shots; the closed-in breechbolt keeps out all rain, snow and sleet, and the dirt, leaves, twigs and sand that clog up other repeaters.

All 12-gauge Marlin repeaters have double extractors that pull any shell, and the automatic recoil hangfire safety lock makes them the safest breech-loading guns built.

THE SIGN OF A Marlin 12 gauge repeaters in three distinct models, many grades and styles, fully described in our 136-page catalog. Free for 3 stamps postage.

The Marlin Firearms Co., 113 Willow Street, NEW HAVEN, CONN.

Old Lawyer (to young partner)—Did you draw up old Moneybag's will?
Young Partner—Yes, sir, and so tight that all the relatives in the world cannot break it.
Old Lawyer (with some disgust)—The next time there is a will to be drawn up I'll do it myself.—New York Sun.

Troubled With Backache For Years. Now Completely Cured By The Use Of DOAN'S KIDNEY PILLS.

Mrs. W. C. Doerr, 13 Brighton St., London, Ont., writes:—"It is with pleasure that I thank you for the good your Doan's Kidney Pills have done me. Have been troubled with backache for years. Nothing helped me until a friend brought me a box of your Kidney Pills. I began to take them and took four boxes, and am glad to say that I am cured entirely and can do all my own work and feel as good as I used to before taken sick. I am positive Doan's Kidney Pills are all you claim them to be, and I advise all kidney sufferers to give them a fair trial."

Let Doan's Kidney Pills do for you what they have done for thousands of others. They cure all forms of kidney trouble and they cure to stay cured.

Price, 50 cents per box or 3 boxes for \$1.25 at all dealers or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

When ordering specify "Doan's."

GOSSIP.

SALE DATES CLAIMED.

Feb. 2nd and 3rd, 1910.—Combination Shorthorn Sale, Union Stock-yards, West Toronto, Ont.

Feb. 3rd.—At West Toronto, A. D. Schmidt & Sons, North Woolwich, Ont.; Shorthorns.

March 9th, 1910.—Arthur Johnston, Greenwood, Ont.; Shorthorns; dispersion sale.

J. A. Watt, Salem, Ont., reports the sale of three young Shorthorn bulls, sired by Jilt Victor (imp.), to the following Ontario breeders: Jas. A. Hawkins, Honeywood; C. Rankin & Son, Wye-bridge, and Alex. Crerar, Lishon. It is needless to say that these bulls are high-class, since their purchasers are men of known good judgment. Mr. Watt makes a change in his advertisement this week in which he offers for sale a few choice young bulls and heifers, sired by the noted show and breeding bull, Jilt Victor.

Wm. Meharey, Russell, Ont., whose recent importation of 64 Clydesdale fillies was noticed in our last week's issue, writes: They all landed safely. I held a sale at St. John, N. B., on December 14th, and sold the whole lot in one day. I think this was the record importation for 1909, in number by one man, and the quickest sale. The prices were not as high as they should have been, but there were rather too many to select from, and people tried to get them cheaper on that account. They averaged around \$280; all two-year-olds but four. The N. B. Government paid the feed bill and advertising and sale expenses.

The Clydesdale Horse Society is to have a very large volume to print during this winter, remarks the Scottish Farmer, referring to the forthcoming thirty-second volume. It is being gone on with as fast as practicable, but with an export trade carried right on into December, it is not easy getting the volume prepared in MS. and closed. The council took up a strong position with respect to errors in colors and markings, and they can hardly be blamed. The carelessness of entrants which calls for frequent corrections, is having a very bad effect on officials in Canada, who view with amazement the carelessness of the Scots breeders in a matter which means many thousands of pounds to the agriculturists of this country. Whatever may be the merits of the particular case in connection with which the question arose, there can be no doubt of the necessity for something being done to enforce care in connection with the recording of colors and markings. The council also resolved to rent a section of the space at the Brussels Exhibition for advertising the breed. The purpose is to have portraits there exhibited of specially good representatives, with show-cards of breeders and owners, setting forth their names and addresses, and a history of the breed in three or four languages.

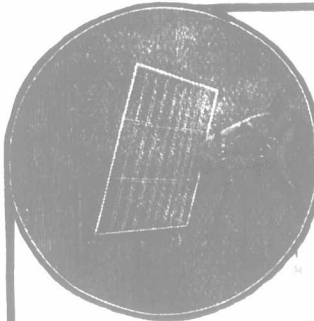
TRADE TOPIC.

LEARN TO MOUNT BIRDS.—Taxidermy is a very entrancing art for private pursuit. Hunters, fishermen and naturalists who are versed in its mysteries can mount their own trophies and decorate their homes or offices with them. To those who make a business of it, the profession is a lucrative one. The N. W. School of Taxidermy, 5031, Omaha, Neb., who advertise in this issue of "The Farmer's Advocate," guarantee to teach the art successfully or no tuition fee is charged. Illustrated book free.

There are many anecdotes of actors and playwrights in the lately-published recollections of Sir Squire and Lady Bancroft. Some of these, of course, originate with the always amusing H. J. Byron. To a Provincial landlady he once bitterly complained of having been attacked by fleas.

"Fleas, sir!" was the retort. "I am sure there is not a single flea in my house."

"I am sure of it, too," was Byron's rejoinder. "they are all married and have large families."



Saves 5 Cents a Day Per Horse

EARN'S ITS COST IN FOUR MONTHS
Stops all the waste and muss of feeding hay from the floor or ordinary manger. Goes on saving you 5 cents a day for every horse you feed. Horses are healthier fed from this rack, because they get only CLEAN hay.

WARREN AUTOMATIC MANGER

FEED RACK & MANGER
Puts a stop to cribbing—keeps rats and mice away—can't get out of order—can't wear out because made of steel and wire. Biggest horse-men use them. Supplied from our nearest Branch. 601

SEND FOR BOOKLET **THE PAGE WIRE FENCE CO., LIMITED**
ADDRESS: Walkerville, Ont. Toronto Montreal St. John Winnipeg

FREE TO YOU—MY SISTER



FREE TO YOU AND EVERY SISTER SUFFERING FROM WOMEN'S AILMENTS.

I am a woman. I know woman's sufferings. I have found the cure. I will mail, free of any charge, my home treatment with full instructions to any sufferer from women's ailments. I want to tell all women about this cure—you, my reader, for yourself, your daughter, your mother, or your sister. I want to tell you how to cure yourself at home without the help of a doctor. Men cannot understand women's sufferings. What we women know from experience, we know better than any doctor. I know that my home treatment is a safe and sure cure for Leucorrhoea or Whitish discharge, Ulceration, Displacement or Falling of the Womb, Profuse, Scanty or Painful Periods, Uterine or Ovarian Tumors or Growths, also pains in the head, back and bowels, bearing down feelings, nervousness, creeping feeling up the spine, melancholy, desire to cry, hot flashes, weariness, kidney and bladder troubles where caused by weakness peculiar to our sex. I want to send you a complete 10 days treatment entirely free to prove to you that you can cure yourself at home, easily, quickly and surely. Remember, that it will cost you nothing to give the treatment a complete trial; and if you should wish to continue, it will cost you only about 12 cents a week, or less than two cents a day. It will not interfere with your work or occupation. Just send me your name and address, tell me how you suffer, if you wish, and I will send you the treatment for your case, entirely free, in plain wrapper, by return mail. I will also send you free of cost, my book—"WOMAN'S OWN MEDICAL ADVISER" with explanatory illustrations showing why women suffer, and how they can easily cure themselves at home. Every woman should have it and learn to think for herself. Then when the doctor says—"You must have an operation," you can decide for yourself. Thousands of women have cured themselves with my home remedy. It cures all, old or young. To Mothers of Daughters, I will explain a simple home treatment which speedily and effectually cures Leucorrhoea, Green Discharge, and Painful or Irregular Menstruation in Young Ladies. Plumpness and health always result from its use. Wherever you live, I can refer you to ladies of your own locality who know and will gladly tell any sufferer that this Home Treatment really cures all women's diseases and makes women well, strong, plump and robust. Just send me your address, and the free ten days' treatment is yours, also the book. Write to-day, as you may not see this offer again. Address: MRS. M. SUMMERS, Box H. 521. WINDSOR, ONT.

BLACK KNIGHT STOVE POLISH

Don't use as much "Black Knight" as you have been using of other stove polishes. You don't need as much, to bring a brilliant, glittering, lasting polish to the iron-work. A little of "Black Knight" goes a long way. And you get a bigger box of "Black Knight" than of any other stove polish that sells for 10c. If, for any reason, you can't get "Black Knight" Stove Polish at your dealer's, send 10c. for a large can postpaid.

THE F. F. DALLEY CO. LIMITED, - HAMILTON, Ont.
Makers of the famous "2 in 1" Shoe Polish. 20

THE EASTERN ONTARIO Live Stock & Poultry Show

WILL BE HELD AT
OTTAWA, ONT., JAN. 17 to 21, 1910.
A large classification is offered for Horses, Beef and Dairy Cattle, Sheep, Swine, Seed and Poultry.

\$8,000.00 in Prizes.
Poultry entries close January 3rd. Live-stock entries close January 8th. Write for prize list, or send entries to the Secretary. Single-fare rates on all railways.

PETER WHITE, PRESIDENT, Pembroke, Ont. **D. T. ELDERKIN, SECRETARY, Ottawa, Ont.**

H. SMITH, EXETER, ONTARIO. **Scotch Shorthorns**
Extra choice young bulls and heifers for sale. Write for what you want. Farm adjoins town.

Please Mention The Farmer's Advocate

Mr. A. J. Hickman,
Court Lodge, Egerton, Kent, England,
Export's Pedigree Live Stock of Every
Description to all Parts of the World.

During the spring months the export of horses of
the light and heavy breeds will be a specialty.
Write for prices, terms and references.

THE "MAPLES" HEREFORDS



Canada's Greatest Show Heed.

For Sale: 25 bulls from 6 to 18
months of age, bred from imported
and show stock; also about the
same number of heifers, none
better. Prices right.

W. H. HUNTER,
Orangeville P.O. and Sta.

Homestead Aberdeen-Angus



Some extra good bull calves, 6 or 8
months old; also females all ages.
Parties looking for cattie, either sex,
should write, or come and see them.
William Ische, Sebringville, Ont.
Long-distance Phone.

ABERDEEN - ANGUS

Will sell both sexes; fair prices. Come and see
them before buying. Drumbo station.

WALTER HALL, Washington, Ont.

Balmiedie Poiled Angus and Oxford Down
a sheep - Offering
several exceptionally nice heifers, and a few young
bulls. Discriminating buyers will be pleased with my
herd. Anything in the herd will be priced. Also
ram and ewe lambs. **T. B. Broadfoot, Fergus
P. O. and Station.**

Aberdeen-Angus Cattle Stock all ages,
and both sexes.
good strains, at reasonable prices. Apply to
**ANDREW DINSMORE "Grape Grange" Farm
Clarksburg, Ont.**

1854-Maple Lodge Stock Farm-1909

Shorthorn bulls and heifers of extra
quality and breeding, and from best milk-
ing strains.
Leicesters of first quality for sale. Can
furnish show flocks.

A. W. SMITH, Maple Lodge P.O., Ontario
Lucan Crossing Sta. G. T. R., one mile.

HIGH-CLASS SHORTHORNS

I have on hand young bulls and heifers of high-
class show type, pure Scotch and Scotch topped,
sired by that sire of champions, Mildred's Royal.
If you want a show bull or heifer, write me.
**GEO. GIER, GRAND VALLEY P. O. AND STA.,
ALSO WARDMAR STA.**

JOHN GARDHOUSE & SONS

Always have for sale a number of first-class Short-
horns, Shires and Lincolns, of both sexes. Drop
us a line, or better, come and see for yourself.
HIGHFIELD P. O., ONTARIO.
Weston Sta., G. T. R. & C. P. R. Long-distance
phone in house.

Geo. D. Fletcher, Binkham P.O., Ont.
offers four choice Short-
horn bulls 10, 13 and 16 months old, with both
breeding and quality for herd headers. Prices easy.
Stock bull, Benachie (imp. #6954); also Shorthorn
females and Yorkshire sows. Erin shipping station,
C. P. R.

CALVES Raise them Without Milk.
Booklet free. The Steele, Briggs
Seed Co., Toronto, Ont.

Elizabeth's mother did not teach her
little daughter much that she should have
learned about religion, nor did the
father.

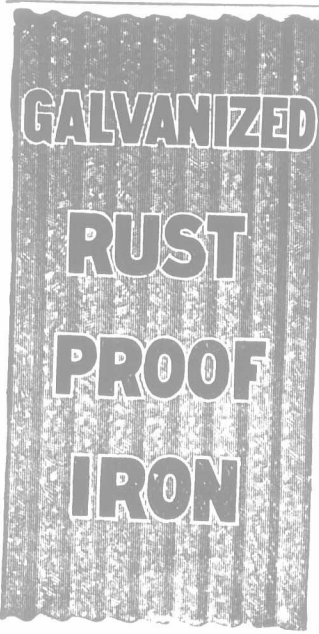
The other day a guest said to the lit-
tle girl:

"Elizabeth, does your father say grace
at the table?"

"What grace?" returned the girl, in-
nocently.

"Why, thanks for what you have to
eat."

"Oh," replied Elizabeth, now enlight-
ened, "we don't have to thank anyone
for what we have—we always pay cash."



The Best Roofing Manufactured!

Requires no painting. Economical and easy to put on; no previous experience necessary. Absolutely guaranteed; brand
new, clean stock. Bright as a dollar. Sheets are full size. Comes in Corrugated, "V" Crimped, Standing Seam or Plain Flat
Sheets. Heavily galvanized on both sides with the most approved galvanizing material; preparation will adhere forever. "Galvanized"
means that the iron has been coated with liquid Zinc, which makes it absolutely rust and weather-proof; not affected by heat or
cold. Makes buildings warmer in winter and cooler in summer. Drains perfectly and does not soak. Does not taint rain
water. Fire and lightning-proof. Makes your insurance cheaper. Sold direct from our own roofing factory—the largest in the
world. Chicago House Wrecking Co. sells more roofing material than any other concern. We sell thousands of squares of
"Galvanized Rust-Proof Iron" every week. Used in all climates. For every kind of building.

PAINTED STEEL ROOFING AT \$1.25 PER HUNDRED SQUARE FEET!

Also in stock, a full line of painted Steel and Iron Roofing, Siding and Ceiling, all styles at prices from \$1.25 sq. foot up.
Fill in the coupon below. We will send you samples free of charge together with a vast amount of roofing information.

Roofing Supplies of Every Kind!

Send for our 500 page Catalog No. 101.
It is full of information for the shrewd, careful and
economical buyer. Lists thousands upon thousands
of rare bargains. Price offers which command orders.
Millions of dollars worth of merchandise, bought at
Sheriff's, Receivers' and other forced sales, are plain-
ly described in this book. SEND FOR IT.

Chicago House Wrecking Co.
35th & Iron Sts., Chicago.

FREE SAMPLE COUPON NO. 625
Chicago House Wrecking Co., 35th & Iron Sts., Chicago.

Kind of Building

Size of Roof

If you want Siding or Ceiling give diagram and full dimensions

When do you expect to order

Name

P. O. R. F. D. State

LAST WEEK WE SAID ON THIS PAGE THAT ON
2nd and 3rd February, 1910

WE WOULD SELL
**ONE HUNDRED AND FORTY
SCOTCH SHORTHORNS**

SELECTED FROM THE HERDS OF
HON. W. C. EDWARDS, ROCKLAND, ONT.,
SIR GEORGE DR. MMOND, BEACONSFIELD, QUE.,
PETER WHITE, K. C., PEMBROKE, ONT.,
W. G. PETTIT, FREEMAN, ONT.,
J. A. WATT, SALEM, ONT.,
JOHN MILLER, BROUGHAM, ONT.,
MILLER BROS., BROUGHAM, ONT.,
JOHN MILLER, JR., ASHBURN, ONT.,
and ROBERT MILLER, STOUFFVILLE, ONT.,

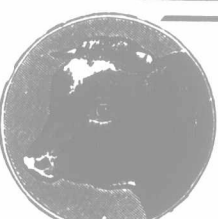
and that no collection of Shorthorns has ever been sold in Canada that
approached this lot in

QUALITY, BREEDING AND REAL VALUE.

We now add that the number is greater; each animal is in perfect con-
dition in every way; no apologies or explanations will be necessary;
there will be bulls and heifers that have won in the best shows, and
that can win again; there are others that have never been shown that
will be wanted by those that are after the honors of 1910.
Unprejudiced men will use this space and more to tell you the rest,
but in the meantime get your name in line for illustrated catalogue, and
keep the dates open so you can be there.
There will be cheap rates to attend the annual Shorthorn meeting
on the 1st.

Robert Miller, Stouffville, Ont.,
MANAGER OF SALE.

Auctioneers: Col. Geo. P. Bellows, Maryville, Mo.; Col. Carey M.
Jones, Chicago, Ill.; and Captain T. E. Robson, London, Ont.



**30 HEIFERS AND 29 BULLS
PRESENT OFFERING.**

Bred right, made right and at prices to make you feel right. Come early
and get your choice. List of these, with catalogue, will be
mailed to those who ask for them.

H. CARGILL & SON, CARGILL, ONT.

SALEM SHORTHORNS!

moderate prices. If you see them you will want to own them.
ONT. ELORA STATION, G. T. R. and C. P. R.

Young bulls and heifers, sired
by the great show and breeding
bull, Jit Victor (imp.) at
J. A. WATT, SALEM,
Long-distance Telephone.

SHORTHORNS

Belmar Parc.
FOR SALE: Three show bulls and five choicely-bred pure Scotch bulls of extra good
milk strains; some show heifers, young cows and heifers of good milking families,
and choice Berkshires of both sexes. Our prices very reasonable, considering quality.
Visitors welcome. **J. PEARSON, SON & CO., Meadowdale P. O. and Sta., C. P. R.**

VALLEY HOME SHORTHORNS AND BERKSHIRES

Meadow Lawn Shorthorns
I am offering for sale young stock, both bulls and heifers, of richest Scotch breeding, and
of high-class show type. I can show some of the best young things in the country.
P. W. EWING, SALEM P. O., ONT., ELORA STATION.

**QUESTIONS AND ANSWERS.
Miscellaneous.**

**WEIGHING ANIMALS—WORKING
HOURS, ETC.**

1. If I or any man takes a load of hogs to market, or a beast of any kind, can the weigh-master prevent the owner going in to see them weighed?
2. If I engage a man for a number of months, can he quit work at 6 o'clock and call his day's work in, and claim every second Sunday?
3. What holidays is he entitled to? Ontario. SUBSCRIBER.

Ans.—1. No.
2. No.
3. He is entitled to the statutory holidays, that is to say, Sundays, New Year's Day, and so forth, but subject to the doing of "chores," even on such holidays. There is no arbitrary rule as to hours—they must be reasonable from point of view of both employer and employee.

VALUE OF BUTTERMILK.

What would buttermilk without rinse water in, and fresh from churn, be worth per hundred pounds at factory for feeding hogs, or its price per gallon; or would there be any likelihood of selling it in Toronto as a beverage? York Co., Ont. SUBSCRIBER.

Ans.—We should think you would find little difficulty in disposing of buttermilk in Toronto for beverage purposes at a very remunerative price. For feeding hogs at the creamery on a wholesale scale it should have a value of not less than twenty cents per cwt., and by good management it might be made worth more. For use on a farm in regular quantities not in excess of reasonable needs it should be worth in these days of high values not less than 25 or 30 cents per cwt.

MISCELLANEOUS.

1. Can you give directions for making a roller hay rack?
2. What is the right way to put rope in two- and three-wheel pulleys for purchase?
3. What is the best blood preparation for heavy draft colts, with a view to keeping their legs all right?
4. How close can horses be bred without being called inbred?
5. How close bred are the Clydesdales eligible in Canada for registration? O. A. C.

Ans.—1. It is made on a flat rack, and is, really, a car running on four wheels, on a track on rack. It covers one-half of the wagon rack. When starting to load from a hay loader, this car is fastened at back end, and half the load is built by tripping it and stopping horses, the car rolls to front end and is fastened, then remainder of load is built behind. One man may easily and quickly build a load this way. It is possible our friend may refer to a roller placed at rear end of rack, by means of which ropes may be tightened over the load, instead of a landing pole being used.

2. Put rope in pulleys so that they will not cross, that is all. The purchase would be just as great if they did cross, but they would not work so easily.

3. The best treatment to keep colts right in that respect is judicious feeding, sufficient exercise, and good ventilation. The following is recommended as a condition powder for horses: Two ounces each of ferric sulphate, pulverized gentian, pulverized ox vomica, and nitrate of soda. Mix, and give a teaspoonful night and morning in ground oats or bran.

4. Generally speaking, what is meant by inbred or inbreeding, is breeding the daughter to her sire, the dam to her son, mating sister and brother, or other close relatives. No definite limit for safety has been fixed, nor can be, for much depends upon the vigor and vitality of the stocks used.

5. There is no rule in the requirements for registration limiting the extent of inbreeding.

A FORTUNATE ESCAPE.

A little Scotch boy on being rescued by a bystander from the dock into which he had fallen, expressed heartfelt gratitude, saying: "I'm so glad you got me out. What a liekin' I wad have frae my mither if I had been drowned!"

QUESTIONS AND ANSWERS. Miscellaneous.

QUESTIONS AND ANSWERS. Miscellaneous.

man takes a load of... prevent the owner... weighed?

to the statutory... say, Sundays, New... forth, but subject to... even on such holi-... arbitrary rule as to... reasonable from point... lawyer and employee.

UTTERMILK. Milk without rine... from churn, be worth... at factory for feed-... ce per gallon; or... likelihood of selling... beverage?

SUBSCRIBER. Think you would find... posing of buttermilk... erage purposes at a... price. For feeding... ry on a wholesale... a value of not less... r ewt., and by good... it be made worth... a farm in regular... cess of reasonable... orth in these days... less than 25 or 30

QUESTIONS AND ANSWERS. Miscellaneous.

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are the Clydesdales... registration?

O. A. C. on a flat rack, and... ng on four wheels... It covers one-half... When starting to... r, this car is fas-... half the load is... d stopping horses... and is fastened... it is built behind... and quickly build a... possible our friend... placed at rear end... hich ropes may be... ad, instead of a...

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what is meant... is breeding the... dam to her son... er, or other close... limit for safety... be, for much de-... d vitality of the...

the requirements... the extent of in-

QUESTIONS AND ANSWERS. Miscellaneous.

ESCAPE. being rescued by... k into which he... artful gratitude... you got me out... e free my mither

Lump Jaw. The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure. It remains today the standard treatment with years of success back of it.

ELECTRIC BEANS ARE A BRACING BLOOD & NERVE TONIC. They are unequalled for Biliousness, Sick Headache, Constipation, Heart Palpitation, Indigestion, Anemia.

Scot Shorthorns. At Toronto Exhibition this fall yearling bulls bred by us won 1st and 3rd in class and junior champion.

GLENGOW Shorthorns. Have two excellent bulls left yet, both about ten months old, and good enough for any herd.

SHORTHORNS, Berkshires, Cotswolds. In Shorthorns, 53 head to select from: 20 calves (13 bulls and 7 heifers), 7 yearling heifers, 3 two year-old heifers, and the balance cows from 3 years up.

Maple Grange Shorthorns. Am offering an extra choice lot of 1-2 and 3-year-old heifers. Scotch and Scotch-topped, Clarets, Nonpareils, etc., sired by Royal Bruce.

Clover Dell Shorthorns. Have several young bulls for sale, of show quality; dark colors, from good milking dams.

High-class Scotch Shorthorns. We are now offering choice young bulls of serviceable age, and a number of one and two year old heifers.

SHORTHORNS for sale. I am offering for sale a number of females of various ages, and four first-class bulls.

Spring Valley Shorthorns. Herd headed by Clipper Chief (imp.) = 64220 = (94673). If you want to get an imported bull, or a good Canadian-bred one to head your herd, be sure and write, or come and see them.

Shorthorns and Leicesters. A number of choice young bulls and heifers from grand milking dams and imp sires.

QUESTIONS AND ANSWERS. Miscellaneous.

PROBABLY ECZEMA. Have a Holstein bull, 10 months old. About a month ago the hair came off his head and neck until it is now more than half off.

Ans.—This appears to be eczema. Wash the parts thoroughly with warm soap suds, applied with a scrubbing brush, rub with cloths until dry, and apply a solution of corrosive sublimate, 30 grains to a quart of water.

QUITTING WORK. I am a farm servant, and engaged with a farmer for 12 months. After the first two weeks, for some reason unknown to me, his wife made it very unpleasant for me in the house.

Ans.—Your reason for leaving does not amount to a sufficient legal ground for the course you have taken, and we do not see that you are in a position to recover wages by legal proceedings.

TREATMENT OF OLD MEADOW. Have a farm of one hundred acres tillable soil, most of which is light soil, part sandy; have some old meadows that are cutting scarcely any hay, and am not making enough manure to give them.

Ans.—On such land as you describe a dressing of hardwood ashes, at the rate of 30 to 40 bushels per acre, would certainly prove of benefit.

Pasture the meadows next spring or early summer. In July, or the first days of August, plow the meadow with a shallow furrow, say 3 to 3 1/2 inches deep; then roll with a good heavy roller.

Apply unleached hardwood ashes, 30 to 40 bushels per acre, working in with last harrowing before seeding. A dressing of lime in addition would do good, say 10 bushels per acre, or gypsum or land plaster, 200 to 300 lbs. per acre, would help.

TRADE TOPIC. NEW MARLIN GUN CATALOGUE.—The "Gun Catalogue" of the Marlin Firearms Co., New Haven, Conn., containing 136 pages of live information relating to rifles, shotguns, ammunition, etc.

More Strength



The World To-day Calls for Men of Strength, Men of Action.

Why do you drag along listlessly from day to day and week to week, brooding over the loss of your former strength and vigor? Get it back.

There's strength in Electricity for such as you. It is a builder, an invigorator, a strength-giver. Its glowing energy fills your nerves and veins with the spirit of youth.

That's the way you were intended to be, the way you ought to be, and the way you can be. Make your body into a storage battery by filling it every night with the gentle currents from the DR. SANDEN ELECTRIC HERCULEX, and the results will surprise you.

rements from the DR. SANDEN ELECTRIC HERCULEX, and the results will surprise you. The world will look rosy to you, and you'll have the strength and courage to tackle any task.

FREE UNTIL CURED

Call or write to me and I will at once arrange to let you have the Belt on trial, not to be paid for until cured. No deposit or advance payment. Send it back if it doesn't do the work. Liberal discount for cash, if you prefer to deal that way.

Electric Suspensory or other attachment free, and guaranteed for one year.

It is a quick and lasting cure for Weakness of any Organ of the body, for Nervousness, Rheumatism, Pains in the Back and Hips, Lumbago, Indigestion, Constipation, Kidney trouble, Loss of Memory, Poor Circulation, and all evidences of breakdown. It cures where everything else has failed.

SEND FOR MY FREE BOOK

If you cannot call at my office personally, write for my book. It is full of things every man ought to know, and gives full particulars. Sent free, sealed, by mail, in plain envelope. Write to-day.

DR. A. F. SANDEN, 140 Yonge Street Toronto, Ont. Entrance: 6 Temperance Street. OFFICE HOURS: 9 to 6, SATURDAYS UNTIL 9 P.M.

A. Edward Meyer Geo. Amos & Sons, MOFFAT, ONTARIO.

P. O. Box 378, Guelph, Ont., Exclusively. Twelve of the most noted Scotch tribes have representatives in my herd.

275 BURLINGTON SHORTHORNS 275. 4 IMPORTED SCOTCH SHORT-HORN BULLS. 12 BULL CALVES 9 TO 16 MONTHS OLD. 30 CHOICE YOUNG COWS AND HEIFERS. 30

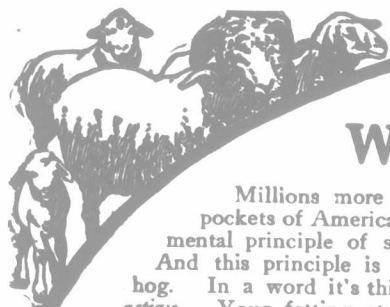
We are offering 15 choice young SHORTHORN BULLS of serviceable age. Among them are high-class herd-headers. We can supply females of all ages.

INVERNESS SHORTHORNS. I can supply Shorthorns of all ages, with richest Scotch breeding and high-class individuality.

Maple Leaf Shires, Shorthorns, Hampshire Hogs. 1- and 2-yr.-old Shire stallions, females from yearling fillies up; Shorthorns, both bulls and heifers; a choice lot of young Hampshire pigs, both sexes beautifully belted.

Shorthorn Cattle AND LINCOLN SHEEP. BRAMPTON JERSEYS

Females of all ages for sale, of the thick-fleshed, low-down kind, that have been raised naturally, neither stuffed nor starved. Twenty-five Lincoln ewes, bred to our best imported stud ram, also a few choice yearling rams.



There's a Right Way to Feed Stock

Millions more of good dollars would lie snugly in the pockets of American farmers and stock feeders, if the fundamental principle of successful feeding were better understood. And this principle is the same for sheep, cow, steer, horse or hog. In a word it's this—*keep the digestive function healthy and active.* Your fattening steer, growing sheep or milking cow, must consume large daily rations of rich foods, or they will not produce more than nature requires for maintenance. And—if the digestive organs are not strong, this heavy feeding will result in impaired appetite, stomach derangement and loss. To obviate this danger, Dr. Hess (M. D., D. V. S.) offers an unfailing preventive—

DR HESS STOCK FOOD A TONIC

Not a food ration, but a tonic, which acts upon the digestive organs, and not only keeps them at healthy, normal activity, but gives added power, so that a feeder may steadily increase the mess up to the capacity of the animal. This is "The Dr. Hess Idea" of feeding, and to follow it on the farm means more milk from the cows; bigger, fatter steers; thrifty, growing sheep; vigorous, handsome horses, and fat, sweet, wholesome pork. Dr. Hess Stock Food is sold on a written guarantee. The dose is small and twice a day is often enough to give it.

100 lbs. \$7.00; 25 lb. pail \$2.00. Smaller quantities at a slight advance. Duty paid. DR. HESS & CLARK, Ashland, Ohio, U. S. A.

Also manufacturers of Dr. Hess Poultry Pan-a-ce-a and Instant Louse Killer. FREE from the 1st to the 10th of each month—Dr. Hess (M. D., D. V. S.) will prescribe for your ailing animals. You can have his 96-page Veterinary Book

Send 2c stamp and mention this paper.

DR. HESS POULTRY PAN-ACE-A does away with the doubtful side of poultry keeping, and who uses it. Poultry Pan-a-ce-a aids digestion, promotes assimilation, makes pure blood and good health. Fed in small portions once a day in soft feed as Dr. Hess directs, it increases egg production as no other known preparation will. It is not a condiment but a tonic, and is as beneficial to growing chicks as to laying hens. It helps through the moulting period and feds old fowls in a short time. It cures Gapes, Cholera, Roup, etc. A penny's worth feeds 30 fowls one day. Sold on a written guarantee. 1½ lbs. 35c.; 5 lbs. 85c.; 12 lbs. \$1.75; 25 lb. pail \$3.50. Duty paid.

Send 2 cents for Dr. Hess 48-page Poultry Book, free.

INSTANT LOUSE KILLER KILLS LICE



THE GOLDEN LAD BULL,

"Golden Fox of Dentonia," at 3 years old a Toronto champion, at the head of my St. Lambert herd. Some beautiful young stock of both sexes for sale from him.

T. PORTER, 360 St. Clair Ave., Toronto.

ARE YOU IN WANT OF A CHOICE BULL TO HEAD YOUR HERD?

We are offering choice bull calves sired by Fountain's Boyle, who won first prize at Toronto, London and Ottawa, who also headed first-prize herd at Toronto and Ottawa. Also offering some choice heifers.

D. DUNCAN, DON, ONT.

DUNCAN STATION, C. N. O.

WOODBINE STOCK FARM

Offer a number of Holstein cows, heifers and young bulls at moderate prices, sired by Sir Creamelle, whose breeding combines the blood of DeKol Creamelle, world's champion milch cow, with that of Duchess Ormsby, highest-testing family of the breed. Write for anything you want.

A. KENNEDY, Ayr, Ont.

Imperial Holsteins!

For sale: Bull calves sired by Tidy Abbekirk Mercedes Posch, whose seven nearest dams have records within a fraction of 27 pounds, out of show cows with high official records. A most desirable lot of coming herd-headers. W. H. SIMMONS, New Durham P. O., Ont., Oxford County.

Holsteins at Ridgedale Farm—Eight bull months old, which I offer at low prices to quick buyers. Write for description and prices, or come and see them. R. W. WALKER, Utica P. O., Ont. Shipping stations: Myrtle, C. P. R., and Port Perry, G. T. R., Ontario Co.

Glenwood Stock Farm—Holsteins and Yorkshires. Holsteins all sold out. Have a few young Yorkshire sows, about 2 months old, for sale cheap. True to type and first-class. Bred from imported stock. Thos. B. Carlaw & Son, Warkworth P. O., Ont. Campbellford Station.

The Maples Holstein Herd!

RECORD-OF-MERIT COWS.

Headed by Lord Wayne Mechthilde Calamity. Nothing for sale at present but choice bull calves from Record-of-Merit dams. Walburn Rivers, Feiden's Corners, Ont.

Holsteins—Maple Grove offers a few richly-bred young cows, safely in calf to Sir Abbekirk De Kol 2nd and Mercena's Sir Posch; also young stock sired by above bulls. For description and prices write

H. BOLLERT, Cassel, Ont.

Holsteins

the "world's champion milking" bull, over 10,000 lbs. in 100 days. Also for sale daughters of De Kol 2nd Mutual De Kol, which gave over 31 lbs. butter in 7 days, also grand-daughters of Hengerveld De Kol. Other leading breeds represented. Putnam station, near Ingersoll.

H. E. GEORGE,

HOLSTEIN CATTLE!

If you are thinking of buying a choice young cow or heifer in calf, come and see our herd. Will sell anything. Have a dozen beautiful heifers safe in calf to Summer Hill Choice Goods (imp.), who has five sisters averaging 29¼ lbs. butter in 7 days, and one sister that held world's record as 4-year-old with 31.60 lbs. butter. Write us what you want. We will guarantee everything just as described. Visitors met at Hamilton by appointment.

D. C. Flatt & Son, Millgrove, Ont.

L.-D. Telephone 2471, Hamilton.

CENTRE AND HILLVIEW

Holsteins

140 head, 45 females in R. O. M. Herd headed by Brookbank Butter Baron, Bonheur Statesman and Sir Sadie Cornucopia Clothilde. The average of dam, sire's dam and granddam is: milk in 7 days, 66.85 lbs.; butter in 7 days, 30.58 lbs. We have bulls born Mar., '09, to two weeks old for sale, from Record-of-Merit dams. Long-distance telephone. P. D. Ede, Oxford Centre, Ont., Woodstock Sta.

Lakeview Holsteins

Herd headed by Count Hengerveld Fayne De Kol, son of Pietertje Hengerveld's Count DeKol, who has five daughters averaging over 30 lbs. butter in 7 days, and whose dam (26.30 lbs. in 7 days) has a daughter with a record of over 35 lbs. in 7 days. Five bull calves from nine months old down from this sire for sale. G. T. R. and Hamilton Radial close to farm. Visitors met by appointment. E. F. OSLER, BRONTE, ONTARIO.

WORLD'S CHAMPION BRED BULL

Grace Fayne 2nd's Sir Colantha. Sire Colantha Johanna Lad. Dam Grace Fayne 2nd. Average butter record for 7 days of his dam, sire's dam and sister is 32.35 lbs. Average milk for one day of dam and sire's dam is 104 lbs. Choice young bulls for sale. M. L. & M. H. HALEY, Springford, Ontario

HERE AGAIN!

With high-class HOLSTEINS for sale, of all ages, except bulls for service. CHEESE is HIGH. Why not invest AT ONCE? We sell at BARGAIN prices. Write or call, we're always home. Railway connections good.

E. & F. MALLORY, Frankford, Ont.

High-class Holsteins

Head of herd, Pietje nearest dams average 26.09 lbs. butter in 7 days. His sire's dam, Pietertje 22nd, has a record of 31.62 lbs. butter in 7 days. Present offering: 2 heifers, due to room; also 2 bull calves by Mannor Johanna DeKol, out of officially-tested cows.

WM. C. STEVENS, PHILLIPSVILLE, ONT.

Maple Hill Holstein-Friesians

FOR SALE—Julia Arthur 2nd, calved Aug. 1st, 1905, 9,219 lbs. milk and 312 lbs. fat in one year; calving in Aug. at 3 yrs. 8 days old. Freshened Oct. 19th, '09. Price \$200 cash. Also bull calves. G. W. CLEMONS, ST. GEORGE, ONT.

FOR SALE: COWS AND HEIFERS

All ages. Also bull and heifer calves, including daughter and granddaughters of Pietertje Hengerveld Count De Kol, whose TWO famous daughters made over 32 lbs. butter each in 7 days, and sire of cow, "De Kol Creamelle, which gave 119 lbs. in one day, over 10,000 lbs. in 100 days. Also for sale daughters of De Kol's 2nd Mutual De Kol, which gave over 31 lbs. butter in 7 days, also grand-daughters of Hengerveld De Kol. Other leading breeds represented. Putnam station, near Ingersoll.

H. E. GEORGE, CRAMPTON, ONTARIO.

Fairview Herd

offers for sale a son of Rag Apple Korndyke. His dam is a daughter of Pontiac Korndyke, with an A. R. O. record of 13.88 lbs. butter in 7 days at two years. Price, \$150.00.

E. H. DOLLAR, Heuvelton, N. Y.

NEAR PRESCOTT.

Maple Glen HOLSTEINS

For sale: Two 3-year-olds, bred to a son of Brown Bros. 30-lb. cow, due to freshen next March. Netherland Johanna Mercedes, a 15.70-lb. Jr. 2-year-old, due last of December to King Fayne Segis, a son of world's champion cow. Also two bull calves, from tested dam, born last June, sired by King Fayne Segis. G. A. GILROY, Gene Buell, Ont. Long-distance phone.

AVONDALE HOLSTEINS

Offers for sale high-class Holsteins all ages. Herd headed by Prince Hengerveld Pietje, a son of Pietertje Hengerveld DeKol, with record of 20.34 lbs. butter at 23 months. We also offer some fine young Yorkshire pigs of choice breeding.

ARTHUR C. HARDY, BRÖCKVILLE, ONTARIO

EVERGREEN STOCK FARM

offers choice young Holstein Bulls, from 10 to 11 months, sired by Sir Mercedes Fatorite, whose dam and gr. dam averaged 80 lbs. milk per day, and 24.60 lbs. butter per week. Their dams also in A. R. Also choice females for sale. F. E. Pettit, Burgessville, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

RATION FOR STEERS.

Having no hay this year, have to feed beef cattle cut straw and silage, mixed, and have to be sparing of the silage; intend feeding twice a day. How much chop should I feed per day at two feeds to steers weighing now about 800 or 900 pounds each? The chop will be mixed chop, say three bushels oats, two bushels barley, and one bushel peas, by measure. Have had the steers in for two weeks, but am only feeding very light on chop yet. Would like to have steers ready for the block by first of May at the latest.

J. McL.

Ans.—Assuming that the steers are now eating about 30 pounds of silage and 8 pounds oat straw, we would recommend commencing with a pound of bran per day, added to whatever meal they may be getting. Then, in about two weeks' time, prepare a mixture of 8 parts of chop, by weight, to 2½ parts oil cake, and substitute this for whatever chop the steers may be then receiving, with the bran extra to the end, the mixture of chop and oil cake to be fed in gradually increasing quantities until at the close of the feeding period the steers may take about ten pounds of the mixture besides the pound of bran. The bran should be mixed with the rest of the concentrates in feeding; we have mentioned it separately to make it clear that we would feed each steer about a pound per day, from beginning to end of feeding period.

RATION FOR COWS—PEA-AND-OAT HAY—PROBABLY WHITE GRUBS.

1. I have 7 cows milking, all due to freshen in March. Are giving an average of 11 lbs. of milk per day. Am feeding 30 lbs. turnips, 4 lbs. bran, one feed of swamp hay, and one of unthreshed oats to each cow per day. Can you suggest a more suitable ration for those cows? Bran is worth \$19, and shorts \$20 per ton. Oats 32c., peas 70c. and buckwheat 40c. per bushel.

2. How do peas and oats, cut green, and saved as hay, compare with clover hay and good oat straw, for feeding to milch cows and young cattle and colts?

3. I plowed up a field this fall which had been in sod for five years. In the bottom of the furrow I saw quite a lot of white worms an inch or more in length, with dark-red heads. Will those be likely to attack the grain next spring? Is there any way of poisoning or getting rid of them? What kind of crops will they be least liable to eat?

B. H.

Ans.—1. There is not much wrong with your feeding. It is not a balanced ration, according to the prescribed standard for milch cows, but as they are milking lightly, their needs are a sort of compromise between a maintenance and a milking ration. It would likely be an economical improvement to use less bran, adding some pea meal or oil cake instead, especially for the cows milking most liberally. For these, try two pounds bran, one pound pea meal, and one pound oil cake, making the change gradually. If they do not respond, go back to your present ration, which is a trifle cheaper. We rather think, however, that they will respond by maintaining, if not increasing their flow. With reference to the roughage mentioned, swamp hay is a very uncertain quantity. Henry gives the analysis of two kinds, one fifty per cent. richer in digestible nutrients than the other. He does not specify the varieties.

2. Very well.

3. We should judge the insects referred to are the white grubs which caused so much injury to pastures this past summer. They injure almost all crops, except clover, which is but little affected. There is no practicable method of extermination, save turning hogs into the field, these animals are fond of the grubs, and will root out and destroy many. Short rotation, leaving land seeded down not more than two years at a time, is a good method of treatment. The insects are likely to be more troublesome the second year than the first year after breaking. If you can sow rape or other crop for hog pasture the coming season, and then seed down with barley the next year, we should think you would be handling the field to best advantage.

QUESTIONS AND ANSWERS.
Cellaneous.

FOR STEERS.

This year, have to feed straw and silage, mixed, sparing of the silage; in fact a day. How much feed per day at two feeds? Now about 800 or 900? The chop will be three bushels oats, two and one bushel peas, by had the steers in for am only feeding very little. Would like to have the block by first of May.

J. McL.

that the steers are now pounds of silage and 8, we would recommend a pound of bran per whatever meal they may eat, in about two weeks' mixture of 8 parts of to 2 1/2 parts oil cake, is for whatever chop e then receiving, with the end, the mixture of to be fed in gradually in until at the close of the steers may take of the mixture of bran. The bran with the rest of the feeding; we have ment to make it clear each steer about a m beginning to end of

COWS—PEA-AND-GRUBS.

Are giving an average per day. Am feeding lbs. bran, one feed of of unthreshed oats ay. Can you suggest for those cows? and shorts \$20 per peas 70c. and buckshel.

nd oats, cut green, compare with clover straw, for feeding to ng cattle and colts? field this fall which r five years. In the w I saw quite a lot inch or more in d heads. Will those ck the grain next ny way of poisoning em? What kind of east liable to eat?

not much wrong with ot a balanced ration, described standard for hey are milking light sort of compromise ance and a milking yely be an economical se less bran, adding l cake instead, espe- milking most liberal- wo pounds bran, one one pound oil cake, adually. If they do ck to your present trifle cheaper. We r, that they will re- g, if not increasing erence to the rough- p hay is a very un- enry gives the an- one fifty per cent. nutrients than the specify the varieties.

the insects referred bs which caused so res this past sum- almost all crops, s but little affected. able method of ex- ing hogs into the e fond of the grubs, and destroy many- g land seeded down ars at a time, is a ment. The insects e troublesome the e first year after ow rape or other the coming season, ith barley the next nk you would be best advantage.

QUESTIONS AND ANSWERS.

Miscellaneous.

A FREE-MARTIN.

I have a heifer two years old that is a twin, the other calf being a bull, which was castrated. The heifer has never been noticed in season.

1. Can anything be done to make her breed?
2. Will a bull so born beget stock?

F. J. S.

Ans.—1. Heifer twinned with bulls generally prove to be barren, but in rare cases a heifer so born comes in season and breeds regularly. The barren heifer twinned with a bull, and failing to show ostrum, is called a free-martin, in this case the internal organs of generation being imperfectly formed or contracted, and there is usually more or less of a masculine appearance about the head.

2. Yes; a bull twinned with a heifer is as sure to prove a breeder as one born single.

RATION FOR STEERS.

Have been feeding steers for Eastern market for some years. Have fed principally cut oat straw, pulped Swede turnips, mixed, night and morning, with a small feed of clover hay at noon. Grain ration has been made up of oats, barley and peas. This year I have the same roughage on hand, and the grain is oats, barley and buckwheat.

1. In what proportions should oats, barley and buckwheat be mixed to give best results?

2. Would you recommend the addition of oil cake at \$35 a ton, and, if so, in what quantity?

3. Will oats, barley and buckwheat be likely to give results equal to oats, barley and peas?

H. W. C.

Ans.—Unless some highly-nitrogenous feed, such as oil cake, were added, we would not anticipate as good results from the ration with buckwheat as from the one with peas. The reason why will be apparent from the following tabulated comparison of the two feeds:

	Digestible protein.	Digestible carbohydrates.	Digestible ether extract.
Peas	16.8	51.8	0.7
Buckwheat	7.7	49.2	1.8

It will be seen that buckwheat is not nearly as rich a feed as peas, pound for pound, and its deficiency consists in the important element, protein, in which the rest of the proposed ration is deficient. And neither the oats nor the barley can be fed in quantity to compensate for this lack. However, a very good ration may be made up by using oil cake, or some similar feed, for example, cottonseed or gluten meal, but preferably oil cake.

	Protein.	Carbohydrates.	Ether extract.
	Lbs.	Lbs.	Lbs.
Oat straw	.120	3.86	.08
Turnips	.400	3.24	.08
Clover hay	.408	2.148	.102
Oats	.276	1.419	.126
Barley	.174	1.312	.032
Buckwheat	.231	1.476	.054
Oil cake	.586	.654	.14
	2.195	14.109	.614

Nutritive ratio, 1:7.057.

This ration should even give better results than the one you have been accustomed to use. It is calculated on a basis of 1,000 pounds live weight, and is intended to satisfy the requirements of steers at the conclusion of the finishing period.

A minister, having walked through a village churchyard and observed the indiscriminate praises bestowed upon the dead, wrote upon the gate-post the following:

"Here lie the dead, and here the living lie."

RAW FURS ALL KINDS WANTED.

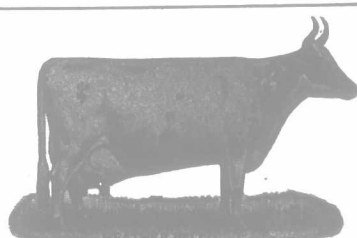
In any quantity. Ship by freight, express or mail. We pay charges, and remit full market value same day. Send trial shipment, or write for information, prices, tags, etc.

FURS

C. H. ROGERS, WALKERTON, CAN.
DIRECT EXPORTER AND MANUFACTURER.

Just Landed with 50 Head CHOICE AYRSHIRES

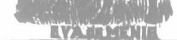
Including 12 bulls fit for service, a few August calving cows and two-year-old heifers; cows with records up to 70 lbs. per day. I have a choice lot of two-year-olds, yearlings and heifer calves. Anything in the lot for sale. Correspondence solicited. Phone, etc.



R. R. NESS, HOWICK, QUE.

AYRSHIRES AND YORKSHIRES

Can fill orders for car lots of Ayrshires, or for good grade dairy cows. Young bulls, cows, heifers or calves of choice breeding. Orders taken for imported stock for 1910. A few young Yorkshires. Write us for anything you need in above lines.



ALEX. HUME & CO., MENIE, ONT.

Stonehouse Ayrshires

36 head to select from. All imported or out of imported sire and dam. For sale: females of all ages. Am now booking orders for bull calves.

Hector Gordon, Howick, Quebec.

ISALEIGH GRANGE AYRSHIRES!

Our herd were all selected on their ability to produce a heavy yield of milk. We have a number of 40, 45 and 50 lb. cows, imported and Canadian-bred. From them are young bulls and heifers for sale. None better. JAMES BODEN, DANVILLE, QUEBEC, ISALEIGH GRANGE FARM.

ELECTRO BALM CURES ECZEMA

Also Piles, Burns, Scalds, Sores, Chapped Hands and Face. Write for sample and booklet of testimonials. 50c. a box at all dealers, or THE ELECTRIC BEAN CHEMICAL CO. LIMITED, OTTAWA.

CRAIGIE LEE Have won more money the last 4 years than all competitors combined, they are heavy producers and high testers. Stock of both sexes for sale, of show-ring form.

H. C. HAMILL, Box Grove P.O. Markham, G. T. R. Locust Hill, C. P. R. Bell phone connection from Markham.

Shannon Bank Ayrshires and Yorkshires. Am now offering young bulls and heifers, true to type and high in quality. Young Yorkshires of both sexes.

W. H. Tran & Son, Locust Hill P.O. & Sta. Ont. Ayrshires from a Prizewinning Herd—Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to WM. STEWART & SON, Campbellford Stn. Menie P.O. Ont.

SPRINGBROOK are large producers of milk, testing high in butter-fat. AYRSHIRES Young stock for sale. Orders booked for calves of 1909, male and female. Prices right. Write or call on

W. F. STEPHEN, Box 163, Huntingdon, Que. Ayrshires—Four young bulls, all bred on dairy lines, out of famous dams; fashionable in color, as well as in breeding. Will be sold worth the money. Females all ages.

N. DYMENT, Clappison's Corners, Ont.



Cures From All Over Canada

Weak Men in Every County and Town Throughout the Broad Dominion Restored to Robust Manhood by the Use of Dr. McLaughlin's Electric Belt.

READ THE EXPRESSIONS OF GRATITUDE.

J. C. Jamison, of Elmside, Que., says: "I have not had a touch of Rheumatism after one week's use of your Belt. I am completely cured."

D. Jannison, Steelton, Ont., writes: "I have been cured of weakness and varicocele and feel like a different man; would not be without your Belt for any money."

C. H. McKague, Roland, Man., has this to say: "After ten days' use of your Belt the losses have stopped, my stomach is digesting its food, and the constipation is a thing of the past. You have my sincere thanks."

Men with small, flabby muscles, thin-chested, dull-eyed, short of breath, without endurance, courage, ambition, sand or grit in their make-up, are WEAK MEN. If they were not horn weak, I can make physical giants of them.

I am not performing miracles. I have only discovered that what makes all this strength, this steam, this FORCE in a man is his Animal Electricity. That is what makes muscles and heart strong. When I find a man who has lost that power and feels only half a man, I want to give it back to him, and I can do it, for I have done it for thousands.

There are men in every town in this country now who thank me for making them feel once more like the greatest of God's creatures—MAN.

HERE IS MORE PROOF OF MY CLAIMS.

J. Largess, Box 53, Vankleek Hill, Ont., reports: "The lameness in my back is all gone, the varicocele is better, and I am getting better health generally, and have gained a good deal in weight."

Jas. Hatt, Beach Hill, N.S., says: "The pains in my back and chest are all gone, and I have gained fifteen pounds in weight. It is a pleasure to say that I have at last found a remedy that will cure me of my aches and pains."

Belonie Gaudet, Miscouche, P.E.I., writes: "I am delighted with the success of your Belt. In forty days' use I have only had three losses. My health is greatly improved, and I feel refreshed after a night's rest."

Where there is any physical constitution to work on, my treatment will develop perfect manhood. It will take the slightest spark of manly vigor and fan it into a flame which will encompass the whole structure and charge every nerve and muscle in the body with the vigor of youth.

EVIDENCE THAT CANNOT BE DENIED.

T. J. Sweeney, care of Seamen's Inst., St. John, N.B., has this to say: "The pains in my back have gone, and the Varicocele has disappeared, and it has done me much good otherwise. I will always recommend it."

Jas. S. Bryson, Maple Creek, Assa., expresses his gratitude by saying: "Your Belt has done me a world of good. I would not be without it if it cost me double the price which you ask."

W. H. Eaton, 512 Cordova St. E., Vancouver, B.C., is thankful because after four days' use of his Belt he was cured of a very severe case of Rheumatism, and has not had a pain since.

Richard Brill, Revelstoke, B.C., says after a month's use of the Belt he is better and healthier than he has been for years, and recommends it to all weak men.

MY BELT CURES Nervous Weakness, Pains in the Back and Limbs, Rheumatism, Kidney and Stomach Troubles, TO STAY CURED Varicocele, Loss of Strength and all the effects of wasted force in Men and Women.

NOT A CENT UNTIL CURED.

That is my offer. You take my latest improved appliance and use it in my way for three months, and if it does not cure you need not pay me. My only condition is that you secure me, so that I will get my money when you are cured.

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If you can't call, send coupon for FREE BOOK.

DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Can.

Dear Sir,—Please forward me one of your Books, as advertised.

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Office Hours—9 a.m. to 6 p.m. Wednesday and Saturday until 8.30 p.m.

Caught Cold By Working In Water.

A Distressing, Tickling Sensation In The Throat.

Mr. Albert MacPhee, Chignecto Mines, N.S., writes:—"In Oct., 1908, I caught cold by working in water, and had a very bad cough and that distressing, tickling sensation in my throat so I could not sleep at night, and my lungs were so very sore I had to give up work. Our doctor gave me medicine but it did me no good so I got a bottle of Dr. Wood's Norway Pine Syrup and by the time I had used two bottles I was entirely cured. I am always recommending it to my friends."

Dr. Wood's Norway Pine Syrup combines the potent healing virtues of the Norway pine tree with other absorbent, expectorant and soothing medicines of recognized worth, and is absolutely harmless, prompt and safe for the cure of Coughs, Colds, Bronchitis, Croup, Sore Throat, Pain or Tightness in the Chest, and all Throat and Lung Troubles.

Beware of imitations of Dr. Wood's Norway Pine Syrup. Ask for it and insist on getting what you ask for. It is put up in a yellow wrapper, three pine trees the trade mark, and the price 25 cents.

Manufactured only by The T. Milburn Co., Limited, Toronto, Ont.

Hampshire Down Sheep.

SPLENDID MUTTON,
GOOD WOOL,
GREAT WEIGHT.

Unrivalled in rapid and WONDERFULLY EARLY MATURITY, hardness of constitution, adapted to all climates, and in quality of MUTTON AND LARGE PROPORTION OF LEAN MEAT.

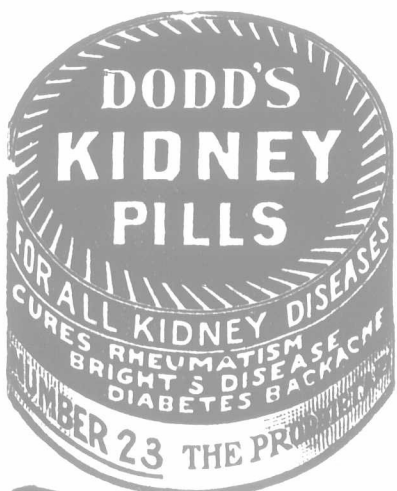
Champion against ALL breeds at the great Smithfield Show, London, 1908.

Full information of

Secretary, Hampshire Down Sheep Breeders' Association, SALISBURY, ENGLAND.

Oxford Down Sheep, Shorthorn Cattle, He, Yorkshire Hogs.—Present offering: Lambs of either sex. For prices, etc., write to **John Cousins & Sons, Bucara Vista Farm, Harington, Ont.**

"I'll work no more for that man Dolan."
"An' why?"
"Shure, 'tis on account av a remark he made."
"An' phwat was that?"
"Says he, 'Casey,' says he, 'ye're discharged.'"



QUESTIONS AND ANSWERS. Miscellaneous.

BALANCED RATION FOR COWS— COMPOSITION OF CORN AND MILLET.

1. Please give a balanced ration for milk cows, composed largely of corn silage, millet and some clover, with corn fodder for roughage, and oats, barley, bran and oil cake for meal, using as much silage and as little meal as possible.

2. Give the analysis of millet hay well cured, also of ensilage corn, well cured and well matured before filling silo.

R. S. T.

Ans.—1. We infer that an inexpensive and therefore only moderately rich ration is desired. With this end in view the following is submitted. It is pretty well balanced, but is not designed to meet the requirements of a cow fed for high production. In composing it, no account has been taken of the millet or corn fodder, it being presumed that these were to be fed in rather small quantities, which would not very seriously affect the balance of the ration. They might be fed day about, in such quantities as the cows cared to consume. For ordinary cows kept under usual farm conditions and milking, say, twenty pounds per day, this ration should prove as profitable as any that might be suggested under the circumstances indicated.

Ration for Cows	Digestible Protein.		Digestible Carbohydrates.		Digestible Ether Extract.
	Lbs.	Lbs.	Lbs.	Lbs.	
Silage	40	.36	4.52	.28	
Clover hay.....	5	.34	1.790	.085	
Oat chop.....	2	.184	.946	.084	
Barley.....	1	.087	.656	.016	
Bran.....	1	.122	.392	.027	
Oil cake.....	2	.586	.654	.14	
		1.679	8.958	.632	
Nutritive ratio, 1:3.62.					

2. We have not before us full details of the composition of millets. Henry compares Hungarian and timothy hay as follows:

	% Digestible Protein.	% Digestible Carbohydrates.	% Digestible Ether Extract.
Hungarian (hay).....	4.5	51.7	1.3
Timothy.....	2.8	13.4	1.4

According to these figures (which, by the way, we do not bank on too far, as the millets are variable in composition according to the stage at which they are cut) Hungarian millet is considerably richer than timothy, especially in respect to its protein content. Other authorities state that the foxtail millets are somewhat deficient in fat and crude protein as compared with timothy hay, though the latter element (protein) has a higher percentage of digestibility than in timothy. The same writer states that barnyard millet hay contains rather more fat and crude protein than the foxtail millets, which is likewise rather more digestible.

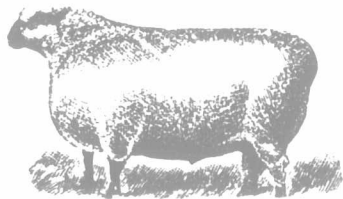
3. Some determinations have been made, but the composition of the corn plant varies greatly according to variety, stage of maturity and other factors. Henry gives the composition of green fodder corn as: Dry matter, 20.7%; of which protein constitutes 1 per cent.; carbohydrates, 11.6%, and ether extract, 0.4%.

At a meeting of the Council of the British Dairy Shorthorn Association on December 6th, Samuel Sanday presented to the Association a 50-guinea challenge cup, to be offered as a prize for the best group of dairy Shorthorns at the forthcoming show of the Royal Agricultural Society at Liverpool in June next. It was decided to take space at the Brussels Exhibition this year for advertising the breed of Dairy Shorthorns.

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W. C. Edwards & Co. James Smith, Rockland, Ont.

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When Writing Mention The Advocate

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YEARLING AND TWO-YEAR-OLD RAMS and a lot of grand Shropshire and Lotsdale ram lambs, ewes and ewe lambs of high class, both breeds, and all of the best breeding. Will sell them in large lots or singly at prices you can afford to pay. Short-horn bulls and heifers, two good registered Clydesdale mares, and a few beautiful Welsh ponies will also be priced at attractive figures.

Farnham Oxford Downs

The Champion Flock for Years.

Our present offering is 20 superior yearling rams for flock headers; some imported, and others by imported sires and from imported dams, or choice Canadian-bred ewes. Also a large number of first-class ram and ewe lambs. Our prices are reasonable.

HENRY ARKELL & SON, ARKELL, ONTARIO, Arkell, C. P. R.; Guelph, G. T. R., and Telegraph.

SPRING BANK OXFORDS

Rams and ewes of all ages at a great reduction for next 30 days. Order at once and get the pick. W. M. BARNETT & SONS, LIVING SPRINGS P. O., ONT. FERGUS STA., G. T. R., and C. P. R.

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You will want them sometime. Now is the time to send for free sample and circular. Write to-day. F. G. James Bowmanville, Ont.

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Present offering: Excellent ewes, choice rams, and the best lot of lambs I ever offered; all sired by imported rams. Yorkshires of both sexes and all ages. Boars fit for service. Sows ready to breed. A high-class lot. Satisfaction assured. J. A. CERSWELL, BOND HEAD P. O., ONT., BRADFORD or BEETON STAS.

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For sale: A high-class show flock of Southdowns, also shearing ram- and ewes, and ram and ewe lambs. Berkshires of both sexes and all ages; right good ones. An honest representation is my motto. SIMEON LEMON, Kettleby P. O., Ont., Aurora Station.

Shropshires, Shires and Clydesdales

High-class Shropshires, shearing rams and ewes, ram lambs and ewe lambs, from imported and Canadian-bred stock show stuff; Shire and Clydesdale fillies; White Wyandotte cockerels and pullets. Prices right. W. D. Monkman Bond Head P. O., Bradford or Beeton Stations.

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A few choice young ewes, bred to the imported first prize shearing ram at Toronto this fall. Also a few good yearling rams and ram lambs that will be sold right. Long-distance telephone. ROBERT McEWEN, BYRON, ONTARIO.

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Now offering 50 young boars 2 to 6 months old. Best breeding. Sired by the two imp. boars, England's Choice and Knowle King David. Also 50 young sows of same breeding. Chas. Currie, Morriston Ont.

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With very nearly 100 sows in breeding, of modern type and high-class quality, our herd will stand comparison with any in Canada. We are always in a position to fill large or small orders with despatch. Long-distance telephone. JAMES WILSON & SONS, FERGUS, ONT.

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Young sows ready to breed, boars ready for service, young pigs just weaned, all choice stock and bred in the purple. Everything guaranteed as represented. Long-distance phone. J. J. WILSON, Importer and Breeder Milton P. O. and Stratton C. P. R. & G. T. R.

Willowdale Berkshires!

Young sows ready to breed, boars ready for service, young pigs just weaned, all choice stock and bred in the purple. Everything guaranteed as represented. Long-distance phone. J. J. WILSON, Importer and Breeder Milton P. O. and Stratton C. P. R. & G. T. R.

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Present offering: 6 yearling heifers and several younger ones. All very choice. Of Tamworths, pigs of all ages and both sexes, pairs not akin. R. O. MORROW & SON, Hilton, Ont. Brighton Tel. and Sin.

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Imported and home-bred. Sows ready to breed. Boars fit for service, and younger ones either sex. Also Embden geese. MAC CAMPBELL & SONS HARWICH, ONT.

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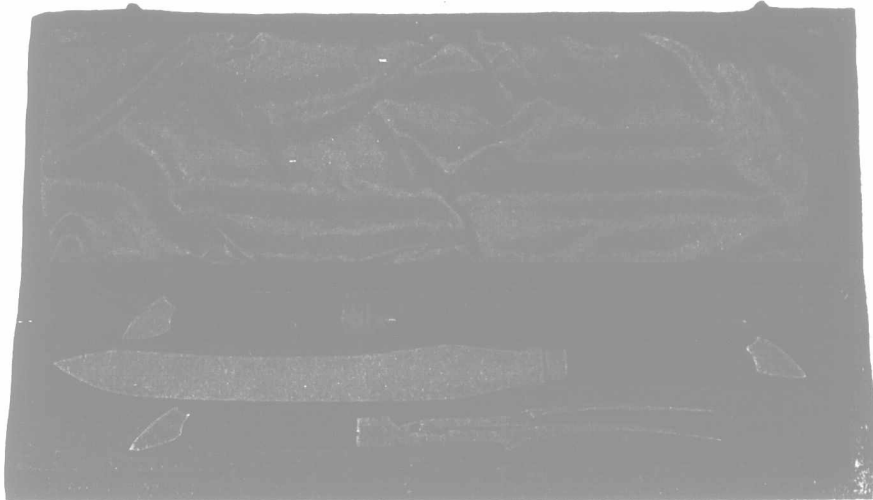
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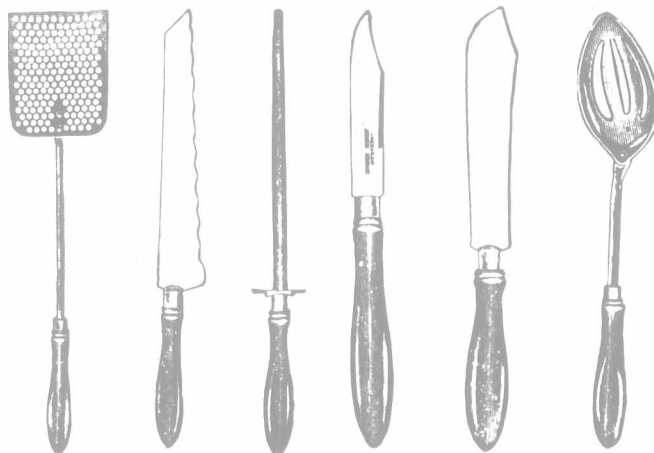
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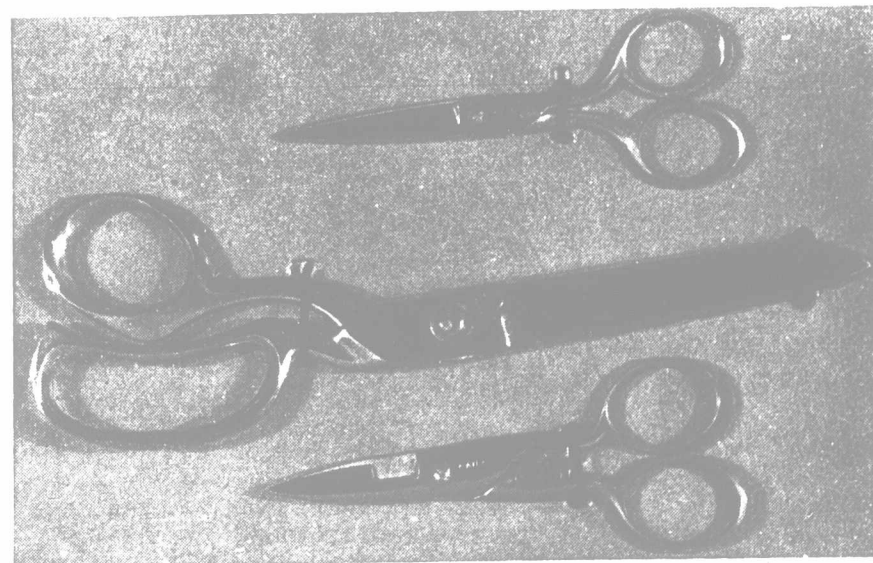
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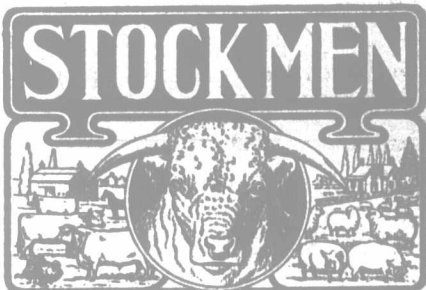
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Spanking does not cure children of bed-wetting. There is a constitutional cause for this trouble. Mrs. M. Summers, Box 821, Windsor, Ont., will send free to any mother her successful home treatment, with full instructions. Send no money, but write her to-day if your children trouble you in this way. Don't blame the child, the chances are it can't help it. This treatment also cures adults and aged people troubled with urine difficulties by day or night.

Boys for Farm Help The managers of Dr. Barnardo's Homes invite applications from farmers, or others, for the boys who are arriving periodically from England to be placed in this country. The young immigrants are mostly between 11 and 13 years of age; all will have passed through a period of training in Dr. Barnardo's English Institutions, and will have been carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars as to the terms and conditions upon which the boys are placed may be obtained upon application to Mr. Alfred B. Owen, Agent Dr. Barnardo's Homes, 50-52 Peter St., Toronto.

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Cover Canadian Roofs Today

A ROOFER'S square is 10 x 10 ft.—100 square feet. There are 400,000 such squares of Oshawa Steel Shingles in use to-day in Canada. Enough steel, that, to make a pathway a foot wide and 7,576 miles long. Almost

thrice the length of the C.P.R. tracks. Nearly enough to roof in a thousand acres of land! And the greater part of those Oshawa Shingles will be right on the job, good, weather-tight, rain-proof roofs, when your grandsons are old, old men. They are good for 100 years.

This is the One Roofing It Pays Best to Buy

Figured by price-cost, "Oshawa" Guaranteed Steel Shingles are as cheap as the poorest wood shingles. Figured by service-cost—the length of time they will make even a passably good roof—wood shingles cost Ten Times as much; slate costs six times as much; and the stuff they call "ready roofing" costs Thirty-Three Times as much! These are facts. They can be proved to you. Proved by figures; by the experience of hundreds of other people who doubted at first, just as you perhaps doubt. Proved, absolutely! You want that proof before you roof. Get it! Send for it to-day.

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Stays rain - and - snow - and - wet-proof for fully a hundred years. Absolutely fireproofs the top of the building for a hundred years. Protects the building from lightning for a hundred years. Resists the hardest winds that blow for a hundred years. Keeps the building it covers cooler in summer, warmer in winter, for a hundred years. Gathers no moisture, and never sweats on the under side for a hundred years. Needs no painting, no patching, no care nor attention for a hundred years. WHAT MORE CAN YOU ASK OF A ROOF?

Send to-day for Sample Shingle and "Roofing Right" Booklet No. 16. Address nearest place.

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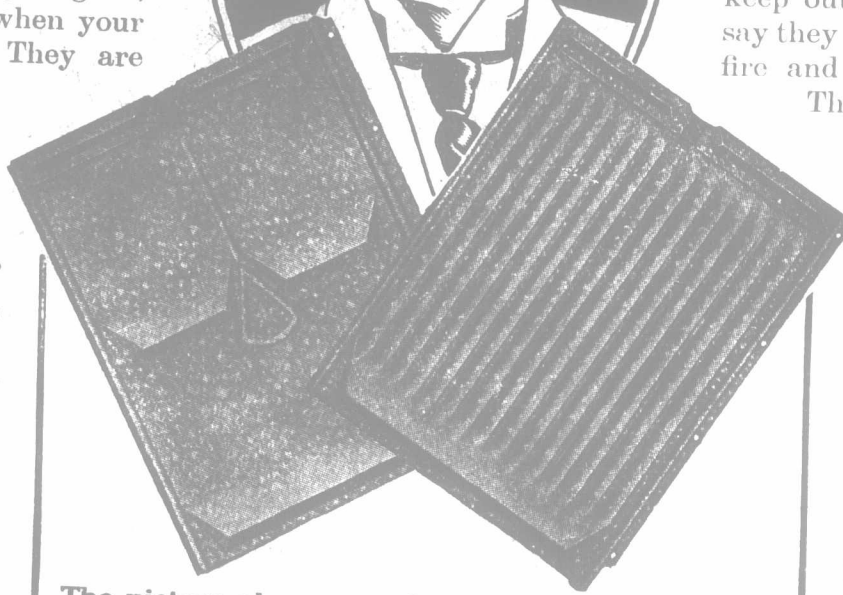
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WRITE FOR DETAILS

MENTION THIS PAPER.



The picture above, on the right, shows the new Spanish pattern Oshawa Galvanized Steel Shingle (Guaranteed). That on left is the standard pattern.

Probably 1935 seems a long way off to you. By that time, I suppose, aeroplanes will be as numerous in the skies as steamers are on the seas now. I don't believe the fall of an aeroplane upon it would harm a Pedlarized-roof.

Yet, when 1935 begins the guarantee that goes with every square foot of my shingles will still have twelve months to run.

You may not be around then. I may not be here. But this powerful company I head will be doing business; and the price of putting a new roof on your building will still stand as a mortgage upon our assets.

Understand me clearly:

If the Oshawa-shingled roof you put on this year fails—even on the last day of 1935—to make good to the letter the plain promises of our Guarantee, there's a new roof for nothing going on that building just as soon as we can get a man there.

Think that over for a minute. Think if it isn't a pretty clear evidence of merit in roofing.

That is what I call making good with Oshawa shingles. That is what you pay five cents per year per square for.

Seems to be worth the money, doesn't it?

G. A. Pedlar

It Will Pay You To Pedlarize All Your Buildings

"To Pedlarize" means to sheathe your whole home with handsome, lasting and beautiful steel—ceilings, side-walls, outside, roof. It means to protect yourself against cold; against fire; against much disease; against repair-bills. Ask us and we will tell you the whole story. Just use a postcard and say: "How about Pedlarizing my house?" State whether brick or frame. Write to-day.

ADVERTISING alone never sold that vast area of Pedlar Shingles. Smooth salesmanship never kept them selling; nor glib talk; nor lying abuse of competing goods; nor cut price. Those things do sell shingles, right here

in Canada's roofing trade. But Oshawa Shingles sell, and keep on selling, for a different reason. They make good. They keep out the wet, they make year, as we say they will. They protect buildings from fire and lightning, as we say they will. They make good.

THEY DO ALL WE SAY THEY WILL AND MORE TOO

This is the One Roofing That is Guaranteed

Some makers of 'metal shingles' (ever notice how careful they are to avoid saying steel?) point with pride to roofs of their 25 years in service. BUT THEY DON'T GUARANTEE their shingles for 25 years to come. You buy Oshawa Steel Shingles—the only kind that IS guaranteed—upon the plain English warranty that if the roof goes back on you in the next quarter-century you get a new roof for nothing. You can read the Guarantee before you decide. Send for it. See if it isn't as fair as your own lawyer would make it on your behalf. Isn't that square?

Book and Sample Shingle Free

Send for free book and free sample of the Oshawa Shingle itself. It will interest you to study it. You will see the actual construction. You will see that the Pedlar Improved Lock, on all four edges of the shingle, makes it certain that moisture never can get through any Oshawa-shingled roof. You will see how the Pedlar process of galvanizing drives the zinc right into the steel so it never can flake off. You will be in no doubt about which roofing after you have studied this shingle.

Send for it and the book and Guarantee. Send for them now.