

48.

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED  
FOUNDED 1875

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

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JULY 1, 1903.

PUBLISHED AT WINNIPEG, MANITOBA.

No. 577

**BELL**

Art Pianos and Organs

Bellolian Automatic Organs.

BELL Piano Players ARE THE BEST IN DESIGN, TONE, FINISH AND DURABILITY.

Made by the **BELL ORGAN AND PIANO COMPANY, LIMITED,** GUELPH, ONTARIO.

Send for Catalogue No. 40.

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"The Best Organ in the Best Case."

Twenty-eight years of public approval have carried

**THE MATCHLESS Doherty Organ**

To the topmost rung of the ladder of fame.

**STRICTLY HIGH-GRADE**

Outside—Inside—Throughout.

New Styles for 1903 Now Ready

Correspondence Solicited. Illustrated Catalogue Free.

**W. Doherty & Co.**  
CLINTON, ONTARIO, CANADA.

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Alma is a Residential School, and has extended courses of instruction in Preparatory and Collegiate Studies, Music, Fine Art, Elocution, and Physical Culture, Domestic Science and Commercial. The College is situated in an eight-acre park. Special attention is given to the health of the students. The aim is to combine the home life with the best educational features.

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**REV. R. T. WARNER, M.A., D.D.,** PRINCIPAL.  
ST. THOMAS, ONT.

**THE Sovereign Bank OF CANADA.**

Head Office, TORONTO.  
Chief Executive Office, MONTREAL.

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**\$3 a Day Sure**

Send us your address and we will show you how to make \$3 a day absolutely sure; we furnish the work and teach you free; you work in the locality where you live. Send us your address and we will explain the business fully; remember we guarantee a clear profit of \$3 for every day's work, absolutely sure, write at once.

**IMPERIAL SILVERWARE CO., Box 508, WINNIPEG, ONT.**

PUBLISHED TWICE A MONTH AT LONDON AND WINNIPEG, CAN.



## How to Use Bug Death

Take Your Choice of the Three Ways: Bug Death Will Do Its Work Either Way.

**DRY.**—BUG DEATH is a fine powder, non-poisonous, which can be dusted on the vines with our "Perfection" Shaker, or can be applied by a piece of burlap (fairly fine) with the corners gathered up. Dust lightly over the plants. When the vines are wet after a rain, or when wet with dew, is the best time to apply BUG DEATH. Use freely. It pays on account of the extra growth of the plant and increase of the crop.

**IN WATER.**—Add 12½ lbs. of BUG DEATH to 40 gallons of water. This makes the proper proportion, but a larger quantity of BUG DEATH can be used to good advantage. Any spraysmotor or sprayer can be used. Keep mixture well agitated when using.

**IN BORDEAUX MIXTURE.**—Add 12½ lbs. to 40 gallons of Bordeaux Mixture. BUG DEATH will kill the bugs and improve the growth of the plants.

WE SEND FREE OUR "BUG DEATH BOOKLET" AND "POTATO CULTURE."

**BUG DEATH CHEMICAL CO., Ltd., ST. STEPHEN, N. B.**

Kills the Bugs. Feeds the Plant.



Pat. in Canada Nov. 4, 1907, Jan. 15, 1908. 808-POSDORF. PREVENTS BURN.

## Standard Scales

For railroad, hay, live stock, dairy, coal and platform.

For prices and particulars write or call on

**GEO. M. FOX,**

**YORK STREET, LONDON, ONT.**



**ROCK SALT** for horses and cattle, in ton and car lots. Toronto Salt Works, Toronto.

## Farmers Contemplating Marriage, AS WELL AS Those Already in Wedded Bliss,

should present their bride or family, as the case may be, with a BEAUTIFUL MASON & RISCH PIANO.

Liberal allowance made for old pianos and organs. Call and get our prices before buying.

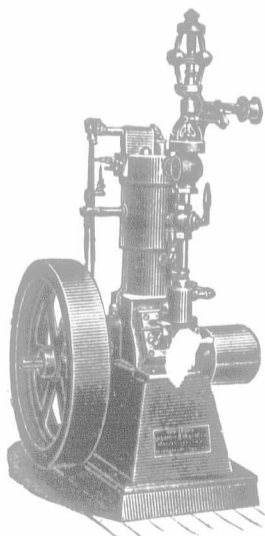
The Mason & Risch Piano Co., Ltd., 211 Dundas St., London

## 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, 214 Farley Ave., Toronto.

## McLachlan Gasoline Engine

18 MOUNTED IN 5, 10, 15, 20 OR 25 HORSE POWER.



WRITE  
**THE McLACHLAN GASOLINE ENGINE CO., LIMITED,**  
201 Queen St. E.,  
TORONTO,

for catalogue and prices.



H-T-T. Published monthly, 52 pages. Tells all about Hunting, Trapping and Raw Furs. Sample copy 10c. Hunter-Trapper, Box G, Gallipolis, Ohio.



THE RIGHT PAINT

TO PAINT RIGHT

## RAMSAY'S PAINTS PAINT RIGHT!

And do it cheaply too, because they're the purest and best in the way of paint making. They outlast cheap paints and cost less to put on—consequently are money-savers and time-savers. Your dealer will tell you the price, and it isn't high if you want a good job.

Write to us for our "Booklet B," free, showing how some houses are painted with Ramsay's Paints.

**A. RAMSAY & SON,**  
Paint Makers,  
Est'd 1842. MONTREAL.

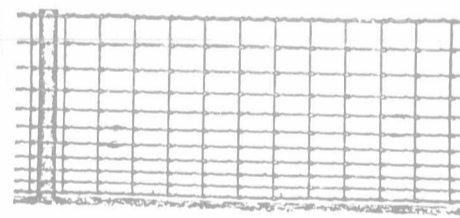
## WOVEN WIRE FENCING

MANUFACTURED IN CANADA

The best selling because the most satisfactory.

"American" Field Fences

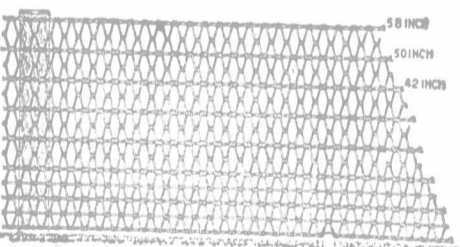
For horses, cattle, sheep, and hogs. All styles and heights—20 inches to 68 inches high, with stays 12 inches or 6 inches apart.



"AMERICAN" FENCE.

"Ellwood" Field, Farm and Lawn Fences.  
Six styles. Heights, 18 inches to 58 inches.

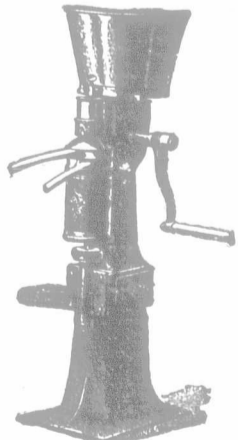
If you can't get the celebrated AMERICAN and ELLWOOD fences from your dealer write to us and we will help you.



"ELLWOOD" FENCE.

The CANADIAN STEEL & WIRE CO. (LIMITED),  
HAMILTON, CANADA.

## We Start With A Good Design



We combine it with the best materials money can buy, formed and put together by skilled labor under the most favorable conditions, and we set it down in your dairy ready for business. "Magnet" separators can be depended upon under any and all circumstances for the most rapid and successful performance of any work within their capacity. No worm gearing, but made with ALL CUT SPUR GEARS.

Jas. W. Robertson,  
Commissioner of Agriculture and Dairying,  
F. W. Hodson,  
Live Stock Commissioner.

Dominion of Canada  
Department of Agriculture,  
Commissioner's Branch,  
Ottawa, April 6th, 1903.

THE PERRIE MFG. CO., LTD., Guelph, Ont.  
Gentlemen,—I am pleased to inform you that the Magnet Cream Separator which I bought from you several months ago has been in continuous use in my dairy of forty cows. It has been very carefully and severely tested, and I am glad to inform you that it has given perfect satisfaction. It runs very lightly, skims well, and separates beyond the capacity guaranteed by you. I have no hesitation in saying that Canadian farmers would find it to their interests to buy machines made in Canada, rather than those imported from foreign countries and assembled in Canada. The reasons are obvious and need no explanation. Yours very truly,  
F. W. Hodson,  
Live Stock Commissioner.

Our Catalogue gives further particulars, and can be had for the asking.

**PETRIE MFG. CO., GUELPH, ONT.**  
Box 603. BRANCH OFFICE, Box 116, ST. JOHN, N. B. LIMITED.

Agents wanted in all unrepresented sections.

## GENUINE Pratt's Astral Lamp Oil

SOLD IN ALL COUNTRIES, AND RECOGNIZED AS THE HIGHEST-GRADE OIL MANUFACTURED.

WHOLESALE ONLY.

THE QUEEN CITY OIL CO., Limited,  
TORONTO.

## Windmills.

GET A

## CANADIAN AIRMOTOR

TO DO

Your Pumping, and employ your own time to better use.

SAVES A LOT OF DRUDGERY.

Will tickle your family, especially the

HIRED MAN.

WILL MARK LIFE WORTH LIVING. WRITE US:

Ont. Wind Engine & Pump Co. TORONTO, ONT. (LIMITED).

## WOODSTOCK STEEL WINDMILLS

Galvanized

or Painted.

For Power

or Pumping.

DANDY Windmill

with Graphite Bearings, runs easy and controls itself in the storm.

GRINDERS, PUMPS, WATER TANKS, DRINKING BASINS AND SAW BENCHES.

WOODSTOCK WIND-MOTOR CO., WOODSTOCK, ONT. (LTD.)



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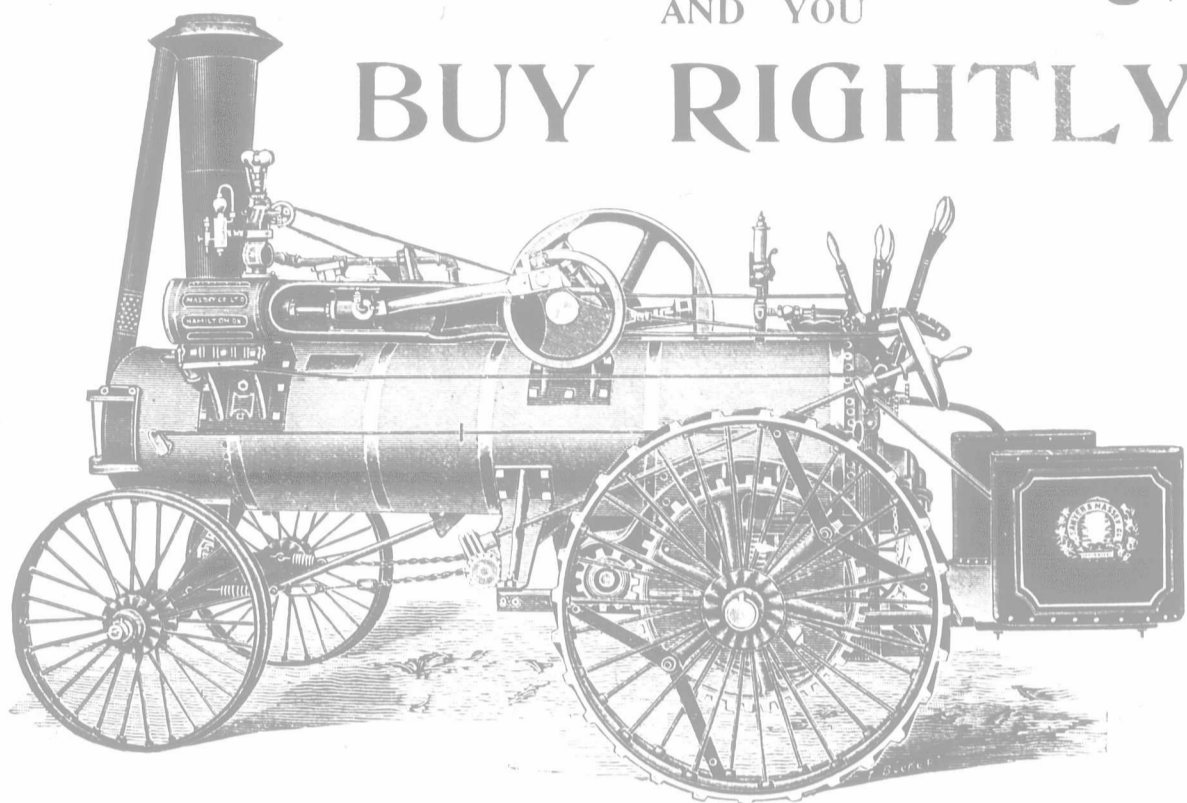


# Buy "S. & M." Machinery

AND YOU

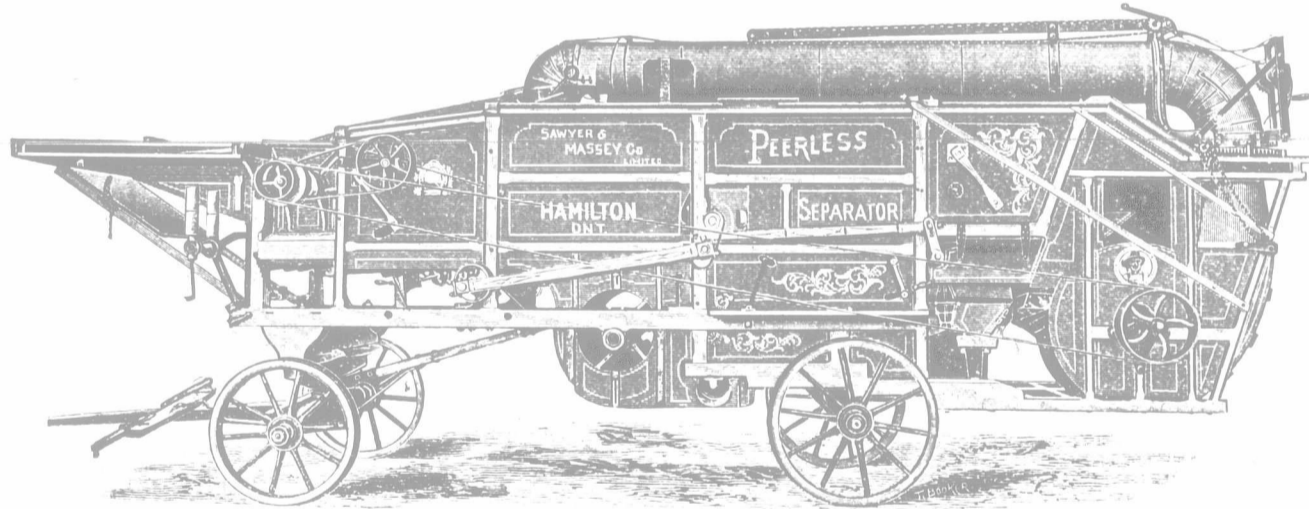
## BUY RIGHTLY

"S. & M." Tractions are specially designed to be used not only as Road Locomotives, but also for driving and operating machines of various kinds. They have all the Attachments to bring the Engine under perfect control, either as a traction on the road or as a plain engine driving the thresher or other machinery.



We manufacture 4 Models of Separators, specially designed and beautifully finished, of various capacities, enabling us to meet the different requirements of our many customers.

**"The Peerless"**  
**"The Daisy"**  
**"The Eclipse"**  
**"The New Ontario"**



These Machines cannot be overfed and will handle long, wet, tough or bunched straw with ease and facility, separating and cleaning the grain at once, fit for the market.

WE MAKE A SPECIALTY OF SUPPLYING

### ATTACHMENTS

BLOWERS, FEEDERS, CARRIERS, BAGGERS, WEIGHERS, CHAFFERS, ELEVATORS, ETC., ETC.

### EXTRAS

TANK PUMPS AND HOSE, RUBBER GANDY AND LEATHER BELTING, CYLINDER TEETH, BRASS GOODS, ETC.

### REPAIRS

AT PRICES BELOW THE AVERAGE.

We also Manufacture CLOVER HULLERS, LEVEL-TREAD POWERS with roller bearings, SWEEP POWERS, BEVEL AND LIFTING JACKS, etc., etc. . . . Also

## Saw-milling and Road-making Machinery:

Comprising ROAD GRADERS, ROAD ROLLERS, ROCK CRUSHERS, WHEEL AND DRAG SCRAPERS, SPREADING WAGONS, DUMP CARTS, MOULDS FOR CONCRETE TILE, etc.

SEND FOR 1903 CATALOGUES

# SAWYER & MASSEY CO.

HAMILTON, CANADA.

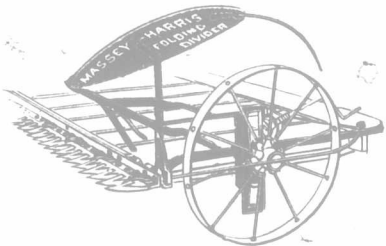
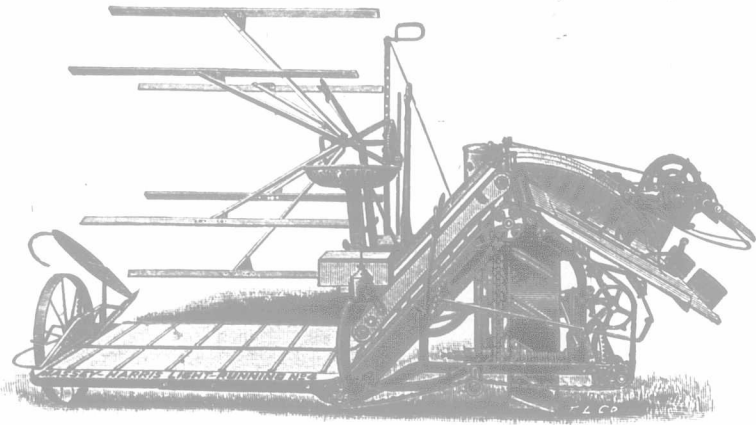
LIMITED.

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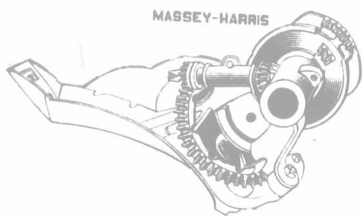
# MASSEY-HARRIS BINDER

Without a Peer in the Harvesting-Machinery World.

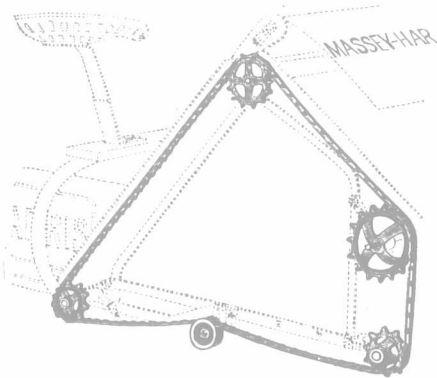


The Elevator Chain has a very simple course.

The Dividers (both inside and outside) can be quickly and easily folded.

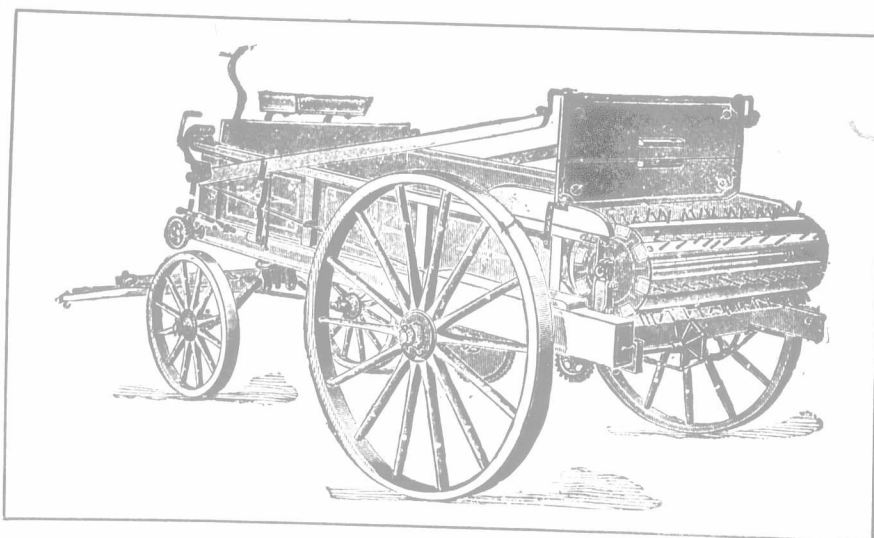


The Knotter can be readily adjusted to take up wear.



This aids greatly in eliminating friction.

# Kemp's 20th Century Manure Spreader.



A CROP-MAKER and A LABOR-SAVER.

Drop a postal card for our Booklet, entitled "Multiplying His Acres."

The KEMP MANURE SPREADER CO., Limited  
STRATFORD, ONT.

SAVE YOUR HAY & SAVE EXTRA LABOR

SPECIAL LABOR SAVING TOOLS

MAXWELL TEDDER SIDE DELIVERY RAKE & LOADER

MAXWELL

St. Mary's, Ont. Canada

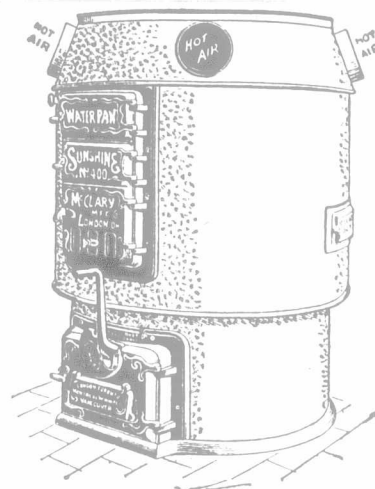
IS THERE AN AGENT IN YOUR DISTRICT

IF NOT ADDRESS THE FIRM DIRECTLY

DAVID MAXWELL & SONS, ST. MARY'S, ONTARIO, Canada

# FARM SPECIALTIES!

## Sunshine Furnace



"SUNSHINE" FURNACE.

Burns coal, coke or wood, and gives perfect satisfaction with either.

Has large double feed-doors, which will admit rough chunks. Large steel dome and steel radiator.

Has every special fuel-saving and heat-producing device known.

Very simple to operate.

## Cornwall Steel Range

Has extra large oven and fire-box.

Burns coal, coke or wood.

Made of best grades of sheet steel.

Has triple triangular grates and sectional cast-iron linings.

The highest-grade Steel Range made in Canada.

Write for Booklets.



"CORNWALL" STEEL RANGE.

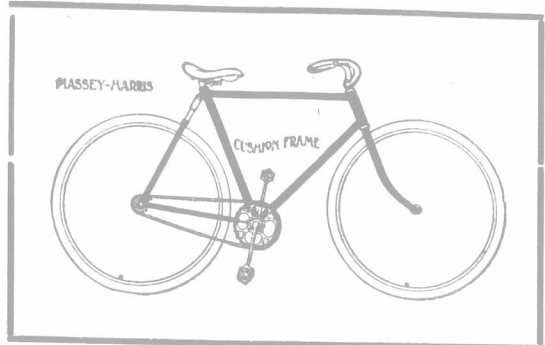
# McCLARY'S.

London. Toronto. Montreal. Winnipeg. Vancouver. St. John, N. B.

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# The Greatest Bicycle



THERE ARE a good many bicycles sold, but few good bicycles. And it pays to get a good one, because you can get comfort and wear out of it and save a great deal on repair bills.

You know just how useful a wheel is in the country. It was originally designed that it should aid in making long distances short and pleasant. The

## Massey-Harris

has done that, and with the new Hygienic

## Cushion Frame

it has turned a spin into absolute comfort, for it has made all roads smooth. It is the "Pullman" of bicycling.

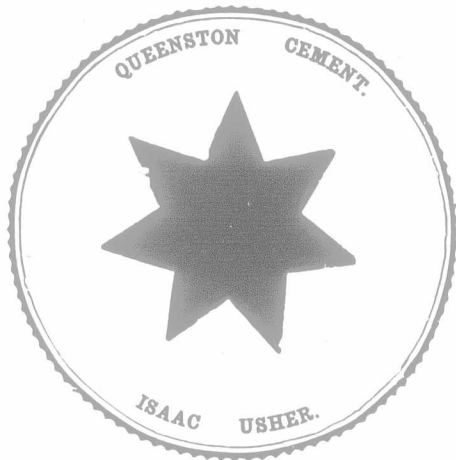
Write for our new booklet.

**CANADA CYCLE & MOTOR CO. LIMITED.**  
TORONTO JUNCTION.

## Going to Build?

A new house, barn, silo, concrete floor, or any other such work? If so, use

## Queenston Cement



THE old brand made by a new process. No better cement made. All who contemplate using cement should first inspect the different structures built of the different kinds of cement, and then they would know which is best and cheapest. We especially request those interested to ask our many patrons about the new-process Queenston Cement used during the latter part of last season. Do not be misled by statements from those who sell the goods most profitable to themselves. Write for prices, estimates and full particulars. We can save money for you when building.

**ISAAC USHER,**  
QUEENSTON, ONTARIO.

## P. E. SHANTZ, PRESTON, ONTARIO.

Binders, Mowers, Rakes,  
Plows, Gang Plows, Scufflers,  
Steel Rollers, 3 section, weight 1060 lbs.  
Diamond Harrows, Square and Flat Bulls,  
Sugar-beet Drills, Cultivators and Lifters.

Write for Prices at once.

AGENTS WANTED.

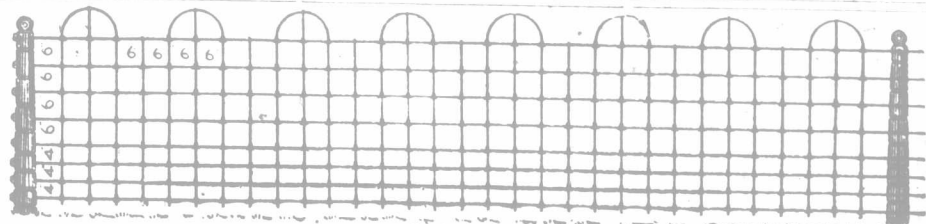
## LONG DISTANCE SINGLE BARREL SHOTGUN \$650

Send us \$1.00 deposit, state if the \$6.50 or \$7.50 gun is wanted. State gauge desired, and we will send this examination, you to pay the express agent the balance and express charges, after you find it perfectly satisfactory. This Fine Gun is made by expert gun makers, every part and piece fitted perfectly and reinforced so it cannot shoot loose or shaky, strong rigid steel frame built extra solid to withstand the use of any NITRO POWDER, latest improved top snap and rebounding hammer, best quality steel works, extra strong spring, fine walnut stock, heavy rubber butt plate, full pistol grip thoroughly tested for pattern, penetration and strength. For \$7.50 in all we will furnish the same gun with latest improved automatic shell ejector which throws shell out automatically, making it possible to reload and fire in rapid succession. Order to-day or write for our Special Gun Catalogue contains single barrel shotguns at \$3.75 up, and everything in rifles, revolvers, ammunition and sportsmen's goods at factory prices.



Breech loading, made with finest blued crucible rolled steel barrel, taper choked bored to size from the solid bar and bored for any nitro powder. Choice of 12 or 16 gauge, 30 inch barrel.

T. W. BOYD & SON, 1683 NOTRE DAME ST., MONTREAL.



This Fence is particularly suited for cemetery, orchard and garden. Made of wickets 12 inches wide, and any length required. The price is less than that of the other ornamental fences, and in a long stretch this is a consideration.

The ANCHOR FENCE is made of all No. 9 wire, either plain or coiled.

## ESPLEN FRAME & CO.,

AGENTS WANTED.

Stratford, Ont.

## Beware!

Of a Fence Lock which needs a kink or crimp to make it hold. It weakens the wire and will eventually cause it to break. The



## Frost Wedge Lock

is the only Fence Lock on the market to-day which will bind two hard wires without injury to either.

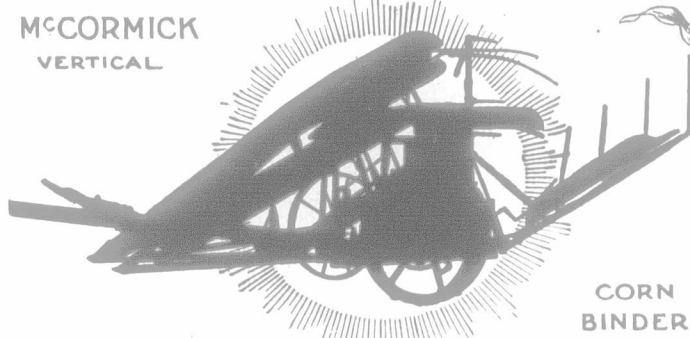


The Frost Wire Fence Co., Ltd.,  
Winnipeg, Man. Welland, Ont.

## "Gwaiakowe"

Translation - Corn is king

MCCORMICK  
VERTICAL



CORN  
BINDER

## KING CORN BINDER

In the language of the Indian, after which our great American crop was named, corn is king. The grain value of the corn crop is approximately \$1,000,000,000. It is estimated that the stalks and fodder are worth as much more. Think, then, of the amount you can make by saving all of your corn crop.

### The MCCORMICK

corn binder and husker and shredder enables you to save this part of the corn crop that has in past years gone to waste.

H. R. THURBER, Toronto, Ont.

A. B. CLANCY, Montreal, Que.

General Agents for MCCORMICK MACHINES.





## Sweeping Day

Comes round each week with the regularity of clockwork, and sweeping day requires a good broom.

# BOECKH'S BAMBOO HANDLED BROOMS

Make work as light as possible—the secret of their easy sweeping is in the scientific construction of the broom and quality of corn used—absolutely the best brooms made.

**Sold by All Good Grocers.**  
Look for name "BOECKH" on handle.

### JUDGING.

Humanity is prone to judgment without knowledge, and especially is this so where prejudice or bias of mind induces condemnation. By passing unfavorable judgment a man not only does harm to the person or article condemned, but he narrows his own mind and scope of vision by looking at only one side of the question and thus fostering prejudice. The prejudiced mind is incapable of fair judgment.

It is a common thing for men who are not open-minded enough to test the matter to condemn Herbageum as expensive, but the fair-minded man who has tested it before passing judgment always gives a favorable verdict, and when the economical value of Herbageum is fairly considered and proven by actual test to be true, a verdict other than favorable is impossible.

## STEEL IS STRONGER THAN LEATHER



**The ROY DODSON'S PATENT HAME-CHAINS** will outwear a dozen ordinary leather straps.

They are stamped out of sheet steel, and are adapted to all kinds of work hames. Quickly adjusted in this way:

*Hook end X into hame loop; close down with hammer, as shown at XX; unbuckle at A, hook into right hame and pull up same as leather strap, put finger in ring, pull up tight.*

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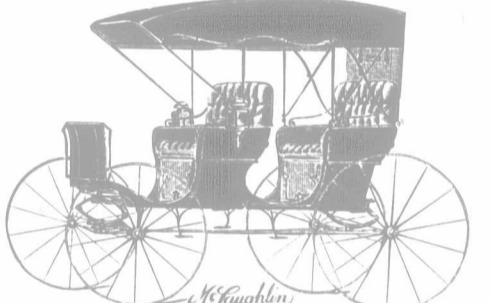


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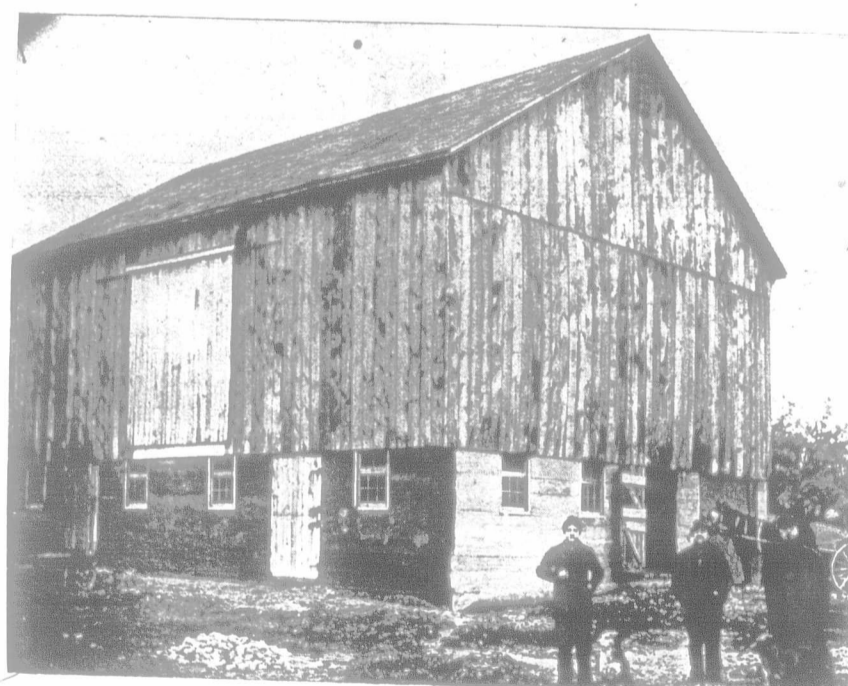
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**Farmer's Advocate**  
and Home Magazine.

"PERSEVERE AND SUCCEED." ESTABLISHED 1866.

VOL. XXXVIII.

LONDON, ONT., AND WINNIPEG, MAN., JULY 1, 1903.

No. 577

EDITORIAL.

**Prepare for the Fairs.**

The honest efforts being made by exhibition managers in this country, in deference to public opinion, to raise the standard of our fairs from a moral point of view, and to make them useful and helpful to all the people, as well as attractive and entertaining, should, be loyally encouraged and supported alike by farmers and city people. These fairs were primarily instituted for the benefit of farmers, by fostering improvement of the type and quality of live stock, and of agricultural products generally. It is with this view that they are aided by grants of public money to be expended in prizes for the purpose of stimulating competition in the production of the best in all lines of agricultural and industrial effort, and it must be acknowledged that to the fairs system is largely due the credit for the steady improvement and dissemination of high-class pure-bred stock throughout the country.

The offer of liberal prizes in the early days of agricultural societies served as an incentive to the importation of first-class stock, and its influence, like that of leaven, has spread until the remotest parts of the Dominion have shared more or less in its benefits. In those early years a first-class agricultural fair, pure and simple, was sufficient to attract a large attendance, both of country and city people, but with the institution of special industrial exhibitions in large centers came the introduction of extraneous attractions and amusements calculated to increase the crowd of attendants, and which certainly for a time had that effect, though at the expense of the usefulness and wholesomeness of the exhibition, either as an agricultural or an industrial advantage. Unfortunately, the deleterious influence of these innovations was not confined to the larger shows, but spread to the county and township fairs, well-nigh spoiling their usefulness by turning the attention of the people mainly to the race course and circus performances, while the useful features of the fair were neglected. Happily, a proper sense of the folly of such a prostitution of the purposes of the fair has dawned upon the minds of the people. Saner counsel has prevailed with fair boards, and the programme of the fair is again on the up-grade, most of the degrading features having been eliminated from the bill of fare of the leading exhibitions, and in their stead have been introduced wholesome and helpful features, which are not only interesting and entertaining, but also educative and elevating. As before intimated, the public should show its appreciation of these improvements, encouraging the disposition to take higher ground, not only by attending the fairs and taking the family along as far as practicable, but by preparing something in the way of exhibits to contribute to the volume of good things shown. Though the time is now short in which to prepare some classes of exhibits for the earlier fairs, there is yet ample time to get ready entries in many classes, and thus to strengthen the show in a practical way. While the early summer drouth in some districts will militate against a strong show in some classes of exhibits, it is gratifying to know that these conditions apply to only a limited area, and that in by far the greater portion of the country the pastures and grain crops are in excellent condition and the prospects for corn and roots very

encouraging. In the time intervening between now and the dates of the exhibitions, more particularly the larger ones, stockmen will be giving the finishing touches to the live-stock exhibits, which, in keeping with the healthy condition of that great industry, will be of a very high character.

**Looking Upon the Harvest.**

As the grain crops stand just before harvest, an excellent opportunity is afforded for noting the individuality of different heads of grain. Every observer has noticed the great difference in plants growing in a field, and the idea of selecting the best of these heads for seed has resulted in remarkable success. Considerable effort has of late been put forth to increase yields by the introduction of new varieties, but such work should only be supplemental to the judicious selection of seed and the propagation of the best specimens of grain in the selected lots. In 1902 the Provinces of Ontario, New Brunswick, Manitoba and the Northwest Territories produced 93,569,450 bushels of wheat from 3,740,007 acres. This was an average of 25.2 bushels per acre, a remarkably high average for such a large acreage, but if with increased care in the selection of seed sown on all this area the yield had been increased by one bushel per acre (a very small increase according to the results obtained in the Macdonald seed-grain competition), there would have been added to the total amount of wheat in these Provinces 3,740,007 bushels, representing at least one and one-half millions of dollars, and that without any material additional cost, such as would accompany the harvesting of this amount if grown on additional land. The matter of increasing the yield of a grain crop by one bushel per acre is a small matter, if viewed from an individual standpoint, but when the increase extends over a whole Province the result is at once so obvious as to attract attention.

Progress in the development of the productive power of grains must necessarily be slow and steady, rather than sudden or spasmodic. The power to produce large yields is a characteristic that must be developed in plants by careful breeding, with selection having that object in view. In the corn States large appropriations are made to enable the experiment stations to carry forward the work of breeding corn and to furnish practical instruction to the growers along the line of careful selection of seed. Clearly the greatest advancement that will be made in farming during the next few years will be in the matter of selecting seed and of more intensive methods of cultivation and management. The need of the farming community now is not so much more land or phenomenal varieties, but an intelligent and determined effort to improve the crops already grown, not only of grain, but also of roots, grasses and fruits. Thorough cultivation should not be neglected, but should be more assiduously studied and practiced, in conjunction with the selection of the best of seeds for future crops.

It is estimated that the losses of cattle and sheep in Montana during the big storm in May will amount to nearly \$5,000,000. In some sections fully ninety per cent. of the sheep on the ranges perished.

**Consolidating the Empire's Trade.**

Public thought in Great Britain was lately stirred as it has not been for a generation, by the deliverances of Hon. Joseph Chamberlain, the member of the Government upon whose department devolves the relations of the mother country with the self-governing "Dominions Beyond the Seas," such as Canada, Australia, New Zealand, India and South Africa. Since the jubilee of our late lamented Queen Victoria, and the colonial conference, coming down through the unifying events of the South African war, and the realization of the vastness of the agricultural resources of the Canadian West, of its resources generally, and its industrial possibilities, statesmen and publicists in every part of the Empire have been scanning with serious and studious eyes the horizon of the future.

Considered in all its world-wide parts, the British Empire is the most marvellous product the world has ever seen—strong, progressive, loyal and cohesive, held together by the ties of sentiment, fraternity, business and freedom. Canada contributes nothing to the Imperial naval defence, which safeguards the commerce of the Empire, and she is free to manage her own fiscal and, for the most part, her other affairs as she will. A happy-go-lucky policy, European or Oriental despots would regard it, but in its flexibility lies its safety. Can it always continue thus? What is the present drift or tendency? What will the future evolve? How will the divergent interests of the outlying portions of the Empire, as they grow in power, be harmonized so as to preserve the unity of the whole and keep pace with rival nations? Wrapped up in these enquiries are vast fiscal, colonial and imperial problems that are perplexing the most sagacious statesmanship.

We find our Empire confronted with the militarism of other nations, and hostile tariffs, like those of Germany and the United States, directed against us. Foreign nations buy only £174,000,000 worth of goods from Britain, but sell her £421,000,000 worth, and she must pay, in cash or otherwise, the balance. On the other hand, the colonies take £109,000,000 worth from Britain, and ship her £106,500,000, which is regarded as fair trade. Britain takes the largest proportion of exports from Canada, and Mr. Chamberlain told the colonial conference that she might double or treble the amount taken under a reciprocal advantage, thus indicating the vast advantage a preferential British tariff would be to the Canadian farmer.

Well might Premier Balfour, on the floor of the British Parliament the other night, declare that he did not belong to that self-satisfied band who thought a fiscal system established fifty years ago, under conditions profoundly different from those now existing, must remain unmodified for all time. While it is true that no tax on food can be imposed without the full consent of the industrial masses of Britain, it is no profanation to frankly examine this traditional policy, with a view to determining wherein the conditions of to-day may suggest modifications. Ere long, Canada will be the home of a vast and aggressive population who will not relinquish self-government, and while putting Canadian interests first, is disposed to do so in a way that will tend to perpetuate and strengthen the Empire. Canada is watching with keen interest the present discussion in England. Little serious disposition has been manifested thus far to modify the existing



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moderate protective Canadian tariff. One significant fact in this connection deserving of consideration is this: That by reason of the present Canadian tariff, and to secure advantages under our flag, we find the greatest agricultural implement manufacturing enterprise in the world, outside of Canada, establishing itself on a large scale in the Dominion, and other American enterprises are prepared to follow that example if need be. This demonstrates the faith of shrewd Americans in Canada and its future, and in the perpetuity of the British Empire. It was faith of a similar kind that conceived and projected the first great Canadian transcontinental railway. It is building the Canadian Northern, and is at the foundation of a still greater and more far-reaching enterprise, so far as the future development of the country is concerned, viz., the Grand Trunk Pacific, the construction of which is now practically assured.

Premier Balfour sums up the situation in a nutshell when he says the British nation finds itself face to face with three great phenomena, viz.: 1st, huge tariff walls against her, and the enormous growth of aggressive trusts behind them; 2nd, the determination of these protected countries to push their export trade with Britain and her colonies; and, 3rd, the desire of the colonies for a closer fiscal union within the Empire, making more secure to their products the great imperial market. Changes in the historic trade policy of Britain may not be wrought suddenly, but the real statesman foresees the signs of the times, and crystallizes a policy that will appeal to the aspirations of the nation and prove enduring in its character by being in right relation to the economic conditions of the times.

Winnipeg Industrial Exhibition promises to be bigger and better than ever this year, Brandon will take no second place, Edmonton promises to be a record-breaker, Calgary is leading forth to newer and better things, and all along the line of shows and exhibitions there is reason for believing that this is to be a bumper year.

### Will China and Japan Buy Wheat?

What is the possibility of opening up a market for Canadian wheat in China and Japan? is a question worthy of some attention by Canadians at the present time. A member of the "Advocate" staff, while travelling recently, enjoyed an interview with a wealthy French merchant who was returning from the exhibition at Oshaka, Japan, where he had been in the interest of his business. After viewing the magnificent wheat fields of Eastern Assiniboia and Manitoba, this intelligent foreigner declared that some day much Canadian produce would find a market across the broad Pacific Ocean. While in Japan it had been his pleasure, he said, to attend a banquet given by the Canadian Minister of Agriculture, at which only Canadian products were served up. Around that table sat a great many Japanese of influence in the country, and they were unanimous in their appreciation of the Canadian butter and wheat bread. These people, he continued, were imitators first, last and always. They were copying the methods and customs of older civilized nations; the better class of them had already begun to use wheat flour, and those in more humble circumstances would soon follow. In China he believed a similar condition of affairs existed, and it would probably not be many years until the people of the Orient would improve their bill-of-fare, which now consists mainly of fish and rice.

J. J. Hill, President of the Great Northern Railway, who has been giving considerable attention to this subject, also believes that a market for wheat can be opened up. So strong are his convictions upon this point that he is now building large steamers for the purpose of carrying wheat from the Pacific Coast to China, Japan and other Oriental countries. He contends that wherever wheat flour has been introduced it has steadily gained in popularity, except among certain tribes of blacks. Mr. Hill claims that the great need of the American farmer to-day is better markets. During the last year, iron, lumber, fuel, and nearly everything else that is required on a prairie farm, has advanced in price, while wheat has not: principally because it is sold in open competition with the products of the world. As a remedy for this, he would create a new market which the American farmer could reach with his wheat at a smaller cost than the wheat-growers of other countries. If the Asiatic rice-eaters could get wheat flour at a fair price, they would buy it, but the trouble at present was there was not steamers to take it to them.

What the great railway magnate of the West has said is full of significance to Canadian farmers. We are just as close to these prospective markets as the wheat-raising farmers of Minnesota and Dakota. We have railway facilities to the Coast, and these are to be increased, which will mean a reduced rate from this side the mountains. If the people of the Orient are going to use more wheat, and there is every indication that they are, they must have a taste of our No. 1 hard. There are enough people over there to take all that can be produced in the western portion of both United States and Canada, even if they only consumed one bushel each per year. Mr. Hill has said that a very large amount could have been marketed there last year if steamers had been available. It surely would have been a great relief to farmers in the Northwest had an occasional train gone westward to relieve the congestion which existed.

It is believed that the C.P.R. at present have the development of the Oriental wheat market under consideration; a line of steamers for this trade are being talked of. At present one of the greatest drawbacks is the heavy haul through the mountains, which, necessarily, makes the freight rates high; but with the completion of the Crow's Nest road to the Coast, and the construction of G. T. R. and C. N. R. through easy passes of the mountains, the way to the seaboard will be easier. Meanwhile it devolves upon the Dominion Government to do all in its power to develop the Oriental market for Canadian wheat, so that when a substantial trade from the Pacific Coast has been established, the farmers of the American Union and the ambitious and far-sighted railway men to the south may not be the only benefactors.

### Opening Massey Hall and Library.

The formal opening of the Massey Hall and Library at the Ontario Agricultural College, Guelph, on Thursday, June 18th, was a notable event in the history of that institution. A large and representative gathering assembled, not simply to pay a personal tribute to the honored name that will ever be associated with this building, but also to publicly express their sense of appreciation, 1st, of the spirit of liberality displayed; 2nd, of the vision of agricultural requirements which this gift to the people implies; and, 3rd, of the lofty ideals that inspired and made possible a structure the imposing character of which is in fitting accord with the noble and far-reaching purposes for which it was conceived by the late Walter E. Massey, who believed, with the executors of the Massey estate, that such a gift would have been in peculiar harmony with the wishes of his father, the late Hart A. Massey. Amid the intense commercialism and rush of the age, it was given to Walter Massey to discern that at a great educational institution the results of scientific investigation and the best literature of present and past should be accessible and permanently available for the training of men to approach and grapple with the serious duties and problems of the world's to-morrow. In this building, the corner stone of which was laid on August 14th, 1901, there is ample storage room in the fireproof compartment—composed of steel, glass and iron—for some 75,000 volumes. On the first floor is a handsome auditorium, or lecture hall, with seats for 325 persons, and furnished with desks and chairs in oak and ash. There are several seminary rooms, a spacious reading-room and extra accommodation for teachers. The walls are of brown stone and dressed red brick. The accompanying photo-engraving gives a good general idea of the external appearance of the building.

Dr. James Mills, President of the College, presided, and called upon Rev. F. W. Weeks to offer the invocation. President Mills' introductory address, in calling upon Mr. Massey to open the building, was one of great clearness and vigor. Notwithstanding the unusually heavy work of the past season, Dr. Mills appeared in good form, and was accorded an enthusiastic reception. "It is a little over 29 years," said he, "since the Ontario Agricultural College was opened, and three or four things in its history are specially noteworthy; and first of all, the political relations of the college. For a number of years—in fact, until a short time ago—it was a football between the two political parties, for the most part defended and upheld by one, suspected and abused by the other; but by keeping out of politics and attending to the work in hand, with the help of a liberal and progressive Minister, the management removed suspicion, overcame opposition, and at length, quite recently, succeeded in uniting all parties to the extent that the farmers of the Province, as a class, now look upon the College as peculiarly their own institution, apply to it for help on various lines, and are willing to have the Legislature give the money required to equip it thoroughly and provide the men necessary to make it a power for good in the country. So the College may now be said to have completely recovered from the measles, chickenpox and other diseases incident to youthful institutions." (Laughter and applause.) Dr. Mills paid a high tribute to the strong and enthusiastic staff by whom he was surrounded, and without whose efforts and co-operation success would have been impossible.

In the second, the fact stood out distinctly that the college has all along been a purely agricultural institution. It has resisted the temptation to increase the number of students, and thereby extend its influence on certain lines, by widening the courses of study so as to compete with arts colleges and schools of engineering and the mechanic arts. In this it has differed from agricultural colleges in the United States, most of which, until quite recently, have been much less practical than our Canadian Agricultural College; and, as a result, a much larger proportion of the students from our college than from any other that can be named have gone and are going to work on the farms of the country. We teach English literature and composition, arithmetic, mensuration, mechanics, bookkeeping, and economics; we teach science in its relations to agriculture, i.e., physics (especially soil physics), chemistry, geology, botany, zoology, entomology, and bacteriology; but always and everywhere, from the beginning to the end of the course, we lay special stress on such practical subjects as agronomy (or soil cultivation and crop growing), live stock raising, horticulture, poultry-raising, and veterinary practice.

The third point of note is the limitation of the number of graduates. Not every one who wishes is allowed to graduate. We give a two years' course, intended for work and life on the



farm. Those who complete this course successfully, receive a diploma admitting them to the status of Associate of the College; and many of them may wish to stay two years longer with a view to obtain the B.S.A. degree from the Provincial University, with which our College is affiliated; but only a small number of them are allowed to do so; that is, only those who take a high standing in both the theoretical and the practical work of the first two years. By this restriction we are trying to prevent young men from turning aside from farming proper, in the hope of getting what they call a "position." Only the few who have proved themselves really strong men are allowed to proceed to the degree in Agriculture.

In the fourth place, the gift of the Massey Hall and Library stands out as a noteworthy event in the history of the college, for two reasons: First, because it represents the first considerable sum of money given by any person or family in the Dominion of Canada unconditionally, to a Government, expressly for the benefit of the Canadian farmers; secondly, because this building, furnished and handed over, all complete, at a cost of about \$45,000, is a very valuable and much needed addition to our equipment for work and progress in every department of the institution. On behalf of the farmers of Ontario, and the students and officers of the College, I tender to the Massey family the strongest possible expression of our gratitude for their thoughtful, public-spirited and splendid generosity. Already their gift has done much good to the College, and the benefits to the students who come here, and indirectly to the farming community, will multiply as the years go by. (Applause.)

Dr. Mills then called upon the architect, Mr. G. M. Miller, of Toronto, who handed the keys of the building completed, furnished and paid for, to Mr. Chester B. Massey, who in turn thanked the architect and all concerned for the manner in which the work had been performed. His gratification at the completion of the building was mingled with sadness, because his brother who conceived it was no longer with them. In the course of a clear and thoughtful address, Mr. Massey pointed out that Canada was primarily an agricultural country, hence the immense importance of such institutions as the Ontario Agricultural College. The more highly these are developed, the

more satisfactory would the system of agriculture become. The one was the complement of the other. He was glad to observe the keen personal interest now taken in agriculture by men of leisure all over America. He was proud to belong to a family of farmers; his grandfather, a native of Vermont, having come as a pioneer to Canada, and his father had been the means of largely introducing labor-saving agricultural machinery. His late brother, also, was personally engaged in farming. In conclusion, he handed over the keys, amid hearty applause, to the Hon. John Dryden, Minister of Agriculture, representing the Ontario Government.

Hon. Mr. Dryden, in accepting the keys, was given a reception the cordiality of which attested the popular esteem in which he is held by the assemblage and friends of the College. He paid an eloquent tribute to the worth of the donor of the building, which would not only be a direct benefit to the College, but a blessing to thousands of students for all time to come. It would have a tendency to uplift agriculture in the minds of those who pursued it, because it meant much of study, and would attract the brightest intellects and tend to develop those conditions in farm life from which were evolved the highest types of character. In conclusion, Mr. Dryden unveiled a beautiful portrait of the late Walter E. Massey, which adorns the wall of the auditorium.

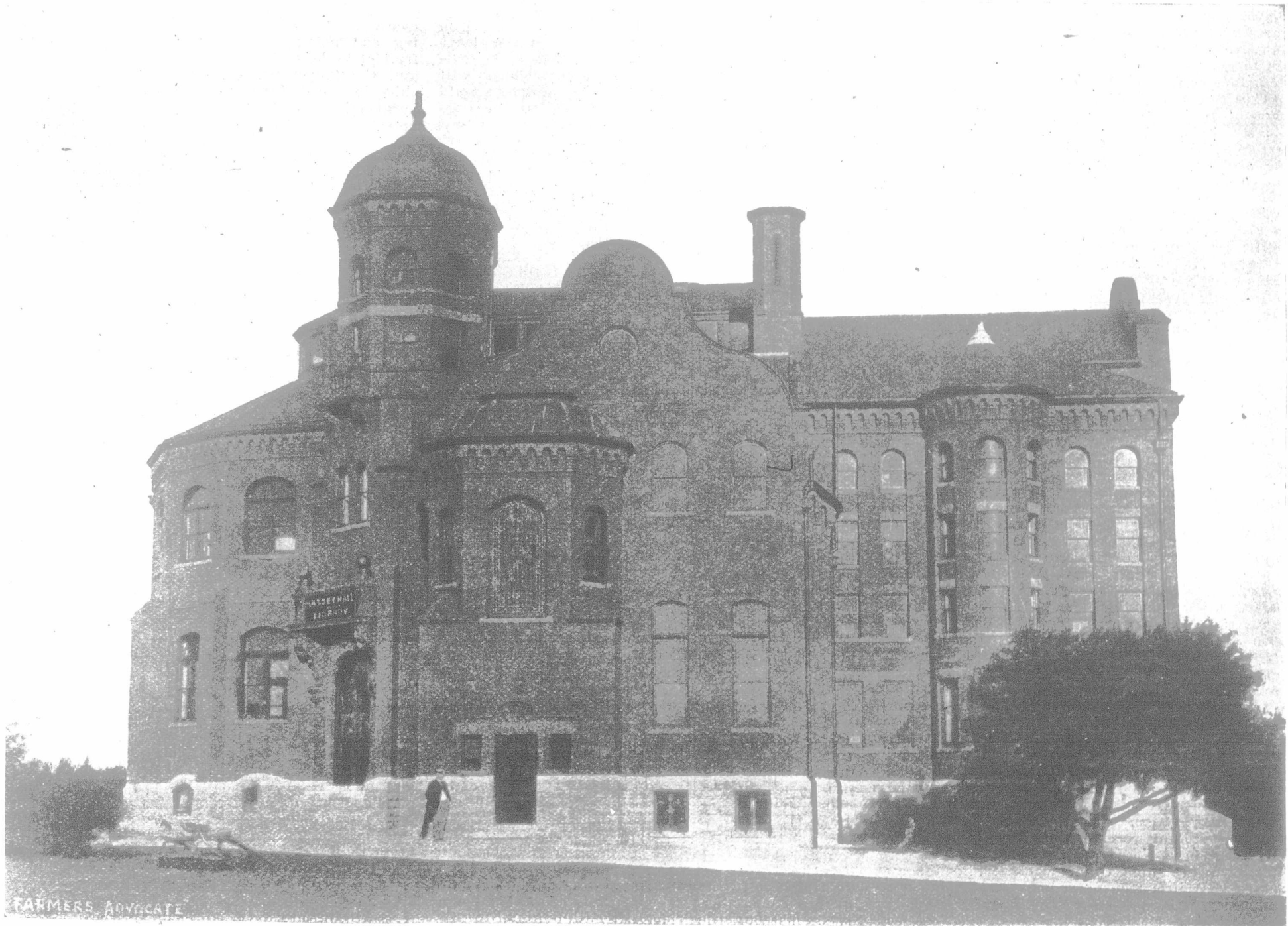
Hon. James Young, of Galt, a former Commissioner of Agriculture in the Ontario Government, suggested that in view of its dignity and importance, the College should be called the University of Agriculture, and said there could be no grander monument to the memory of the late Mr. Massey than this magnificent hall. He attributed the present great agricultural revival and prosperity of farming in Canada, and particularly in Ontario, to agricultural teaching, and said that the country was under a deep debt of gratitude to Hon. John Dryden and Principal Mills for what they had accomplished in that direction. (Applause.) The preferential feature of the Canadian tariff had also contributed to the advantage of Canadian agriculture by promoting the export of our products to Great Britain. As showing the greatness of Ontario agriculture he mentioned the fact that the investment in that industry now amounted to over one thousand million dollars.

Mr. James Innes moved a resolution, acknowledging the valuable services of Dr. Mills as President of the College, which was enthusiastically carried, after which the visitors were entertained to a luncheon by the Principal and Mrs. Mills.

**Long and Short Haul.**

The creation of a Canadian Railway Commission naturally awakens interest in the efforts made in the United States to regulate the railways. The result has not been altogether encouraging.

The decision of the Supreme Court of the United States in the case of the Interstate Commerce Commission vs. the Louisville & Nashville Railroad, is believed to have extinguished the fourth section of the interstate commerce law, popularly known as the long and short haul clause. The case originated in the complaint of a merchant of New Orleans, who asserted that the defendant railroad was charging a higher rate for the hauling of freight to La Grange, Ga., than to Atlanta, Ga., which latter point is said to be 100 miles farther from New Orleans than La Grange. The railroad company admitted the truth of the allegation. The Supreme Court sustains the difference in rate on the ground that Atlanta is a competitive point, while La Grange is not. The court in effect declares that it is not illegal for railroads to charge less for hauling freight to competitive than to non-competitive points situated at a shorter distance. The same principle was supported in two previous decisions of the Supreme Court, but never so squarely as in the New Orleans case. The decision of the court effectually bars all future attempts on the part of the Interstate Commerce Commission to enforce the terms of the long and short haul clause. Shippers must look for relief to Congress. The interstate commerce law has been so gradually curtailed by court decisions that little



**LIBRARY BUILDING AT THE O. A. C.**  
 Donated by the Massey estate. Formally presented to the College on June 18th, 1903.



remains now but the right to collect statistics. It has been suggested that either the law itself should be greatly strengthened or the commission abolished. The former action is that which is demanded by the producing and consuming public.

The Canadian Railway Commission is being clothed with powers far in advance of any commission previously created, and the country expects Parliament to stand at the back of the Minister of Railways, Hon. A. G. Blair, in securing the passage of a bill that will effectually regulate the railways of Canada in the interests of the people.

#### American versus Canadian Milling.

Representative Bede, of Duluth, Minn., states that in course of time, owing to the rapid decline of Minnesota wheat-growing, the great mills of Minneapolis and Duluth will have to shut down, unless under some reciprocal arrangement they can get the wheat of Western Canada to grind. Why not get in on the ground-floor by moving the milling outfits into Manitoba and the Territories, where the world's best wheat is being produced? That would be easier than looking to Canada for reciprocal favors, and is the sensible plan adopted by the great International Harvester Company and other American manufacturers. If our magnificent No. 1 hard goes into U. S. mills it goes out on to the market as "American Flour," and its reputation to Canada is lost and our milling industry is not built up. Furthermore, the offal (shorts and bran) should be kept in Canada for feeding purposes, thus aiding our live-stock industry and sustaining the fertility of our soil.

## HORSES.

### Size in Horses.

The premium put upon size in the horse market has set horse-breeders investigating different methods to produce this desirable feature. The first step toward that end is the securing of mares and stallions of the largest size compatible with good quality. Naturally, large sires and large mares produce large offspring, if other conditions are favorable for growth. Exceptions to this rule may be found where colts inherit a tendency to slow growth, or on account of poor feed do not reach the expected size, but, ordinarily, a colt should be as large as his parents. The problem then arises how to get colts that will develop into horses larger than their ancestors. The history of the improvement of all classes of live stock has answered this question in the two words, by feeding.

The original home and the present domicile of all the heavy draft breeds are remarkable for their rich pastures, which furnish abundant nourishment for the growth of bone and muscle. Size of late years has been increased in these breeds by supplementing the pasture by good growth-inducing grains, which not only encourage the colts to grow fast, but tend to maintain a heavy flow of milk in the dam, thus indirectly promoting growth.

Certain conditions are against the development of size in horses in this country. Our pastures are not naturally as nutritious as those in the low-lying districts of England and Scotland, where our great drafters are bred, and our warm, dry summers invariably dry up the grass just at a time when colts are in most need of considerable succulent, nutritious pasture. To overcome these serious drawbacks, we must provide green crops of clover, corn, etc., supplemented with good oat chop and bran, and should arrange these foods so that the mare and foal will not be affected by the drying up of the early summer pastures. The danger, however, of the mare becoming over-fat on such treatment will need to be guarded against. So much for the feeding; other treatment, of course, must not be neglected. The maximum size of a colt cannot be attained where the mare is worked hard in the field. Draft work is sure to be at the expense of milk production. Neither should the colt be allowed to trudge after the mare all day in the heat and flies, with only such green food as he can find in a stubble field or summer-fallow. He should, however, have sufficient exercise to develop firmness of muscle. The summer and fall is a critical period in a colt's life, when he should receive the very best of feed. While our land does not produce the best pastures, we are able to grow clover, grains and grasses that are unsurpassed for winter foods to produce growth.

We wish to emphasize the importance of feed in the development of size for the reason that people are liable to run off with the idea that it is only to be obtained by breeding to stallions

of unusual weight that have been produced in some secret or mythical way by breeders in foreign countries.

### Examination of Horses as to Soundness

(concluded).

Having finished the examination while standing, we proceed to examine first for stringhalt. Take the horse by the head and back him, step him forward, turn sharply to the right and then to the left, closely watching the hind legs all the time. If he lifts one or both feet suddenly and highly from the ground, with a rapid and apparently involuntary motion, it indicates unsoundness. Then get an assistant to lead him straight away and straight back on a hard road, first at a walk and afterwards at a trot. He must not be held tightly, or with his head up, but allowed to go with a slack lead rein; his head being entirely free from constraint; but in order that the person who is leading him may be safe, he must not allow a sufficient length of rein to give the horse an opportunity of kicking him. Watch him closely, both going from you and coming towards you, and observe if he shows any symptoms of lameness, either before or behind, at any gait. He may go short and groggy in front, and still not be exactly lame, and this is an unsoundness. Some horses are naturally short-gaited, but at the same time go free and show no symptoms of soreness. The examiner must be able to discriminate between a naturally short-gaited animal and one that goes sore or groggy. The examination for lameness is one of the most difficult, and the examiner needs to be very careful. A horse may stand sound and show no alteration of structure, and at the same time go lame. In some cases he will show lameness only after standing a considerable time. If we observe a man, whose horse is being examined, inclined to keep the animal moving as much as possible, we become suspicious. If when we are exercising the horse his actions excite suspicion, even though we cannot exactly say that he is going lame or groggy, it is good practice to put him in a stall and allow him to stand at perfect ease for a few hours and then test him again. If an owner objects to this delay, we are justified in refusing to pass his horse as sound. Where there is reasonable grounds for suspicion, the examiner should not be content until he has satisfied himself whether or not his suspicions are well founded. When a horse shows lameness it is sufficient to condemn him, as he is at the least temporarily unsound. If the lameness is evidently caused by some recent injury which will undoubtedly soon disappear, the examiner should express his opinion to that effect, and the purchaser may then decide whether or not he will buy. If the horse be lame, it is not the duty of the examiner to determine the cause of lameness, especially if it be obscure. The lameness exists, and with the exception of a possible case, such as has been already mentioned, it constitutes unsoundness, and is sufficient to condemn the animal.

Having satisfied himself that the horse is going sound, the examiner will proceed to test his wind. This is a point upon which he must be very careful and particular. In order to do this, the animal must be subjected to severe exercise, and in order to determine whether or not he be sound, the examiner must be familiar with the sounds made by a healthy horse under such conditions. There are several diseases of the respiratory organs which are apparent only under severe exertion, such as roaring, whistling, wheezing, etc., all of which are different forms or conditions of the same trouble, viz., disease of the throat or nostrils, principally the former, and are in the majority of cases due to a wasting away of the muscles of the larynx (the cartilaginous box at the commencement of the windpipe). The abnormal sounds made are due to air rushing through a constricted cavity to reach the lungs. In order to prevent this, unscrupulous dealers will sometimes stuff the false nostrils with batting, and by constricting the external opening prevent the air entering in sufficient quantities to cause a noise. We, therefore, should examine the nostrils, if we are suspicious. Another condition to be carefully looked for is broken wind or heaves. Here, again, unscrupulous dealers ply their art. A heavy horse may be dosed so as to temporarily lessen the symptoms, so that while at rest the horse will not show the decided abdominal motions during expiration, that indicate heaves, but during severe exercise the presence of the disease can be detected. In order to test the wind, a man should be put on the horse's back and sent down the street for quarter of a mile or further, with instructions to gallop the horse back. If we are still suspicious of lameness, it is good practice to have the horse jogged with a slack rein on a hard road. If lame in front, he is more likely to manifest it with weight on his back. Then instruct the rider to gallop him towards you for at least quarter of a mile, and draw him up suddenly when he reaches you. If disease exists he will make some of the noises mentioned,

or heave abnormally at the flank. If he be sound he will make a few rapid breaths and then breathe normally. Now, sir, I have endeavored to treat this important subject as thoroughly and simply as possible, but must again state that in order to satisfactorily examine a horse as to soundness, the examiner must be thoroughly conversant with the appearance and actions of a sound horse. "WHIP."

## STOCK.

### A Summer Jaunt.

(Editorial correspondence.)

An outing in the country in June, when nature has donned her freshest garb, is ever a delightful experience to an office-bound denizen of the city. A recent trip to the Province of Quebec proved a thoroughly enjoyable one. The unusually protracted spring drouth, we regret to note, has seriously damped the natural ardor of the rural habitant of the counties contiguous to the City of Montreal, the grain crops in many instances having failed to materialize, and the pastures having become so bare and brown that the meadows, short and light at best, have been invaded to keep the cattle and other stock from starving. This is the only unsatisfactory feature in an otherwise pleasure-giving picture, and this, happily, applies to no very widely extended area, as when one reaches the far-famed and naturally favored Eastern Townships, where the conditions admit of earlier seeding and the methods of farming are more advanced, the scene changes and the fair promise of an average harvest meets the eye, the pastures and grain crops looking fresh from recent copious rains, which, alas, came too late to raise the hopes of the residents of the less-favored districts, in which farmers appear to be missing the opportunity to better the prospect by sowing on their naked lands such quick-growing emergency crops as corn, millet and rape, which might greatly relieve the situation in the coming months.

Those who have not been privileged to visit the Eastern Townships have little idea of the pleasure they have missed, for perhaps nowhere in all our fair Dominion is found so enjoyably combined the beauty and bounty of nature in contributing to the pleasure, health and happiness of the people; the soil being at once rich and easily workable, and the scenery the most charming, embracing in wealthy profusion wooded hills, fruitful valleys dotted with white farm buildings, and the famed White Mountains of New Hampshire in the distance. Here, close to the pretty rural village of Compton, is Hillhurst, the farm and home of Senator Cochrane, historic ground in the annals of high-class Shorthorn cattle, the first home in America of the noted prizewinning animals, Baron Booth of Lancaster, Rosedale, and Duchess 97th, the "thousand-guinea heifer," and here to-day is found an up-to-date herd of imported and home-bred animals of approved Scotch type, revelling in the rich, rolling pasture fields, and living the year 'round under conditions which have given to the district the appellation of the Aberdeenshire of America. Like the townships, the herd at Hillhurst needs only to be seen to win the admiration of the visitor, and to fully convince him that no herd on this continent is better equipped with sterling sires of highest type, the personality of whose sons and daughters seen in the herd speak in eloquent terms of their prepotency as improvers of the breed. The sadness of it all is the fast-failing health of the aged Senator, who, deprived of his sight, sits in darkness, denied the old-time pleasure of feasting his eyes on the symmetry and substance of his favorite comely Shorthorns, which he has, reluctantly, decided to dispose of in the near future in order to closing up his business interests.

Ingleside, the home of the leading herd of Herefords in Canada, property of Mr. H. D. Smith, lies alongside of Hillhurst, and presents a picturesque appearance with its princely dwelling; its extensive white stables, equipped with modern improvements; and its gently sloping pastures, where the white-faced prizewinners, champions on many a hard-fought field, gather at sunset, around the salt-lick at the crown of the hill, all combining to make up a strikingly pretty picture of ideal rural life.

A few hours were pleasantly and profitably spent at each of the two great rival Ayrshire-breeding farms of Mr. Ogilvie, at Lachine Rapids, and of Mr. Reford, at St. Anne de Bellevue, a few miles west of Montreal; the former under the management of Mr. Robert Hunter, and the latter superintended by his brother-in-law, Mr. Jas. Boden, pastmasters in the art of handling their favorite breed, and critical judges of dairy form and function. On these great farms, side issues with men deeply interested in extensive commercial enterprises, is found the aristocracy of the Ayrshire breed, over 80 head on each, selected mainly from the leading herds in their native Scotland and including Derby winners and champions of the principal shows in the Land of



Heather. For the production of uniformity of high-class dairy character, quality and type, combining beauty and utility, commend us to these canny Scots, whose genius is exemplified in the ideal Ayrshire "coo," carrying her ample and evenly-balanced milk vessel with an apparent consciousness of superiority in the world of dairy cattle.

A night was pleasantly spent with Mr. Wm. H. Gibson, the able manager of Senator Drummond's "Huntleywood" farm, at Beaconsfield, where a grand flock of nearly 400 registered Southdown sheep clip and keep short the grass on the 150 acres of golf links, kept exclusively for sport and sheep of the breeding flock, while in paddocks and pens are found the showyard contingent in preparation for the coming campaign. Included in both lots are many imported prizewinning animals in British show-rings, and most of the grand champion prize flock at the Pan-American Exposition, all breeds competing, a record of which Manager Gibson is pardonably proud. The nucleus of a Shorthorn herd that promises to make a similar record is also found here, headed by the imported bull, Cicely's Pride, a model specimen of the breed, bred by the King, at the Royal farms at Sandringham; his sire, the Duthie-bred Pride of Collynie, and his dam, a Cruickshank Clipper. Ten females, selected from the same noted herd, together with several other imported Scotch-bred cows and heifers, make up a herd of 25 of excellent type and quality, among which are representatives of the Lavender, Broadhooks and Sittyton Secret families, besides a number of others of good sound sorts, Scotch-topped and typical.

Our last call was at "Thistle Ha," the beautiful home of Mr. John Miller, of Brougham, in the fine township of Pickering, where from the comfortable tree-embowered homestead of the veteran pioneer, importer and breeder, is seen spread out before the vision one of the most beautiful rural landscapes in fair Ontario, extending over 20 miles, with the lake visible in the distance, and covering most of the splendid townships of Pickering and Whitby, made famous in history as the homes of noted importers of Shorthorns, and sheep and heavy horses; among which are listed the well-known names Miller, Thompson, Dryden, Davidson, Johnston, Porter, Smith, and others. A night with the sage of "Thistle Ha," now in his 87th year, yet hale and hearty, though somewhat still in his knee-joints, is a genuine treat and a first-class entertainment, as he drops into reminiscences of the long ago, and spices the recital with anecdotes and shrewd specimens of sly Scotch humor, told with the native accent, which he has not sought to relinquish, but has rather cherished for "auld lang syne," and accompanied by numerous digressions, from the thread of his story, to which, though complaining of the lapses of his memory, he returns with remarkable dexterity, considering his weight of years. Born near Hodden Castle, Dumfriesshire, May 17th, 1817, emigrating to Canada in the spring of 1835, seven weeks and a day on the voyage in a sailing vessel, injured to all the hardships and toil incident to clearing a bush farm, which through industry has been made to blossom as the rose, his experience differs from that of thousands of pioneer settlers mainly in his connection with the importation, breeding and showing of prizewinning stock, in which he was long a leading figure, bringing with him sheep and pigs on his first trip across the ocean, and showing stock at Toronto in 1836. The name of Miller has held a higher place for a longer time in Canadian pure-bred stock annals than any other in the history of the country, and is yet represented by the living personality of more than one of the original immigrants of the family, for two of his brothers and a sister survive the ravages of time, and with him exemplify the sturdy, robust Scottish character which has thriven so well on Canadian soil. J. C. S.

**Live Stock at Toronto Fair.**

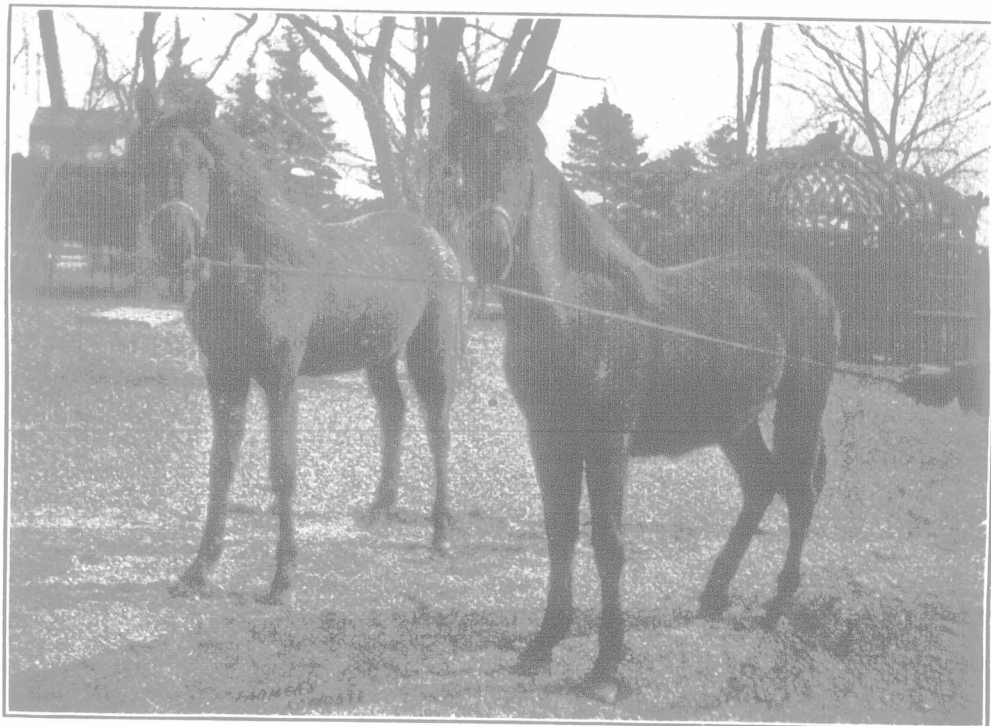
The prizes in the live stock classes at the Dominion Exhibition, to be held in Toronto from August 27th to September 12th, have all been revised and increased. Shorthorn cattle alone have had \$1,000 added to them, thanks in part to the Dominion Shorthorn Association, who increased their annual grant and were generously met by the Industrial Exhibition Association. Other changes have been made in the cattle classes, all of which are detailed in the prize list, which can be had by addressing J. O. Orr, Manager Industrial Exhibition, Toronto, Ont. In the sheep classes, medals will be given for the best ram any age and for the best ewe any age. The American Cotswold Record, American Leicester Breeders' Association, American Shropshire Registry Association, American Oxford Down Record Association and American Southdown Association are all offering cash specials this year. In swine, \$600 has been added to the prizes, \$300 by the Industrial Exhibition Association and \$300 by the Swine Breeders' Association. The horse classes have had \$500 added to them. The rules and regulations have been completely changed, so that this year careful attention to the prize list is advised.

**Stock in South Africa.**

G. M. Odium, a young agricultural expert, went to South Africa two years ago to manage an estate in Rhodesia. Now he is in America on business for the Rhodesian Department of Agriculture, and says to the Chicago Live-Stock World:

"Do you realize the size of South Africa—that it is as far from Cape Town to the newly-established town at Victoria Falls, on the Zambesia, as New York is from Denver? Rhodesia alone has 750,000 miles of land within its borders, and nearly all this land from Table Mountain northward is adapted to cattle, and most of it to sheep; and yet, most of the meat now being used in Africa is imported either in the form of frozen beef or mutton from Australia, or as canned meat from the United States and Australia. The reason is this: First, the plague of rinderpest that ravaged the country, and then this last man-and-animal-destroying war. Every animal left in the country is required for either breeding or transport purposes, and even all the survivors will not begin to be enough to stock the farms with breeding animals, and we must import, if possible.

"I say if possible, for the reason that we are not as yet sure that we can safely import large quantities of animals and have them live. The greater portion of South Africa is as badly infected with Texas fever as is our own South, and it would be folly to import European animals into any but a few non-infected localities. The only place left for us to secure animals, it would seem,



**ETHEL AND FANNY.**

THE PROPERTY OF EX-WARDEN WILSON, OF PUGWASH, N. S.  
(See Gossip, page 619.)

would be from the Texas-fever regions of North and South America and Australia. But now we seem to be suffering from either a very virulent form of the fever or from some akin malarial disease, and the question arises as to whether animals from even the worst Texas-fever districts would show any degree of immunity.

"If some of the southern ranchmen could guarantee 90 per cent. of their animals to live for six months after landing they would have no trouble in securing sale for a hundred thousand good breeding animals, of both the beef and dairy types. In fact, I am inclined to think that we should be willing to allow even a greater loss and still be very well satisfied.

"Good sale could be found for large quantities of sheep. South Africa has not as yet begun to show up as it will in the sheep line. Cape Colony wool grades very low, but this is no fault of the climate, but rather the result of careless and shiftless methods of breeding. Most of the farmers do not select their rams with any, or at best little, care. If the ram can beget offspring, that is about all that most of them have required of him. With the general awakening now taking place in South Africa, and the immigration of new settlers from Europe, the mutton and wool business is sure to brace up, and the importation of fresh blood be demanded."

Elsewhere in this issue appear announcements of really beautiful and useful premiums which may be obtained by sending new subscribers to the "Farmer's Advocate."

**Our Scottish Letter.**

June is the great month for agricultural shows outside the purely dairying districts. There the shows must be held in spring, in order that the animals may be seen to the best advantage. Since last writing there has been a perfect plethora of shows, and at all of them quite excellent displays of stock have been seen. Some interesting exhibits were in evidence. At Paisley a Clydesdale mare was on exhibition, 21 years of age, and looking very fit. Messrs. A. & J. Wilson, Boghall, Houston, showed a truly grand specimen of the Ayrshire cow. She is one of the best seen this season, and possibly lost nothing through being shown in nice thriving condition, and in nowise overfed. Mr. Wm. Rodger, of Crook, Mearns, showed a three-year-old quey which ran the Boghall cow stiff enough for premier honors. Some of the best Ayrshire herds in Scotland are to be found in Renfrewshire. Boghall is one of the best. It has a long history, and honorable at that. Clydesdales at Renfrewshire shows are very much in the hands of men so well known as Mr. Taylor, Park Mains, Renfrew; Mr. W. S. Park, Hatton, Bishopston; Mr. Wm. Clark, Netherlee, Cathcart; and Mr. David Ridden, Blackhall, Paisley. Mr. Taylor had the female championship this year, with a Sir Everard mare of his own breeding, and Mr. Wm. Clark had the male championship, with Baron's Best, one of the numerous successful progeny of Baron's Pride. This week we have had a magnificent general show at Stirling, and another, at which light horses were an outstanding feature, at Edinburgh. One of the best Shorthorn herds in Scotland, that of Captain Graham Stirling, of Strowan, was represented at Stirling. This herd contains many fine, big, well-bred cows, showing

true breed character and good milkers. The red, white and roan was also well represented at Edinburgh, where an exceptionally good show was held on Wednesday last. Mr. George Harrison, Gainford Hall, Darlington, showed his superb cow Flora VI., which last year was unbeaten. Unluckily, she has lost her calf, which came a few weeks before its time; consequently, she is debarred from competing at the Royal. Mr. Robert Taylor, Pittlivo, Dundee, was also a successful exhibitor. He has been shipping heavily to the Argentine, undeterred by the foot-and-mouth scare. One of the best collections of Scots

stock is to be seen at Mr. J. Ernest Kerr's farm, of Harviestoun, Dollar. Mr. Kerr is building up a fine herd of Aberdeen-Angus cattle, which he showed successfully at both Edinburgh and Stirling. He has also a splendid stud of Clydesdales, and one of his mares, Lady Garnet, won the championship at Edinburgh. His Hackneys are rapidly coming to the front, and will be further heard of. Another breeder of Shorthorns and Border Leicester sheep is Mr. David Hume, Parrelwell, Brechin. He won the championship with the latter at Edinburgh, and has frequently topped the Highland. We are now looking forward to the first show of the Royal in its new quarters at Park Royal, near London. Next letter will give some particulars about the show-ground, and the horses and cattle.

I don't suppose you are much troubled with game in Canada; that is to say, you don't have to feed game which you can't shoot, and either eat or sell. Here things are different. In 1880 Sir William Vernon Harcourt won for himself the sobriquet of "Hares and Rabbits Bill," by getting an act passed which gave the unfortunate farmer who fed ground game a concurrent right with his landlord to snare and shoot them. The act was a tardy measure of justice to a long-suffering race, but its passing into law did not end all the farmers' difficulties. Recently a new difficulty has cropped up. A farmer was baffled in his efforts to keep down rabbits by finding his snares avoided by the rodents. The landlord's gamekeeper was operating at the same time as the farmer's trapper, and the landlord supposed that he was engaged in the same work as the farmer—snaring and killing the prolific vermin.



Unfortunately, he was mistaken. His keeper, instead of snaring, was found to be engaged in pouring paraffin in front of the farmer's snares, thereby preventing the rabbits going by their accustomed runs, and so enabling them to avoid the snares. It was a mean trick, apparently due to some ill-feeling between the gamekeeper and the farmer. Such feuds are by no means uncommon. The gamekeeper has it in his power to be an unusually disagreeable person. He can thwart the farmer in many ways, and once he conceives an illwill to the agricultural tenant he can make his life a burden by endless petty annoyances. In the case before us, the Court of Session has intervened, and ordained the gamekeeper to desist from his tricks. Curiously enough, nothing was said to the landlord, who was surely responsible for the action of his servants. Game, in the shape of big deer, are supplanting sheep on many square miles of our Scottish highlands.

Big shipments of Clydesdales have been or will shortly be made to Canada. Messrs. Smith & Richardson, Columbus, Ont., are sailing this week with a good selection of horses and fillies, purchased from Mr. Peter Crawford, Dargavel, Dumfries, and Messrs. A. & W. Montgomery. Mr. Richardson has been here for several weeks selecting stock, and has got something away which pleases him. His horses are big and well-bred, and his mares belong to the sort which are likely to breed well. Mr. Hoffman, from the Northwest, goes by the same ship with what must be regarded as quite a fine selection of sixteen fillies, purchased from Messrs. Montgomery. These are got by some of the best breeding horses in Scotland, and for size, quality and breeding they will not have been surpassed by any selection of mares exported for some time past. Shipments such as these must do much to extend the breeding of Clydesdales in Canada. A week hence Mr. Robert Ness, Howick, Quebec, sails by the Allan line, taking a combined shipment of Clydesdales, Shires, and Percherons. Clydesdales have also been shipped recently to Buenos Ayres and Germany. For a small country, this piece of soil called Scotland contrives to keep itself well in evidence.

Butter and buttermaking attracts quite a lot of attention here now. We have always had families famed for their skill in manipulating cream and producing high-class butter, and no butter in the world can surpass the product of the dairies in such districts as are within a radius of 10 or 15 miles around Glasgow. Unhappily, the quantity produced is, so far as the great market is concerned, practically a negligible quantity. It does not affect values. The particular brand referred to sells at the highest price of all, but it is never quoted, as it does not pass through the public market, but is either sold by the farmer direct to the consumer, or through the medium of the retail provision dealer. The question at present publicly agitated is the standard of quality in butter. A committee is at present sitting whose duty it is to settle this question. I believe the members are not finding the settlement so simple as it looks. Some very good-looking butter is found to be of very indifferent quality when subjected to the Reichert test. How the matter will end doth not yet appear, but in any case a deal of useful information is being collected, which may form the starting point for further advances.

"SCOTLAND YET."

### Contagious Abortion in Cattle.

The Department of Agriculture for Ireland has of late given considerable attention and study to the question of abortion in cattle, and while they found that surgical and medicinal measures would in some cases prevent the occurrence of abortion, they recommend preventive measures as the most practical for farmers under general conditions. The disease is clearly caused by a germ, and treatment is directed to the destruction or prevention of the propagation of those germs. Since germs of all kinds thrive best in filth, darkness and foul air, it is evident that to get rid of them one must provide well-lighted stables with good floors that can be easily cleaned. Frequent whitewashing of the walls is recommended, and periodical disinfecting of floors by spraying with copper sulphate, twenty-one pounds to ten gallons of water. Where the disease is already established, the affected cows should be isolated; the "slipped" calves should be burned or buried deeply; the discharges should be disinfected with copper sulphate; and the cows should be disinfected by injecting some preparation provided by a competent veterinarian; the sheath of the bull should also receive an injection after serving a suspected cow.

Cows that continually come in season may be made to hold by the following treatment: Pass the nozzle of a rubber syringe right into the ring of the calf-bed, which is a small round opening found about eight or ten inches inside the vulva. One hand should first be oiled and passed in with the nozzle, the other being kept free to work the syringe. About a pint of a solution of Jeyes'

Fluid, a patented preparation, is used each time. (Other disinfecting fluids may be used in place of Jeyes'.) This should be repeated every day for a week, after that once a week for a month; after this the cow can be left alone until two weeks before going to the bull, when she may have one last injection.

### Separated Milk as Food for Calves.

It is questionable if anybody doubts the superiority of new milk as the premier food for calves. A good article has, however, a limit to its value, and where separated milk is plentiful, and new milk scarce, the former, with all its faults, may be the cheaper of the two. All who understand calf rearing and feeding, and know the difference between ordinary skim milk and separated milk, realize the impossibility of equal results from the two classes of milk when used in the same manner. To do so is to expect the impossible. Provided both are of the same degree of freshness, separated milk is quite a good food; but old-fashioned skim milk is better. From the food point of view, separated milk and skim milk only differ in one respect, viz., that the former contains from 1-10 to 1-4 of 1 per cent. of butter-fat, while the latter usually contains at least 1 per cent., and often more. Ordinary skim milk is, therefore, from four to ten times richer in fat than separated milk, or, in other words, skim milk contains from  $\frac{1}{2}$  lb. to 1 lb. of butter-fat more than separated milk in every 100 lbs. Presuming new milk to contain 3 $\frac{1}{2}$  per cent. of fat, skim milk to have 1 to 1 $\frac{1}{2}$  per cent., and separated milk  $\frac{1}{2}$  per cent., this will be equal to 56 ozs. in the first, 16 to 20 ozs. in the second, and 4 ozs. in the third, of pure fat per 100 lbs. of milk. For our purpose, 100 lbs. of milk may be looked on as ten gallons, so that one-tenth of the above figures represents the amount of fat in ounces in each gallon of milk. If a calf gets 1 $\frac{1}{2}$  gallons of milk per day, it would receive about 3 ozs. of fat in ordinary skim milk, and only a little over  $\frac{1}{2}$  oz. in separated milk. This addition, daily, of from 2 to 2 $\frac{1}{2}$  ozs. of such a nutritive and easily-digested food as pure butter-fat is a valuable gain to the food, and is sufficient to account for a very great increase in the live weight of any animal to which it is given. Anyone can, therefore, easily see that separated milk is unsuited for feeding alone to calves. It, however, contains much the same casein, albumen and milk sugar as whole milk or old-fashioned skim milk, which are of equally as great importance from the food point of view as the fat, so that the fat is really the only point in which the two kinds of milk differ. The whole question of the profitable use of separated milk as a food for calves depends on whether or not the abstracted fat can be replaced by some other substance.

When new milk is given to calves the first four or six weeks of their existence, there is no great difficulty in supplying the calf with supplemental food to make good the deficiency of the skim milk. The calf is then at an age which permits its using other foods to a greater or less extent, so that the deficiency of the skim milk is not noticed to the same extent as is the case when separated milk is used. Owing to the ready market at the creameries for new milk, there is also now a greater tendency than formerly to restrict the quantity and shorten the period during which new milk is given. This tendency is found to apply to every district where milk can be easily sold. For an immediate prospect of a return in cash for the milk sold to the creameries or elsewhere, compared with the more distant one when the calf is sold as a yearling or heifer, the food of the calf is often restricted in a degree greater than experience warrants as profitable. This further intensifies the stunting process in the growth of the calf, and it is not to be wondered at that dealers and feeders have become alarmed and have put all the blame on separated milk. There is, however, no occasion for alarm, but considerable necessity for further inquiry, in order to find out how far and with what advantage supplemental foods can be added to separated milk when fed to calves.

In converting new milk into separated milk, it has already been shown that nothing is added to it, and pure fat alone is drawn from it. The great question, therefore, for the calf feeder is, can this valuable butter-fat be replaced by any cheaper fat and yet give satisfactory results. It is very unlikely that any fat will ever give better results in calf feeding than the original fat of milk. A good article may, however, at times be bought too dear, and at the present price of butter the use of the fat of milk for feeding calves seems a very costly food. There are also good grounds for believing that much better financial results might in many cases be obtained if the butter-fat were sold for human consumption, and some cheaper, and yet easily-digested, fat purchased for the use of the calves. The experience of the last three or four years has proved without doubt that good results can be obtained by adding about two ounces of cod-liver oil to the daily supply of separated milk. The addition of this quantity of oil brings the separated milk up to about the same percentage of fat as good skim milk. Those who

have been most successful with this food recommend the use of new milk for about a month, after which the new milk may gradually be withdrawn, and a fully greater quantity of separated milk substituted, to the daily supply of which two ounces of cod-liver oil has been added. A few rearers have successfully used fully more than this quantity of oil without producing any purgative effects, but while some calves can easily digest more, others cannot, and this seems a safe limit. Instead of increasing the quantity of oil, it is found better to encourage the calves to eat a little of the best procurable linseed cake, or to add to the milk a little jelly made from ground linseed and boiling water. During their second month calves will eat about half a pound of linsed cake per day, or somewhat less of linseed meal, in addition to their supply of separated milk and cod-liver oil. As the calf gets older the linseed cake may be gradually increased, or it may have other substances added to it, such as well-boiled oatmeal. A small quantity of fresh well-made hay or young grass should be given early to each calf, as they begin to chew hay earlier than many people suppose. Some rearers have had good results from the addition of other substances besides cod-liver oil, linseed cake and oatmeal to separated milk, and it is not improbable that the best food or mixture of foods may not yet be discovered.

The first occasion on which public attention was drawn to the value of cod-liver oil for calf feeding was when, in 1896, Mr. Campbell, Farm Manager to Sir Robert Jardine, Bart., of Castlemilk, Dumfriesshire, fed sixteen calves, in four lots of four each, on various foods. One lot was given new milk for three months, and separated milk for one month later. A second lot were given the same quantity of separated milk, to which two ounces of cod-liver oil was added. In addition to these foods, both lots had one-half pound of linseed cake for each calf, daily, for the second month, one pound during the third month, and one and one-half pounds during the fourth month. Both lots were weaned at the end of the fourth month, when there was little difference between either in appearance, after which they were fed and housed alike. In January, 1897—that is, when about nine months old—those which had been fed on fresh milk weighed 15 $\frac{1}{2}$  cwt., live weight of four, while those fed on separated milk and cod-liver oil weighed 16 $\frac{1}{2}$  cwt., live weight of four. A year later both lots were sold in Lockerbie auction mart, the following being the gross weight and prices realized for each lot:

Those fed on whole milk weighed 35 cwt., gross, and realized \$275 for the lot.

Those fed on separated milk and oil weighed 36 cwt., gross, and realized \$297.50 for the lot.

The milk supplied to those fed on new milk was valued at \$60, or \$15 per calf; while the separated milk and cod-liver oil given to the other lot was valued at \$30, or \$7.50 per calf. These are facts which speak for themselves, and which any rearer may repeat and verify at little or no expense to himself.

Where separated milk is brought from a creamery once daily every precaution ought to be observed to keep the milk sweet and free from taints of any kind. To carry this out satisfactorily the separated milk should be first heated, then rapidly cooled, before being returned to the farmers. The process of heating, or pasteurizing, as it is called, may be carried out in a special apparatus made for the purpose, or by one of the many simple and inexpensive arrangements capable of attaining this end which will occur to most people. It is usually possible to do so at no cost for fuel by utilizing the exhaust steam of the engine driving the separator, etc. When milk is heated to about 150° F. it acquires a boiled flavor, which is very disagreeable to many people, and the digestibility of the albumenoids is believed to be also considerably lowered. The lactic acid germ, or active souring agent in milk, is, however, found to be very greatly weakened, if not even killed, by exposure to a temperature of 140° F. for from ten minutes to twenty minutes. Experiments at Wisconsin, in 1898, proved that 98 per cent., if not more, of the bacteria which produce lactic acid were killed by subjecting milk to 140° F. for twenty minutes. Other test at the same station also showed that milk heated for fifteen minutes at 140° F. was as fresh, on the average of a large number of tests, at forty-four hours as another portion of the same milk unheated, but kept under identical conditions, was at twenty-one hours. Where, therefore, the milk is to be used for calf-rearing, pasteurization should always be performed, and in order to get the full advantage of the process, it should be followed by rapid cooling down to 50° F. or under. In the most of cases, separated milk will always be brought back to the farm in the same vessels that carried the new milk away, and unless great care is taken at every point such vessels run considerable risk of contaminating the new milk. The process of pasteurizing, and then cooling, not only reduces this risk to a minimum, but it enables the milk of a day old to be fed to the calves, with little or no risk of souring and consequent liability of indigestion. To do so necessitates considerable care, both at the creamery and farm, otherwise good results will seldom be obtained. In the rearing of calves, even on the best of food, cleanliness must be observed everywhere, not only in the dishes from which the calves are fed, but particularly in the calf house, which must be clean, dry and well ventilated. Unless the latter be attended to, good results will rarely be obtained from any class of food.—[Irish Bulletin.



**Some Notes on Breeding.**

Systematic breeding to improve farm animals has been in progress for several generations. When we see breeds improved nowadays we do not always recognize how much more simple the matter is to undertake now than it was a century ago. The breed-maker of those days had little or no recorded experience before him; his own intuitive powers had to guide his selection. In improving or, as has so often been the case, in making a breed (for few breeds have not been made by crossing), those who lead the way have to look far into the future, and set up, in mind, a standard. By means of the records of those who have gone before, and who without text-book training or so-called science built up for us the science of breeding, we have had many features and problems solved. These results, obtained for the main part by old-time farmers possessing the genius of breed making, give us the greatest asset in farming to-day; the leading breeds of live stock in the world.

If we look at our breeds we see that the main features are very similar, although the breed characteristics, of course, differ. For instance, breeds of cattle best suited to beef making have the essential features of heart girth, good top and bottom line, long, deep and full hind quarters, deep and full chest, tail well set and not too coarse, etc. There is one point, and a highly important one, where we fall short, and that is in the want of a recognized standard of features for a bull suited to transmit good milking as well as good beef properties. Even here we think that the knowledge on the point is greater than many who are looking out for such a rare animal might be led to suppose. The knowledge exists, but many have not the courage to put it into practice, because they probably would not find it profitable.

The features of a milk-getting bull are widely different from those of a beef beast. If we look at the Jerseys, Guernseys, Ayrshires, Kerries, or other milking breeds which have little aptitude for beef production, the bulls appear very mean in comparison with the bulls of the beef producers. If the bulls of the milking breeds were judged on beef points they would make a very poor show. There are any number of men who have a good knowledge of the points of the milking breeds, who are also good all-round judges of the other breeds, and these men know well enough when they look at a Shorthorn, Hereford, Polled-Angus or other great beef breeds that the milking features are submerged by the development of the beef points. What would be the position of a breeder of Shorthorns who developed a strain showing to the full the features which are apparent in the milking breeds? If he competed at any show, not excluding dairy classes, not a judge would have the courage to notice his exhibit; the award would inevitably go to the animals possessing the massive, well-squared features of the beef beast, otherwise there would be pretty severe criticism. If the breeder produced a bull which would get milk preferentially to beef he would find very few to buy, because lacking the features of the beef beast it would be regarded as badly bred.—[Farmers' Gazette.

**A Cattle Feeding Experiment.**

Prof. Mumford, of the Illinois Experiment Station, has just completed an experiment in feeding cattle. Last October he purchased on the Chicago market six lots of steers, of sixteen head to the lot. The different lots were classified according to their suitability as feeders, and the price ranged from \$4.75 to \$3.35 per cwt.; the selling price for finished steers of similar classification ranging from \$7.25 to \$4.75 per cwt. The difference in each class was as follows:

Lot 1, of fancy selected feeders, were bought in the open market at \$4.75 in October, when finished cattle of the same class were selling at \$7.25 on the Chicago market, there being an apparent margin of \$2.50 per hundredweight. Lot 2 cost \$4.55, and finished cattle of the same class were at that date selling at \$7.15, a margin of \$2.60. Lot 3, good feeders, cost \$4.20, a margin of \$1.55 per hundredweight under the price of similar finished cattle on the date of purchase. Lot 4, medium feeders, cost \$3.85, similar cattle finished selling in Chicago at the date of purchase at \$5.25. Lot 5, common feeders, were bought at \$3.60, when similar finished cattle were selling at \$4.75. Lot 6, inferior feeders, cost \$3.35, when similar finished cattle were selling at \$4.75. When sold this spring, however, the price was not nearly equal to that of similar cattle at time of buying, Lots 1 and 2 selling at \$5.40; Lot 3 at \$5.15; Lot 4 at \$4.90; and Lots 5 and 6 at \$4.80.

The steers of the best grades were all of high-grade Shorthorn or Hereford breeding. The experiment extended over six months, and in that time only two of the steers were off feed. The

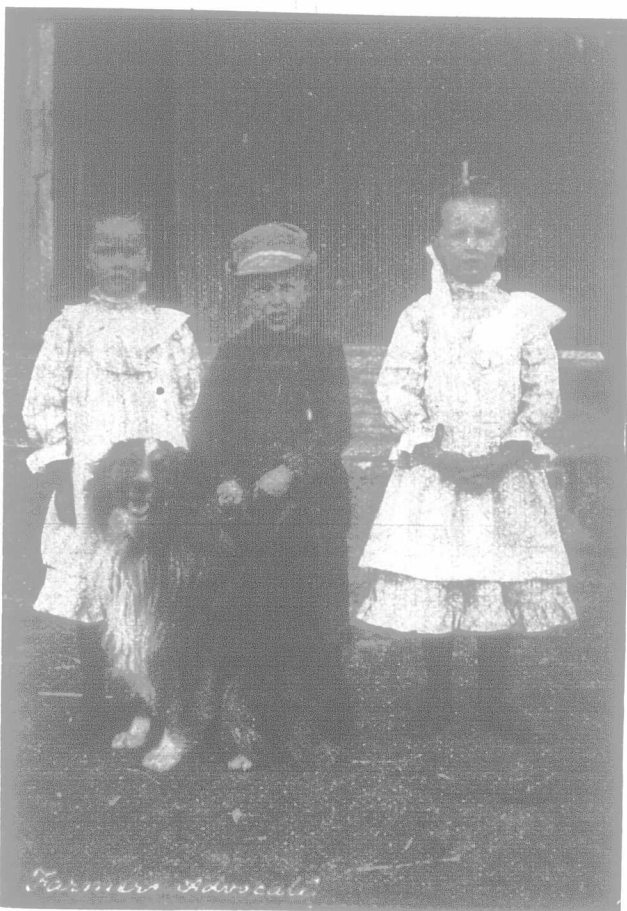
rations consisted of corn and cob meal and roughage. Under this system only 11.14 pounds of dry matter were required to make a pound of gain, and the average daily gain per steer was 2.57 pounds.

Lot 1 made 460.1 pounds in six months; Lot 2, 455.25 pounds; Lot 3, 419.1 pounds; Lot 4, 381 pounds; Lot 5, 395.1 pounds; Lot 6, 348 pounds.

The object of the experiment was to solve the problem of buying high or low priced steers for winter feeding. Commenting upon this phase of the experiment, Prof. Mumford says:

"As a general principle the lower the price of fat cattle in the markets of the country, the less difference there is between the market value of the best grade of fat cattle, namely, prize steers, and the lowest grade, common rough steers. This suggests that the feeder should be cautious, during such periods of low prices, about paying a premium for high-grade steers of the beef breeds possessing correct conformation. On the other hand, when prime steers are selling high in the market, there is a wide difference in price between their market value and that of the cheaper grades. Under such conditions the feeder can afford to pay a premium for well-bred steers of the choice and fancy selected grades."

Elsewhere in this issue appear announcements of really beautiful and useful premiums which may be obtained by sending new subscribers to the "Farmers' Advocate."



BERTHA, GEORGE AND JENNIE MUTCH. Children of Mr. Alex. Mutch, Craigie Mains, Lumsden, Assn., with their favorite dog.

**The Hired Man.**

Who is the chap by men most sought,  
Whose services cannot be bought,  
Who answers short and fears us not?  
The hired man.

We hunt for him both day and night,  
To capture him use all our might,  
And give him wages—out of sight,  
The hired man.

Who ne'er from work will let us roam,  
Whose head out-tops St. Peter's dome,  
Who is the boss around our home?  
The hired man.

Who climbs upon a lofty perch,  
And says he'll leave us in the lurch,  
While we saw wood, who goes to church?  
The hired man.

Who has a shiny, stiff-front shirt,  
And hands that show no signs of dirt,  
And wears a look serenely pert?  
The hired man.

To him the profits of our toil are given,  
He gets ten shares while we get seven,  
Who will, we fear, be first in heaven,  
The hired man.

—[J. S. Brundige, in Toronto Moon.

**FARM.**

**Rape Culture.**

In Bulletin No. 42, on the rape plant, Mr. J. H. Grisdale, Agriculturist of the Central Experimental Farm, mentions that rape may be sown as late as the end of August, and depending upon conditions, may be fit for pasture in five or six weeks.

Rape may be sown broadcast or in rows. Where intended to be used for soiling, a thin broadcast seeding may be expected to give satisfaction. The quantity of seed required per acre when sown broadcast is about four pounds. A larger quantity of seed may be used when it is intended to cut as soon after seeding as possible; a lesser quantity where it is intended to permit the plants to attain their full growth. The leaves and small stems are the most nutritious and palatable parts of the plant, hence the above conditions of seeding.

When cutting for soiling, care should be taken to cut not lower than four or four and a half inches from the ground. By observing this precaution, a second, and even a third, crop may be expected from the same area without any further seeding.

Where sown in rows, less than four pounds per acre may be used. The quantity is, of course, affected by the space between the rows. Anywhere from 20 to 30 inch spaces give more or less satisfaction, but 22 inch spaces are probably the most profitable. Less space than 22 inches makes horse cultivation inconvenient; greater space means a slight decrease in the yield per acre. In dry soils or droughty areas, level culture should be practiced; in badly drained fields or rainy districts, it is advisable to sow on ridges.

The method of seeding in rows is, generally speaking, much to be preferred over the broadcast. The principal reasons for such preference are: (1) greater proportion of leaf to stem; (2) more rapid and vigorous growth; (3) less waste when pastured, as animals naturally walk between rows, and do not, therefore, trample so many leaves or plants as when sown broadcast; and (4) permits of cultivation, which insures conservation of moisture in dry seasons and destruction of weeds in wet times.

Sheep on Rape.—Breeding ewes do well on it in summer, and it constitutes a capital feed for "flushing" or putting them into good condition for breeding in the fall. Lambs thrive upon it, but in their case it is possibly even more imperative than with older sheep or cattle to provide some other pasture (preferably other than clover) in addition to the rape.

Pasture for Pigs.—It makes a very good pasture for brood sows. A little corn or barley fed in conjunction helps to balance the ration.

For fattening and growing pigs it cannot be surpassed. They sometimes need to be trained to eat it, but once taught, they consume it most freely. An acre sown on good land and handled carefully may be expected to carry from 25 to 40 pigs from June 15th to October. The exact number an acre will carry depends upon the season, the soil, and the method of handling. To get the best results, the field should be divided into three or four equal parts, and the pigs changed over to a fresh part each week or ten days.

Soiling Pigs.—Of course, greater returns in pounds of pork produced may be secured by cutting the rape and feeding it to pigs in pens, but more labor is required and so, in a measure at least, the advantage is lost.

Young Cattle and Steers.—Calves relish a small amount of rape at a very early age, and do well on it when fed judiciously. Young cattle thrive on it when it is fed in connection with natural grass pasture. Steers intended for stall feeding or late fall marketing cannot be better cared for than to be allowed the run of a good field of rape.

Dairy Cows.—Dairy cows respond well to a rape ration, but judgment must be exercised in feeding, or evil odors may find their way into the milk pail.

In feeding rape to cattle and sheep, care should be taken to prevent bloating. They should never be allowed to enter a rape field when very hungry, more especially should this precaution be observed if the rape is wet from dew, rain, or frost. Once accustomed to the feed, however, and having access to it at all times, little danger may be anticipated. Pigs are not affected in this way.

In chemical composition and feeding value, rape resembles clover. It is even richer than clover in flesh-forming constituents, and is exceedingly succulent. Analyses show its water-content to run from about 89 to about 94 per cent. The nutritive ratio, or proportion of digestible protein (flesh-forming constituents) to digestible carbohydrates and fats (heat-producing constituents), is about 1 to 3.37. Such a large proportion of



digestible protein accounts for the great feeding value of the plant. Then, since average growing animals require a ration of a nutritive ratio of about 1 to 5.5, it is easily seen why most animals require some other food not so rich in protein along with rape. Timothy or a mixed grass pasture would be suitable for this purpose.

Steers have been pastured at the Experimental Farm on rape and good results secured. A bunch of 22 steers made an average of 50 lbs. gain, live weight, in three weeks, on an area of two acres. About thirty sheep had been allowed to pasture on part of this same area for ten weeks. The sheep had had at the same time access to a limited area of natural grass pasture.

On the Experimental Farm, in one instance, six pigs were pastured from August 14th till snow in 1900 on three-sixteenths of an acre of rape.

To produce 100 pounds of pork, only 269 pounds of meal was required in addition to the rape. The average amount of meal required for 100 pounds of pork is 425 pounds. The use of rape, therefore, saved 156 pounds of meal on each 100 pounds of pork produced, or about 1,210 pounds of meal saved by three-sixteenths of an acre of rape. All pig weights mentioned are live weight. Many other lots have been fed similarly with similar results. In 1902, 60 pigs were fed on an acre and a half. In addition to the rape pasture, about 500 pounds of meal was required for each pig from weaning time to an average of 185 pounds live weight in October or November.

### Harvest Notes.

It is harvest-time again, a culminating point in the year's operations. Although a busy period in which every effort is exerted to house the crop, it does not now, as a few years ago, stand out so prominently as the most strenuous period of the year. The adoption of a method of mixed farming has resulted in spreading the work of the farm over the whole of the summer and a good part of the winter. The rush of work at harvest time, however, is sufficiently strong to necessitate a little extra effort. With our present method more depends upon management than mere hard work. The binder should be in repair, the barn prepared, the wagon-rack made ready, and anything that would save time when the grain is ripe should not be neglected.

Harvesting is, perhaps, the best carried out of any of our farm operations. The object to be accomplished is so obvious that the best means of attaining the end are soon discovered. No matter how widely methods of cultivation and rotation may vary on adjoining farms, at harvest-time every effort is directed along the same line and toward the same end.

At present more effort is being given to the problem of growing larger crops, of making larger yields, than to the matter of harvesting. Careful study and experiments are being used to throw light upon these questions, while the question of expeditiously harvesting the crop remains a problem to be solved in the realm of practical farm operations. About the only advancement likely to be made in the future in our methods of handling crops will be along the line of increased size in machines for cutting and improved machinery for threshing and chaffing at the one operation. When thoughtfully considered there appears to be no very good reason why binders should not be seven feet wide rather than five, as every increase in width of cutting-bar means a gain of time. Machines should be built to cut to the full capacity of the tying apparatus. In many cases, where the straw grows particularly heavy, this is already the case, but in many others the machine runs partly idle more than half the time. Headers will never be popular in Eastern Canada on account of the value of straw for feeding and manurial purposes. A clever inventor in the West is reported as having devised a shocking attachment for binders, but the apparatus is not being introduced, and shocking is likely to remain the heavy part of the harvest for some time. Harvest, however, with all its strenuousness, is a welcome season. The work, if hard, is agreeable, and we are never sorry to have an abundant crop to handle.

### Let us Spray!

Let us spray! If we don't, some of our fields will be yellow before the harvest.

If farmers would say this to their neighbors about once a week, there is no estimating the good that would follow such forceful preaching. The ease with which mustard can be destroyed by spraying only reflects discredit upon those who from year to year make no effort to eradicate this weed.

This is the time to see that the mowers are in good order, the screws all sound, and the bolts tight. See that you have a few spare sections and rivets on hand.

### Rural Delivery of Mail.

To the Editor "Farmer's Advocate":

Dear Sir,—As you were advocating rural free delivery of mail matter, I take the liberty of sending a sketch of the working of it in the place where at present I have pitched my moving tent. As a Canadian, there is nothing I would like better to see inaugurated than rural free delivery. It is one of the greatest conveniences that the rural population enjoy—neither more nor less than a travelling post office, stamps, letters registered, money orders obtained all in less than ten minutes' time, and at the farm gate. The system is well summarized in an article written by W. C. R. Hazard, the following extract from which I hope will be of interest to your readers:

"When the idea of a system of free delivery of mails in the rural districts was first suggested in this country it was regarded as preposterous. Even the people who would benefit most by such a system were slow to see how feasible and possible it could become, but now it is safe to say that the free delivery system has done more than any one other thing to draw the world together through the daily news service, for the news of the world has no more intelligent readers than the farmers.

"The people who want the route have merely to write the Post Office Department for a blank petition, and procure the signatures. The petitioners agree to provide boxes to receive the mail, and to keep the roads in condition for passage of the carriers' vehicles. This last clause means that in free delivery districts the roads will always be open and passable. Such a condition of things is a direct material help to a district. It is also an interesting fact that farm property along free delivery routes has gone up in value.

"Routes are laid out with perfect impartiality, the only idea being to reach the most people with the least waste of time. It often happens that a farmer living a mile or so away from the line of route, but whose box is on the line of route at the corner nearest his home, receives pension papers, special delivery letters or a registered letter. In this case the carrier does not deposit this mail in the box, as he would ordinary letters, but leaves his route and drives the extra three or four miles to the house and back, delivering the mail to the person addressed, and taking receipt for the same. The mail, even though it passes the house of the person, is always delivered in the box, and any mail in the box is taken by the carrier, which avoids the delay of the carrier and, as the boxes are all provided with lock and key, simplifies the system and makes it absolutely safe.

"In each county or town there is a road surveyor or selectman or pathmaster who is authorized to call upon the residents along a route to keep the roads in condition by working out their road taxes. In the case of a big snowstorm, or bad weather, the pathmasters of a district should leave their houses at the time the carrier leaves his post office, and each go over his section of the route, calling out the residents to fix the road where this is needed. It is only by insisting that the pathmasters shall do their duty in this respect that the free delivery service can be enjoyed by the rural inhabitants. This does not mean that the road must be absolutely clear, but a passable way must be made for the carrier, even though it is through fields.

"In those parts of the country where the winter season is snowy, the practice cannot be too strongly condemned that puts hedges or stone walls by the sides of country roads, as such roads invariably become blocked with snow, handicapping the carrier to a large extent, in some cases even breaking the horses' legs, and causing serious delays. If wire fencing were to be adopted in place of these hedges, a road would never be blocked.

"It was often the case when, as special agent, I went over a proposed route that some of the more narrow-minded residents would look upon the new system as likely to be an increased expense to them. One old farmer in particular, worth probably a hundred thousand dollars, came to me and wanted to know how much rural free delivery would increase his tax. It does not increase local taxes in any way, as this is part of the postal system, and this government is not run on direct taxation, as so many people seem to think.

"The question of how to avoid delays is a serious one, and when a route has been installed the patrons should do everything in their power to aid the carrier, and not the least help is the purchasing of stamped envelopes. The government sells, and the carrier is prepared to furnish, twenty-five good envelopes stamped with two-cent stamps and with the imprint in the corner and blank for the sender's name and address, at fifty-three cents. Stopping the carrier at every box to buy a two-cent stamp, or to get one stamped envelope, is unnecessary, and it seems as if the government has done all in its power to avoid this by furnishing the stamped envelopes at the above price. Many people have a prejudice against buying a stamped envelope, for they think if a mistake is made in addressing the envelope they lose the two cents. This, however, is not the case, and the carrier who comes to your door is authorized to redeem the stamps on the envelopes. The portion of the envelope bearing the stamp must be preserved and handed to him.

"We do not actually know, yet, all the benefit that

can accrue to the country at large from this system, but we do know that it saves time, that it insures open roads in the rural districts, that it increases the value of farm property where it is established, and that it brings the farmer, through his daily paper, into closer touch with the whole world, and these are benefits enough to base a claim for success upon.

"One curious and interesting fact with reference to the free delivery system is the marked increase which at once occurs in the amount of mail matter delivered in a district when service is established. In nearly every case the establishment of service is followed by a phenomenal increase from month to month in the number of pieces of mail delivered and collected by the carriers, and it is remarkable that the increase does not cease after the first few months, but continues, from which it is quite evident that increased mail facilities means not only an increased amount of reading matter for the farmer, but increased amount of time in which to avail himself of it. American farmers have always been great readers, compared with the farmers of Europe, and the rural free delivery is a direct benefit to this taste in our farmers, by giving them more time and opportunity to gratify it.

"The records of the Post Office Department show that no other branch of our great postal system is as popular as the Rural Free Delivery Service. This is, I think, due largely to the fact that, as I have shown, it carries with it all postal facilities."

Huron Co., Mich.

JOHN TAYLOR.

### Macaroni Wheat.

In the Dakotas the growing of macaroni wheat is beginning to extend over a large area. In 1901 the total yield was 75,000 bushels, and the estimated yield for the current year is 10,000,000 bushels. The wheat is now being used to a large extent for bread, and in many cases it is preferred to the bread made from the better known varieties. In France it is usual to mix the grain with some softer variety when it is to be used for bread. In the Dakotas and Minnesota no such plan is thought necessary. Within the past few months quite a number of private experiments have been successfully made in testing the bread-making qualities of the new wheat, and the Department of Agriculture, recognizing the importance of these experiments, have taken the matter in hand, and a series of experiments on extensive lines have been undertaken by them. The opinion of that department is that when it becomes practically demonstrated that macaroni wheat will produce a high grade of bread, the crop will be grown very extensively, and they estimate that the crop of 1904 will exceed 20,000,000 bushels. The problem of milling the product has been promptly met, and during last year several mills in North Dakota ground nothing else, and it is believed that in that State the number of such mills will reach fifteen this year. South Dakota also promises to set apart some of her mills for this purpose, and a move is being made in Minneapolis amongst the millers to take the matter up. Professor M. A. Carleton, Cerealist of the Department of Agriculture, is paying great attention to the matter, and a lecture which he has arranged to deliver before the Detroit convention next month is looked forward to with much interest. The present prospects point to a revolution of cereal crop-growing in the large areas across the line, where the matter is taking hold.

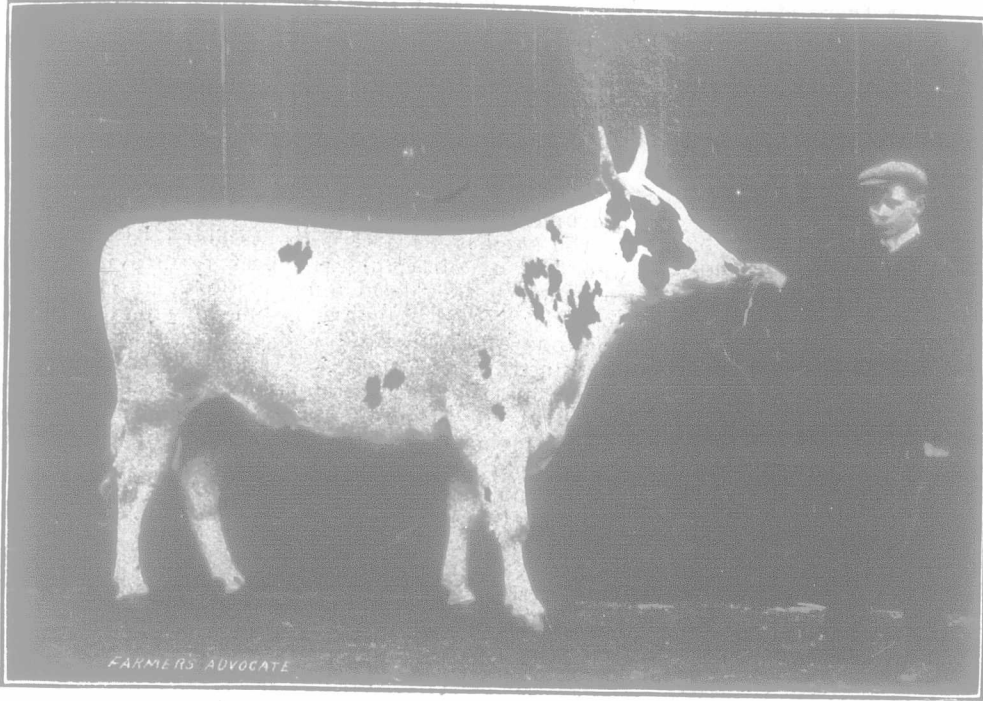
At Brandon and Indian Head Experimental Farms macaroni wheats have been giving heavier yields on the experimental plots than Red Fife. Might it not happen that the experience of Dakota farmers and millers with this wheat would yet be of value to us?

### Sugar Beets in Alberta.

Sugar-beet seeding in Southern Alberta is now all over, the land irrigated last season working up in splendid tilth. The spring rain gave the crop a start, and artificial watering will be used to mature it. The area sown is considerably over 2,500 acres. It is not expected that the yield or total product will be as large this year as it will next year, owing to the tillage not being in a very high state generally. Most of the land had had only one previous crop. In the Magrath district there will be crops of beets of good yield and quality. The price of the product, guaranteed by the sugar company, will make the crop profitable, and will consequently lead to adequate attention being given to careful cultivation.

Engineer Bradrick is rushing the sugar mill along. The placing of the plant is proceeding ahead of the raising of the steel structural work enclosing it, and the derricks are having a busy time of it. The steel work is about up on main building, and he is ready for the brickwork.





**FIZZAWAY.**

Two-year-old Ayre-hire bull. Winner of first prize as a yearling at the Highland Society's Show in 1902, and first as a two-year-old in a class of 14 at Ayre in 1903. IMPORTED AND OWNED BY ROBT. REFORD, TREDINNOCK FARM, ST. ANNE DE BELLEVUE, QUE.

**Finding His Work.**

The son of an immensely wealthy American, having graduated from college, went to Paris to study art. He worked hard in the Paris studios for three years. One day he made up his mind that he would never be a great artist, and that he would rather be a successful farmer than a fairly successful painter. Now—although still a young man—he has a model farm covering 10,000 acres in Illinois. He knows every foot of it, what it should produce, and sees that it produces everything it should. He has built a magnificent house, in which not an ornament jars the finest taste. He goes to Europe every winter and studies European methods of scientific farming and cattle-raising. He is developing the land as his fathers did before him. He employs scores of men; he helps the smaller farmers about him; he is likely to be a great factor in the development of the State during the next few years. And this is the story of a young American who works for the love of it, and who is a great success because, anxious to do things, he knew when he had not "found his work."—[The World's Work.

**DAIRY.**

**Canadian Butter.**

One of the most important functions of government is to ensure pure foods for the uses of the people. Bogus or imitation products should not be allowed to masquerade as the genuine article, thus deceiving and injuring the public. Once such articles gain a foothold under any guise it becomes almost impossible to regulate or control them; hence the necessity for efficient prohibitory measures. Like Canadian cheese, our butter is now securing an enviable reputation in the world's markets for purity and excellence, and this should be sustained. The manufacture or sale of oleomargarine or butterine is already prohibited under penalty in Canada, and a bill has been introduced in the Dominion Parliament by Hon. Sydney Fisher, Minister of Agriculture, including the foregoing provisions, and also prohibiting the manufacture or sale of renovated, adulterated, or "process" butter; also, that only butter made in a creamery shall be marked "creamery"; that any butter containing more than 16 per cent. of water shall be considered adulterated, and forbidding the use of any acid, alkali or chemical to cause butter to absorb water. The United States has legislated against "process" butter, and it is said that manufacturers design transferring their operations to Canada. With the establishment of dressed meat enterprises in Canada, attempts may be made to promote the "oleo" or butterine business. Dairymen should keep their representatives in Parliament warned against conceding any points that might subsequently militate against the interests of legitimate dairying. Care must also be taken that bogus products from the United States are not permitted to be shipped through Canada, thus endangering our good name in Great Britain.

One of the most beautiful sights ever seen in California, according to the papers of that State, was observed at Corona this month, when a vast cloud of butterflies passed over the place. They flew about five feet from the earth, and the mass was half a mile wide and several miles long. No one knows how high in the air the flock of brilliantly-colored insects extended, or where they went or came from.

**Jerseys for City Milk Trade.**

Citizens of Ottawa have been offered the opportunity of securing the very best milk that it is possible for pure-bred Jerseys to produce. Mr. P. Clark, a retired merchant, who has bought a herd and is embarking in the business, in a circular to the trade says: "Every process is open for full inspection, and visitors are always welcome. The best time to see the dairy is between four and six o'clock in the afternoon, as the cows are then in the stables, and the men are milking, cooling and bottling the milk.

Our methods enable us to produce pure milk. Our cows are all healthy, the stables are modern, well ventilated, light, clean, and have cement floors." Recently Mr. Clark visited Ohio, and purchased several head of Jerseys of the most approved strains. One is a son of King of St. Lambert's King, 30752, who now has thirty tested daughters. Mr. Clark has had his bull named Clark's King of St. Lambert. The females in the lot are four daughters of Gazelle's King of St. Lambert 49640. They are Gazelle's Brighteyes 172828; dam Chief's Brighteyes, 15 lbs. 8 ozs.; King's Amy 172829, dam Amy H. of St. Lambert, 17 lbs.; King's Doris H. 173008, dam, Doris W., 17 lbs. 8 ozs.; and King's Viola. With such blood Mr. Clark should soon raise a herd that would produce milk of the very best quality. The herd is also a valuable addition to the stock interests of Canada.

**Moldy Butter.**

The New York Produce Review and American Creamery says: The "Man on the Street" has made frequent references of late to moldy butter, and calls attention to the fact that a good deal of trouble is expected this season unless immediate steps are taken to prevent it. This seems to be almost a threadbare subject. It has been threshed over and over again, and no buttermaker of any intelligence can plead the excuse of ignorance as to how to prevent his butter from becoming moldy. The trouble lies very largely at his own door. He has the power to practically eliminate this dangerous element in the trade, and when his duty in this respect is neglected it becomes almost a crime, for it causes a financial loss either to the handler of the butter in the commercial market or to the patrons of the creamery.

Scientific experiments have proven that mold comes from a germ, that it grows very rapidly under favorable conditions, but that it can be killed under proper treatment. Some of the bacteriologists in our dairy schools and experiment stations have advocated treating the tubs with certain chemicals, formaline being especially recommended; others favor thorough steaming of the tubs before the butter is packed. The former plan seems impracticable because comparatively few buttermakers know how to handle dangerous chemicals. Steaming is good, but only a few creameries are equipped to do this well. A simpler and yet apparently as effective a method is the liberal use of salt. This is within the reach of every buttermaker, and is in no way dependent upon the equipment of the creamery.

Those who have been most successful in keeping their butter free from mold in all sorts of weather, and in spite of poor refrigerators at the creameries, have followed the plan of soaking the tubs thoroughly in strong brine, sprinkling salt on the bottom and sides, and leaving about a wineglass of water in the tub. We have made careful inquiry among receivers who have studied this matter closely, and have never found an instance of mold where this method was followed conscientiously. If paper linings are used, they too should be thoroughly soaked in brine.

We urge that this matter receive the attention which its importance demands, and that butter-makers will do their part to remove a serious menace to the butter trade of the country.

**The Hand Separator System.**

Time, or some person endowed with supernatural power of predicting future events, only can tell whether the hand separator system is eventually to become the chief system in the manufacture of butter, but, nevertheless, this system apparently is on the increase. If the conclusions as to the advisability of this system are to be drawn from the advantages, considered numerically, in contrast with the "hauling-milk system," then the hand-separator system will certainly come out ahead. The chief advantages of the hand-separator system are as follows:

1. Better skimmed milk for feed.
2. The milk can be skimmed and fed at regular hours.
3. Not so much to haul to the creamery, hence less time and less cost.
4. The capacity of a plant can be increased.

The chief disadvantages are:

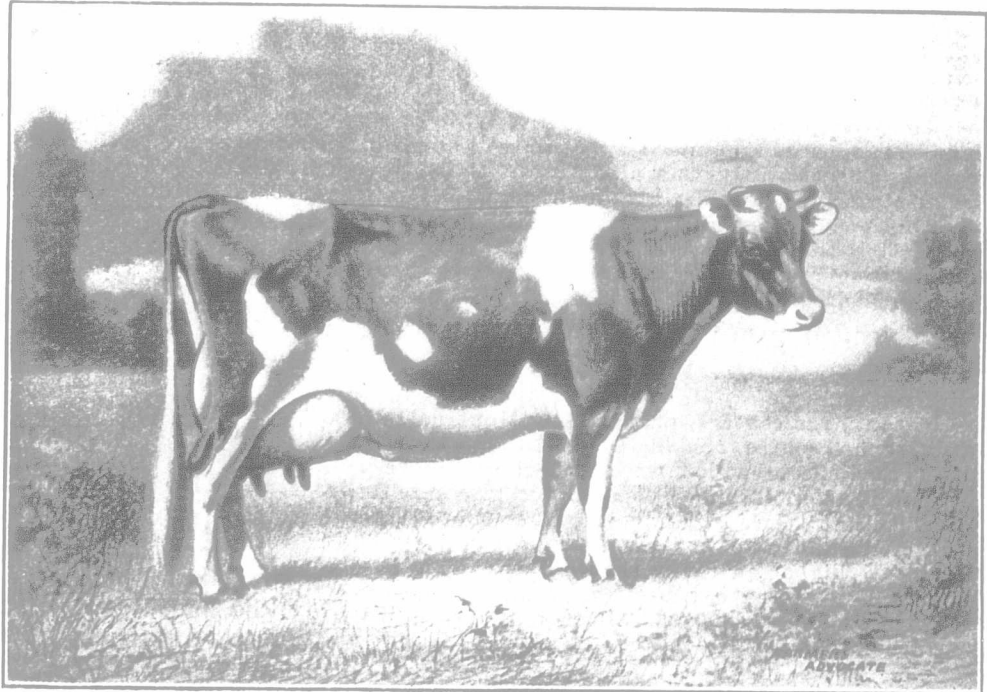
1. A poorer quality of butter.
2. The application of hand power in the separation of milk.

If the hand-separator system is the coming one, and no effective and systematic restraint can be wisely administered, then it is time for the friends of good butter to come out and give a helping hand toward improving the quality of cream, so that a quality of butter suitable to the taste of consumers and commanding the highest market price can continue to be manufactured. —[Iowa Agriculturist.

[Note.—In farm buttermaking, the use of the hand separator has resulted in better cream and better butter; but under the cream-gathering factory system it is complained that cream from different patrons lacks uniformity, and many of them do not take proper care of the cream before it goes to the factory. Where the fresh whole milk is taken to the factory daily and there separated, the resulting cream is more directly under the buttermaker's control.]

**How a Gentleman Milks.**

A contributor to a South Dakota exchange, in an article on swearing, very properly maintains that it is not gentlemanly to swear, and says a gentleman will talk like one to his cow in fly-time. It has been claimed by dairymen for years that to get the best results from a cow she should be treated gently and talked to softly, and this article from the pen of the Beresford gentleman bears out the contention. There may be times when a man is tempted to use profanity, and one of these times might be when the cow takes a whack at a fly on her ear with her hind right-hand foot at milking time, but if he will remember that harsh language will decrease the flow of milk and stamp him as a rude fellow, he will simply get another pail and start over again.



**GOLDEN LAD'S CREAMPOT.**

Prizewinning Jersey cow on the Island; an illustration of ideal dairy form and function.



### New Cheese and Butter Standards.

An important joint meeting of the cheese and butter salesmen, members of the Montreal Produce Merchants' Association, and officials of the Dominion Dairying Service, was held at Montreal on June 2nd, in the council chamber of the Board of Trade. The meeting was arranged by Mr. J. A. Ruddick, Chief of the Dairy Division of the Dominion Department of Agriculture, who presided in the absence of Prof. Robertson.

The chief object of the meeting was to consider the questions of standards of quality and descriptive terms for the different grades of cheese and butter. The lack of authoritative finding on these points has sometimes resulted in misunderstandings and disputes, and it was Mr. Ruddick's idea that a representative conference of the interested parties to discuss the specific questions above mentioned would lead to some definite conclusions which would be beneficial to the trade as a whole. Nearly one hundred salesmen, exporters, instructors and others interested in the export trade were present, and steps were taken which cannot help but lead to improvement in the marketing of cheese and butter.

Mr. Ruddick outlined the efforts made by the Dominion Department and by the Provincial Governments of Ontario and Quebec, to bring about a more general system of inspecting cheese and butter before it was placed on the market. He pointed out that dairying was making rapid strides in Denmark and Russia, and that Canada should be prepared to meet stronger competition in the future than in the past. Only steady improvement in the quality of our dairy products will enable us to retain our present position in the British market.

### BETTER STANDARDS AND DEFINITIONS REQUIRED.

Mr. Z. F. Lawrence, proprietor of and salesman for the West Shefford creamery, who was the first speaker, spoke in favor of adopting standards of quality for butter and cheese for the accommodation of all concerned, and to stimulate improvement in manufacture. He explained the loss to which butter and cheese makers are put by lack of good definitions, and pointed out the difficulty which he and other salesmen have in trying to conform to the requirements of the export trade, without having some clear-cut definitions of grades and standards of quality from some authoritative source. He illustrated his point by referring to a clause in the circular issued by the Montreal Produce Merchants' Association, allowing three per cent. in butter. The "three per cent. of salt" was very indefinite, as salt added at different stages of the making produced very different results. Mr. Ayer, on behalf of the association, explained that "three per cent. salt" meant that the three per cent. of salt was added after the butter was worked thoroughly dry. This gave a distinctive flavor of salt, as required.

### BAD PACKING.

Mr. A. A. Ayer, of Montreal, spoke especially of the wretched boxes in which Canadian butter is frequently packed. Many creameries made good butter, but few packed it properly. He showed a number of boxes which had been sent to him as samples, and pronounced them all unsatisfactory; the wood was too thin, the sides not properly fastened together, and the cover hooks not good enough. The paraffining was also bad.

Mr. Byers, of Vankleek Hill, Ont., said that a good deal of the best Canadian spruce was purchased by Americans. He lived near a mill, and knew that it would be easy to get spruce large enough to make good strong boxes, instead of the flimsy packages made from narrow remnants, which are too often used. For the sake of a cent or two on the price of the boxes, factory-men were endangering the whole butter trade. Mr. Ayer pointed out that Argentine butter was frequently shipped in boxes made from the best Canadian spruce, and much superior to those in general use here. It was also shown that New Zealand and Australia, although comparatively new to the business of exporting dairy products, are putting their butter on the British market in much stronger and more satisfactory boxes than Canadians are using.

### NOT ENOUGH DISCRIMINATION BY BUYERS.

Mr. H. S. Foster, President of the Bedford Dairymen's Association, remarked that the buyers in the large centers, particularly Montreal, did not give any extra consideration to offerings of butter and cheese which were first-class in every particular, over offerings of a poorer grade. He claimed that the superior quality should be recognized and the makers encouraged by its drawing a higher price in the market. If a factory went to extra expense and trouble to turn out a fine grade of cheese or butter, that product should command a higher price.

### THE NEW STANDARDS.

A general discussion took place in regard to the standards adopted by the Montreal Produce Merchants' Association, and it was found to be

the opinion of the meeting that these standards, which had proved satisfactory in business transactions between exporters, and which provided a legal basis on which to settle any dispute that might arise concerning such transactions, were suitable for general adoption. The following resolution was finally adopted:

"The following shall be the definition of finest butter:

"Butter—Finest creamery butter shall be butter made in a creamery under the system known as the centrifugal or separator process.

"Flavor—Sweet, clean and fresh.

"Body—Good and uniform, and not loose-made or watery; must contain less than 16 per cent. of moisture to conform to the law in England. With proper care none of our Canadian butter should contain more than 13 per cent. moisture.

"Color—Even and uniform; should be straw-colored or pale, but not white or lardy.

"Salt—Must not be over three per cent., unless by special arrangement.

"Package—Boxes must be strong, well made, of well-seasoned wood, properly paraffined; of the uniform capacity of 56 lbs., clean, and in good condition for shipping. When hooks are used, four hooks in each box. Tubs must be strong, neat, and of uniform size. Pure vegetable parchment paper, of not less than forty pounds to the ream, must be used for lining all packages."

Mr. Jas. Dalrymple submitted the following suggestions in regard to the packing of butter:

"Fodder butter should be salted four per cent., clean in make and clear straw color. Fresh or new made should not be kept till stale before shipping, but should be in consumers' hands ten to fifteen days after it is made. Neat and clean 30-lb. tubs and 56-lb. boxes only should be used, as the appearance adds much to the value of the butter.

"It will be well to bear in mind that the home trade has come to know the value of the 56-pound boxes, finding the same more profitable, as they enable the retailer to cut his butter much neater.

"Gathered-cream butter or Western Ontario—This should be shipped often, and given to the consumer when fresh; three or four days makes great difference to the quality.

"Parchment paper should be the best, and free from any inclination to mould; grading of butter is not desirable; what is No. 1 to-day will be No. 2 next week."

The matter of cheese was then taken up by Mr. R. M. Ballantyne, President of the Produce Merchants' Association. He pointed out defects in the quality and package. The greatest care should be taken to keep the factory clean, as otherwise bacteria would develop and infect the cheese and produce a bad flavor. He spoke of packages, recommending an 80-pound cheese and a 14½ to 15 cent hoop.

Mr. A. J. Hodgson did not want the cheese shipped in too green boxes, and impressed upon factory-men the importance of using strong boxes, as thousands of cheese were arriving on the other side without the vestige of a box.

Mr. Ballantyne moved the adoption of the following requirements of finest cheese, seconded by Mr. Hodgson:

"Cheese—Flavor, clean and pure.

"Body—Close, good and well cured.

"Texture—Silky, solid and meaty.

"Color—Good and uniform.

"Finish—Of good shape and fairly uniform in size, neat in finish, with good rinds and clean surfaces.

"Boxes—Must be strong and close fitting."

The recommendation was carried.

It was then moved by Mr. A. A. Ayer, and seconded by Mr. H. A. Hodgson, "That this meeting recommend the use of at least quarter pound and not more than half pound, to each 100 pounds of butter, of the best preservative, specially prepared for butter, and that this should be thoroughly mixed with the butter."

This motion was also adopted.

### Rusty Spot in Cheesemaking.

New York Agricultural Experiment Station Bulletin 225 relates to one of the perplexing troubles of the cheesemaker, rusty spot, and reports that thorough trials, in several different factories, prove that steaming the vats and utensils used in cheesemaking is a very cheap and effective method of controlling the trouble.

Our lady readers, especially, will be interested in the new hand- and wrist-bag premiums announced elsewhere in this issue, and which may be had by getting new subscribers to the "Farmer's Advocate." We have taken care to secure articles of great value, which will be appreciated, and trust many of our readers will take advantage of these as well as other premium offers.

### Food Rations for Dairy Cows.

Dairymen, like owners of stall-fed cattle, differ very widely in their views as to the best combination of foods to give to their stock. In almost every district into which one goes, farmers are to be found employing combinations of food stuffs differing from those used by their neighbors. There is, perhaps, no "best" mixture of foods for use under all possible circumstances, but there is at the same time a certain standard to which all who aim at obtaining the best results from the cows which they keep must conform as closely as possible. This standard is one in which the proportions of albuminoid and carbohydrate matters contained in the food are about 1 to 6; that is, one part of albuminoid matters to six of carbohydrates. The different foods commonly employed for cattle feeding purposes contain these albuminoid and carbohydrate constituents in widely-varying proportions. Some foods, like cotton cake, contain a very high percentage of albuminoids, good samples showing as much as 45 per cent. of albuminoids, while linseed is also very rich in the same constituents. At the other extreme are maize and barley meal, which contain comparatively little albuminoids, but a very high percentage of carbohydrates. In order to obtain a desirable medium, it is, therefore, advisable to use these foods not separately, but in combination. Tables showing the proportions of albuminoid and carbohydrate constituents in most food stuffs are published in many of the agricultural annuals, and by having these tables before them, farmers and others can easily blend the foods at their command so as to produce the combination of food constituents that is known to give the best results. As already indicated, the proportion in the case of dairy cows is one of albuminoids to five or six of carbohydrates. Young stock require slightly richer food—that is, food containing one part of albuminoids to four or five of carbohydrates; but on the other hand, the ratio for fattening cattle should be somewhat "wider"—that is, at the rate of one of albuminoids to seven or eight of carbohydrates.—[Ex.

### Special Dairy Prizes.

An innovation in the giving of prizes at the Dominion Exhibition, to be held at Toronto, from August 27th to September 12th, is the giving of \$125, divided into \$75 and \$50, for the syndicate instructor whose factories secure the highest aggregate prizes in sections. In awarding these prizes a first prize in any of the sections named will represent 4 points, a second prize 3 points, a third prize 2 points, and a fourth prize 1 point.

### POULTRY.

#### Great Demand for Chickens.

The present time is most favorable for the production, fattening and marketing of farm chickens. There has been such a substantial increase in the consumption of chickens and eggs within the last few years that it is not possible to rear a greater number of suitable market chickens than can be sold with profit. Last year there were not sufficient chickens sold in Canada to supply the home markets. As a result of the shortage of chickens the trade with Great Britain was lessened. This is unfortunate on account of the great demand for Canadian chickens in Great Britain, and the good prices that are paid.

The Chief of the Poultry Division, Mr. F. C. Hare, states that numerous letters have been received from produce merchants, poulterers and commission merchants in Canada, the United States, Great Britain, Australia, etc., who desire to learn where chickens can be bought in great numbers and at reasonable prices. Last fall one shipment of Canadian chickens was made to Cape Colony, which arrived in a satisfactory condition and pleased the trade. A New York firm wrote that they desired to import Canadian chickens, and were recommended by the Canadian Department of Agriculture to a firm in the Maritime Provinces, from whom they purchased chickens and were impressed favorably by them.

The problem of supplying this wonderfully increased demand for chickens can be solved by the farmers alone. Instead of the farmers rearing fifty or a hundred chickens that receive little attention or feed, a writer in the Department of Agriculture concludes that he should rear from 200 to 1,000 chickens annually of a utility type, such as can be found in the popular breeds, Plymouth Rocks and Wyandottes; hatched and reared by incubators and brooders, and when ready for market the cockerels should be placed in fattening crates and fattened. The equipment required to do this work is estimated at \$200 to \$250 for incubators, brooders, houses and fattening crates for finishing 1,000 chickens. The work connected with finishing 1,000 chickens with the proper appliances is no more than is necessary for rearing



200 chickens by the natural means. Poultry farming is a business that requires to be developed in the same manner as the butter, cheese and fruit branches. A substantial profit can be made from the poultry business, when it is carried on as an adjunct to farming and with the same careful attention and financing.

The Dominion Department of Agriculture is endeavoring to increase the poultry trade of Canada; to encourage the growing of the greatest number of high-class chickens; and to assist in the marketing of them. A revised edition of the useful bulletin, "Profitable Poultry Farming," has just been issued, and will be mailed without charge on application to the Commissioner of Agriculture and Dairying, Ottawa. Mr. W. R. Graham, of the O.A.C. poultry department, also issued an instructive bulletin (No. 127), "Farm Poultry," on the same subject.

**Buying Eggs.**

The following report of eggs shipped some distance to a breeder of fine poultry is taken from an article in Farm Poultry. The breeder bought from eight different fanciers, and writes to the editor that he is "greatly discouraged, and feels like throwing up the sponge." When we consider the express charges on eggs, cost of eggs, and time and energy expended, we do not wonder that this breeder feels discouraged, but we wonder why he did not buy some of his eggs near home rather than to send east for them. He probably expected to have a home market, and why did he not patronize a home breeder? He purchased eggs as follows:

	Eggs.	Hatched.	Raised.
From Y. ....	60	19	9
From B. ....	30	19	8
From C. ....	30	4	0
From H. ....	15	7	4
From P. ....	30	4	1
From S. ....	15	5	4
From Z. ....	30	21	10
From K. ....	13	4	2

Since all the eggs hatched badly except those from "Z," it would seem that there was something wrong at each end of the line, but why any breeder should attempt to stock his yards from eight different strains, taking it for granted that the eggs were all from the same breed, is a matter of surprise. It is very generally conceded that a cross of two different strains is often as disastrous as a cross between different breeds.

**Poultry Notes.**

Beginners in poultry-raising should have a care about undertaking too much at the outset.

Do not allow your litter in coop to become damp during the rainy season. Fowls must have dry houses.

Exposure to cold wind, especially to a draught at night, causes colds and throat affections in the most robust fowls.

Do not have your mixed feed too soft, but have it of such consistency as to fall apart when thrown on the feed boards.

Many a person puts the money into fancy buildings and furnishings for his henhouse that ought to go into the poultry.

There are many who enter the poultry business for pleasure, but they don't stay in long just for the pleasure they receive, and are not to be blamed either.

The gape worm can frequently be dislodged through the efforts of the chicken itself—vigorous sneezing. Several recipes are given to induce this effort, such as blowing Persian powder down the chicken's throat, or putting the chicken in a box or keg and making a lime dust. There is some danger of overdoing the job and making the chicken sneeze itself to death, or stifling it.—[Journal of Agriculture.

**Pullets for Layers.**

It is the pullets that do the late fall and early winter laying, and if we would have an abundant supply of eggs at the time of highest prices a goodly proportion of our birds must be early hatched and well-grown pullets. An experiment illustrating the doubled profits to be gotten from pullets as compared with year-old hens was carried on at the Utah Experiment Station, Logan, Utah, a few years ago, and the results were most instructive. Two pens of old hens averaged 85 eggs apiece, while two pens of pullets averaged 170 eggs apiece—exactly double the number. The doubled number of eggs laid by the pullets does not rightly present the ratio of profit, however, because from one-half to two-thirds of the increase comes at a time of decidedly higher prices, hence the proportion of profit is much greater. In this Utah experiment the average value of the eggs per hen was \$0.78, while that of the eggs per pullet was \$1.78. The food, cost, labor and interest on buildings, etc., is no greater for a pullet than it is for a hen, and it would seem to be the part of wisdom to have the bulk of our flocks early-hatched and well grown.

**Selecting the Best Chickens.**

People who hatch a great many more chickens than they mean to rear to maturity require to begin the weeding process at a comparatively early age. Fanciers who mean to take a prominent position at the winter shows are forced to do so, for the most carefully mated pens in the world will throw a fair percentage of weedy birds. How much more so will the result be from pens of birds of only moderate value? The fact is that our best breeders hatch hundreds of chickens every year, from which they select a dozen or less of the best specimens for show purposes. The sooner the numbers are kept within bounds the better it is for those which are left. The true fancier is continually on the lookout, not only to discover what will probably be his best birds, but to spot undeniable weeds and kill them off as quickly as possible. The worst specimens can usually be detected at an early age, but which are first-class and which are second-class have to be decided upon at a later date.

Wrong-colored chickens can be detected in the nest and dispensed with at once. For instance, blacks and whites in a nest of blue Andalusians can be taken out forthwith, so can single combs when it is a rose-combed breed which is being cultivated. Twisted toes or beaks can also meet the same fate. Leg color cannot be dealt with in the same way, however. Chickens of black breeds frequently hatch with yellow legs, and these darken off until quite black in a few weeks' time. Chicken feathers are also of little index to the adult plumage in most cases. When the decision has to rest upon the plumage, that means that the birds must be four or five months old before the final selection is made. Take laced Wyandottes, for instance. The chicken feathers are not laced at all, but are generally more or less grizzled all over, and the birds are nearly four months old before the beautiful black and white or black and brown begin to peep out at the sides of the breast. Then one by one the first feathers begin to drop out, and the gorgeous adult plumage takes its place. It is the same with Indian Game. The pullets' breasts remain black more or less until between three and four months old, at which period the beautiful double lacing on the rich brown ground begins to make its appearance. And so on with many other breeds. Time is required before the final selection must be made; only the misfits must go early, and at the earliest possible moment.

Of course, it costs money to rear a lot of birds to near maturity, but there is a very good market for second and even third rate birds, and well-known breeders usually find no difficulty in getting rid of this class of their stock. Their reputation as successful breeders, of course, greatly helps to get the birds away, but it is an undoubted fact that second-class birds bred from first-rate stock which have been line-bred for several generations can be depended on to throw many grand birds if carefully mated to stock which contains half the blood of their own strain.

In keeping poultry for profit the food bill requires to be carefully considered. One breed or cross may be a good layer, but it may consume more food than another which produces just about the same number of eggs. Clearly the latter is preferable. Some breeds require to be fed well in order to lay well; others are but moderate eaters while being very prolific. Compare golden or silver Wyandottes, for instance, with buff Orpingtons. All three breeds are excellent winter layers, with little to choose between them during that season; but if the buff Orpington had its way it would consume much more food than the Wyandotte. It takes its big appetite from the Cochin, while the Wyandotte is a moderate eater, due probably to some extent to its bygone descent from the silver Hamburg. Many other comparisons could be given. It is, therefore, of great importance before selecting breeds for utility purposes to find out something about their special cost of upkeep. If a little extra food meant a good many more eggs the thing is all right, but very often it does not mean this at all.

A good many well-known exhibitors do not breed their best birds. They buy them from quiet-going breeders who have no desire to win show pen honors themselves, but who have no objection to sell the first-rate produce of their well-mated stock. A very considerable percentage of the best birds of the year are not bred by their exhibitors at all.—[Farmer and Stock-breeder.

No other paper offers such a list of useful and attractive premiums for obtaining new subscribers as the "Farmer's Advocate." Read the announcement elsewhere in this issue,

**APIARY.**

**Taking off Honey.**

The time for removing honey from the hives is largely a matter of convenience. It is done at intervals during the season, or all together at its close. Comb honey is usually tiered up on the hives, and removed after the honey flow. Extracted honey is often taken off as fast as it is ripened and capped. This requires only one extracting super for each hive; but more help is needed to attend to that and swarming at the same time. To tier up, as with comb honey, each hive must have two or more supers; but swarming is greatly reduced, and the work of extracting comes later. For extensive beekeeping, there is no doubt but the latter is the better plan, as combs are cheaper than men.

To avoid travel-stain, the sections must be gotten off just as soon as the appearance of robbers around the honey-house windows indicates that the flow is ended. Extracted honey should all come off at the same time, or, in any case, before buckwheat or other fall honey plant blooms. All white honey should be off by the first or not later than the middle of August.

For getting bees out of section supers there is nothing like a good bee-escape. All supply dealers handle them. It is put on between the supers and the brood-chamber, and is so arranged that the bees can go down through it, but cannot get back. In a few hours the supers are practically free of bees, and can be carried directly into the honey-house. The few remaining bees will fly to the windows, where they may be liberated. Escapes work well for extracting supers also, with some limitations. The least bit of brood in the super will hold the bees, and the escape is useless; or if the weather is at all cool the deserted honey soon chills, and is harder to uncup and extract than when warm.

All considered, perhaps, the most expeditious way to get off extracting supers when robbers are about is to proceed as follows: Lift off the super, set it down in front, and close up the hive. Robbers are now prevented from getting into the hive, except at the entrance, which is well guarded. Lift a comb out of the super, shake and brush the bees from it at the entrance, and set it into an empty super ready for the purpose on a wheelbarrow directly behind the hive. Repeat the operation with all the combs in the super. If two are working rapidly at this, you have the honey inside screen doors almost before the robbers know you are there.

MORLEY PETTIT.

**The Harvest Time.**

BY MORLEY PETTIT.

For white honey, July is the harvest month. The supers, like the heads of grain, are filling, and must soon be gathered in. White-clover honey begins to come into the hives before the middle of June, and continues until it stops: a very uncertain date, not usually beyond the end of July. Basswood, where the woodman has spared the trees, opens bloom about July 12th. This honey has its own flavor, and a decided, though not unpleasant, aroma, which can be noticed in the apiary during the basswood flow. Commanding the same price, clover and basswood honey may be extracted together; but if to be kept separate, the former must be removed before the twelfth of the month. Only that which is half or more capped should be taken, however, as uncapped honey is unripe and should not be extracted except in special cases, and should never be offered for sale.

Speaking of unripe honey, the results of some experiments with honey, given by Prof. Shutt at the Barrie convention last December, and reported in these columns, should be referred to now. Nectar of flowers is to ripe honey almost what sap is to maple syrup. It reaches the hive in a very thin condition, and requires thickening and some digestive treatment. A great number of the hive workers arrange themselves in such a way that they can make a current of air through the hive with their wings. This fanning cools the hive, dries the honey, and, incidentally, produces the pleasant roar heard in the apiary at night after a busy day. As soon as it is ready, the honey is capped in the cells, and if the weather be fairly dry, curing and capping go merrily on; but on damp days the moisture-laden air may be drawn through the hives, and even the animal-heat of the bees does not enable it to materially dry the honey. Even capped honey becomes thinner at such times, so great is its affinity for moisture.

Last season was notably favorable for studying these conditions. The air was almost constantly saturated; white clover bloomed profusely and yielded well. When the weather was not cool and rainy it was hot and damp. The sections and extracting combs filled rapidly with thin nectar, but were not capped, for the simple reason that the air could take no more moisture and the honey could not be ripened. The excessive swarming may in part be ascribed to discontent arising from this very cause.



## GARDEN AND ORCHARD.

**Helderleigh Fruit Farms and Nurseries.**

The trend of the times in Canada in these empire-building years is, happily, in the direction of the encouragement of home production, the development of home industries, and the growth of a feeling of confidence in ourselves and in our ability to produce the best quality of goods in many lines in order not only to meet the requirements of our ever-increasing home markets, but also to capture a goodly share of the trade of foreign or remote countries. This is good sense and good business policy, and perhaps in no line of business is it more practicable than in the growing of first-class fruit, to which very large areas of this Dominion are peculiarly adapted.

The time was when Canadian farmers and orchardists imported most of their nursery stock, being persuaded by glib-tongued agents from over the line that such stock was superior to the home grown, but in many instances experience taught the lesson that this country was not infrequently made the dumping-ground for inferior stock, which failed to grow or proved untrue to name, and, hence, unsatisfactory and vexatious. A few Canadian nurserymen, having faith in themselves and in the capabilities of this country to produce stock equal to the best, and being possessed of the spirit of enterprise and perseverance which, rightly directed, leads to success, have from small beginnings gone forward in the face of strong competition, and by the adoption of the best-tested varieties, the most advanced methods of propagation and cultivation, and honorable dealing, have gained and held the confidence of the people, and have succeeded in building up extensive and eminently successful business enterprises, giving general satisfaction to their customers by the superior quality of the stock sent out. Prominent in the front rank of these advanced nurserymen is Mr. E. D. Smith, M.P., of Winona, Ont., in the Niagara district, far-famed for the abundance and perfection of its fruit, whose Helderleigh Nurseries, started in a comparatively small way in 1882, have grown and extended from year to year until at present the area under cultivation is no less than 575 acres, of which 200 acres are planted to first-class fruit orchards; 200 acres solidly planted to nursery stock of standard varieties of apples, peaches, pears, plums, cherries, grapes, raspberries and gooseberries, besides all the best-known varieties of ornamental shade trees and shrubs; the balance of the land being used for growing feed for the horses, etc. To give our readers an idea of the stock required to meet the great demand for trees from this nursery, we were informed, on the occasion of a recent visit, that the planting this spring was 100 bushels of peach seed, 100,000 plum seedlings, 60,000 pear seedlings, 40,000 cherry seedlings, 335,000 apple grafts, and other things in the same proportion. It should be borne in mind that these figures represent only one year's growth, and that as a rule it takes three years to grow trees large enough for shipping, so that these figures are duplicated by last year's planting, and by at least one-half for the previous year, and must be multiplied by two and a half in order to get a reasonably correct idea of the extent of the planting of these lines.

**AN IMMENSE BUSINESS.**

That the business is rapidly growing is evidenced by the fact that while five years ago it was only found necessary to plant 150,000 apple

grafts, the demand has so increased that this year 335,000 have been planted, while last year's planting was nearly as many. Remembering that all these plants require to be grafted or budded near the root the first year after planting; that over 400 acres of plantation is so thoroughly cultivated that scarce a weed is seen; that all these trees have to be pruned; that stock almost equal to one year's planting has each year to be taken from the ground, fumigated, packed and shipped; that some 40,000 barrels of apples and

are scarce; besides, the trees out in the nursery rows all winter are sometimes badly damaged by freezing. A few years ago all peach trees, dwarf pear trees and many plum trees were nearly ruined, and no doubt hundreds of thousands were sent out in a dead or feeble condition. With ample cellar accommodation all these things are taken up in the fall and trenched in out of danger in the moist loamy soil of these huge above-ground cellars, in which the different varieties are alphabetically arranged, carefully labelled, and separated by ropes to insure accuracy. Everyone knows the enormous advantage of early planting, when the trees are dormant. A tree planted dormant and early will, it is believed, grow more in two years than one planted late and partially in leaf will in three.

"Consider this situation," says Mr. Smith: "Frost in the ground April 4th; digging starts April 5th; 500,000 trees to dig before packing can start; hands scarce; leaves coming out April 20th, as I have seen; trees not ready before April 25th; ten days packing trees; a week in transit; purchaser gets them May 5th to May 10th from a nurseryman without such a cellar; whereas I can commence shipping at any time. This year I was afraid of shipping before freezing weather was over. I started as early as I thought customers would be ready for stock. Customers will see the advantage of buying when they can get sound, unfrosted trees, and get them two weeks ahead of those from any other nursery."

**THE SECRET OF PERMANENCY.**

The permanency of a nursery business is the best guarantee of honesty. No nurseryman who intends to follow up the business all his life, and leave it a legacy to his heirs, would be fool enough, even if he were dishonest enough, to send out trees untrue to name if he could avoid it. Mr. Smith's aim has always been to furnish the best and to be sure it is true to name. Mistakes may occasionally occur, but not wilful mistakes, and so long as they are not wilful they will be few in number. Being a modest man, he makes no claim to superior honesty, leaving his neighbors to judge of that, but he points out that no nurseryman establishing and carrying on a permanent business can afford to be anything but honest. Untrustworthiness won't pay; above all things, in the nursery business, where all depends on confidence between buyer and seller. In order to insure that the various kinds of apples, plums, pears, peaches, grapes, etc., are true, he cuts from bearing trees, vines and bushes, known to be true on his own farm, the scions and cuttings for grafting and budding. He has 200 acres in fruit orchard, and has been handling fruit in a large way for twenty-five years, and so is not only able to judge of the value of different sorts, and in a position to give good advice, but he grows for sale all the best sorts; sorts that produce the most of the best quality and size; in fact, those that are most profitable. He is obliged also to grow scores of sorts that people call for that he would not grow if the selection were left to him. He has a hundred varieties of plums growing, and almost every kind of peaches, pears, apples, grapes, etc., that are known in Canada as valuable in any way; all told, close upon a thousand varieties of trees, vines, bushes and shrubs.

**ABOUT NEW VARIETIES.**

Another feature is the care in offering new varieties. He does not offer them now until well tested, having found that it is not safe to depend

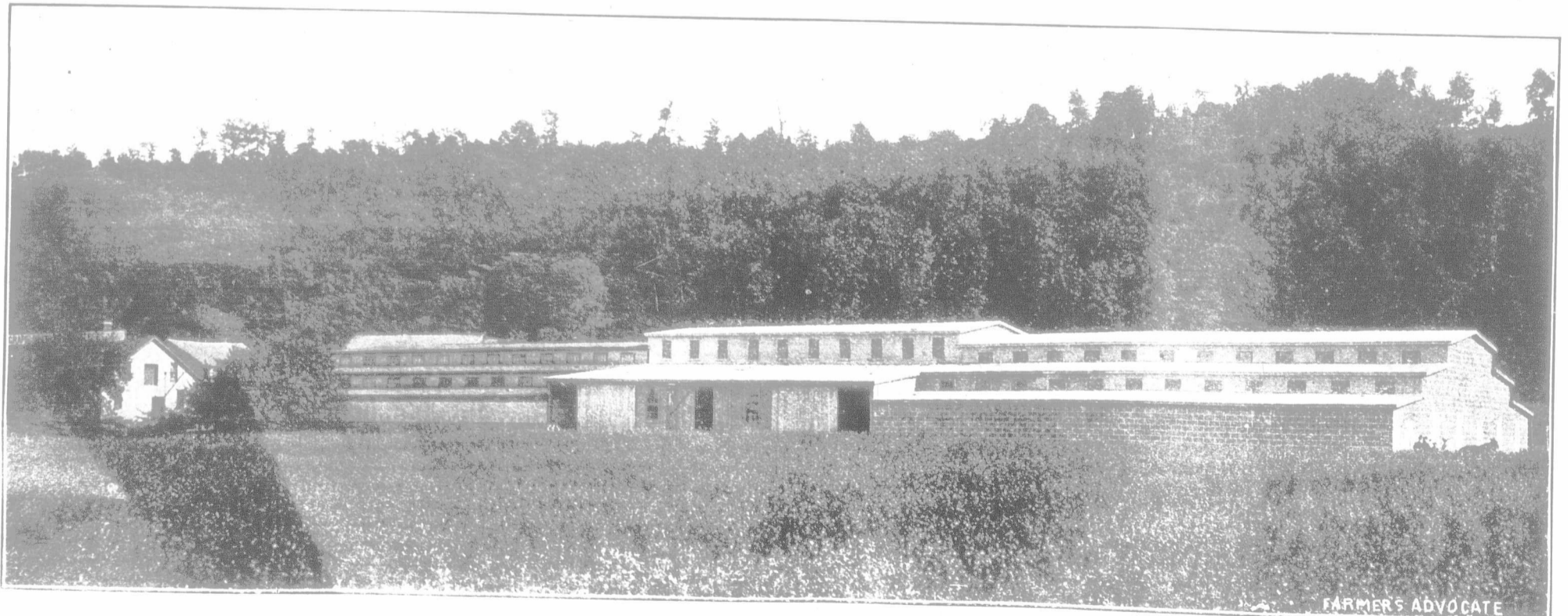


MR. E. D. SMITH, M. P.  
Proprietor of the Helderleigh Nurseries, Winona, Ont.

300 carloads of ten tons each of other fruit, most of which is purchased from neighboring growers, and a large percentage of which has to be graded by hand before packing, is shipped from the warehouse on the electric railway running through the farm, in a single season of a few months, and one gets some idea, though necessarily a very imperfect one, of the immense amount of work involved and of the number of hands required in carrying on this business.

**WINTER STORAGE BUILDINGS.**

Since beginning the business twenty-one years ago, it has been Mr. Smith's ambition, which has grown stronger as the years have gone by, to make it a permanent one, one not only for his own life, but for his sons after him, believing that it is a most interesting and useful business, and likely to be permanently profitable if conducted on the best lines. Believing this, and his confidence being more and more confirmed by the large increase in the demand for his trees of late years, he has, at a cost of \$6,000, constructed the best buildings for the business in Canada. In these, one of which (illustrated in the engraving) is 108x280 feet in dimensions, under cover from storm and frost, he can trench in 250,000 trees in November, ready to ship out two weeks earlier in the spring than are trees which have to be dug in the spring. Sometimes trees are in leaf before such large quantities can be dug in the spring, especially of late when men



WINTER STORAGE BUILDING FOR TREES AT HELDERLEIGH FRUIT FARMS AND NURSERIES,  
PROPERTY OF E. D. SMITH, M. P., WINONA, ONT.



upon any representations made by interested parties. Finding from experience that it is only occasionally that a new fruit is better than some older kind, a very conservative course is pursued in this respect. Nevertheless, really valuable things are not neglected. Campbell's Early, for instance, is one of the newer grapes that is a decided step in advance, as the Niagara was when it came out. In plums, the Emerald, says Mr. Smith, is far and away the greatest advance in early plums introduced for many years, being three weeks earlier than any good European plum, and two weeks ahead of Abundance, earlier than such sorts as Red June and Willard, and of choice quality for eating out of hand, which cannot be said of any plum ripening within a month of it, and that is the only use of an early plum—to eat out of hand. They are sold at high prices, and are not used for canning; consequently, quality is the important thing, and Emerald is not only above the average, it is right at the top, not even the old Green Gage, its parent, being superior. In peaches, one of the finest ever introduced is Millionaire, which was secured at St. Catharines. It has fruited now several years, and is ahead of anything even of its season, when there are a number of good sorts ready.

**THE NEEDS OF OUR NORTHLAND.**  
Mr. Smith makes a specialty of studying the needs of the northern half of Ontario and Quebec, and has a long list of varieties of apples, cherries and plums that do well in these colder sections; varieties that have been tested by the Experimental Farm at Ottawa, and by such well-known and trusted men as Robt. Hamilton, Chapais, Dupuis and other Quebec growers.

The writer has seldom, if ever, spent as agreeable and instructive a day in quest of information for the "Farmer's Advocate" constituency as during the visit to this great nursery and fruit farm, where on the one hand may be seen the little seedling in process of development, and upon the other the full-grown tree laden with fruit, the ultimate triumph of the horticulturist's art.

**Thinning Fruit.**

The thinning of fruit is a question that is much discussed by fruit-growers, and numerous instances are given where the operation has paid handsomely; but whether with the present scarcity and high price of labor it will pay on any and all kinds of tree fruits, is a question not as yet definitely solved. Many varieties of plums, peaches, and also some varieties of apples, are inclined to set more fruit than they can properly mature. The removal of half of it, being careful to always remove the poorest specimens, will often result in a crop of just as large a bulk as if it had been left unthinned, but the fruit would be improved in size and quality to such an extent that the extra price received for it would pay the cost of thinning and leave a good margin of profit. It is estimated to cost from ten to fifteen cents a tree on young bearing trees, but it would be much more on large trees; conditions vary so much that it is impossible to fix a price per tree; but in the case of plums and peaches the work of thinning could be lessened to a very great extent by judicious spring pruning. Opinions differ as to the distance apart; from three to six inches for peaches and from two to four for plums is recommended. There are other advantages in favor of thinning that are, perhaps, overlooked. In the case of plums it lessens greatly the damage by rot. The Monilia, or plum-rot, will not spread so fast or do nearly so much damage where the plums are not touching each other.

Then it takes just as much fertility from the soil to grow a poor, unsalable specimen, such as are always plentiful on overloaded trees, as it does to grow one of high quality. Some varieties of apples, such as the Duchess, are inclined to overload to such an extent that they can not make any fruit buds for the next crop, and, therefore, only bear every other year. The removal of half the crop would allow of the formation of fruit buds and regularity of bearing. If cheap labor were obtainable, thinning would become a common practice.

**Ornamental Trees.**

A buys a farm with the road running through it east and west, and builds a house on the north side of road; plants out ornamental trees on both sides of the road in front of his house, extending six or eight rods each way (east and west). A dies, and leaves his farm to his two boys, B and C. He gives B the north side of the road that has the house on, and C the south side of the road. C builds a house a mile or two distant, and uses his share for a hay lot only. B and C die, leaving the property to their children.

1. Can C's children cut down the ornamental trees for firewood on the south side of the road, opposite B's children's house? They are on the limits of the road.

2. If not, what way would need to be taken to prevent them if they should attempt it?

3. Can B's children plant out young trees to

replace ones that have died on the south side of the road by the side of C's hay lot? J. P. N. S.

Ans.—1 and 2. It is probable that they are legally entitled to do so.

3. We think not. We would, though, with regard to all these questions, say that it is likely there is local legislation affecting them, and that should be referred to.

**Buying Nursery Stock.**

At this season nursery agents are making their rounds, soliciting orders for nursery stock of all kinds. Usually their prices are high for small orders. This is necessarily the case, as it costs about the same to pack and ship a small order as a large one. A large saving could be made by intending planters by bulking their orders and securing the reduction that is always made on large orders. Dealing direct with a nurseryman is usually the best way, however, of purchasing stock.

As a rule, no dependence should be placed on the agents' judgment as to the varieties to plant—they don't know—their business is to sell. Intending planters should consult some experienced grower and be guided by his advice. He should also consult the reports of the Fruit-growers' Associations, and it will probably pay him well to become a member. He should also look over the reports of the Experiment Stations. It may be dollars in his pocket. Locality, soil, markets, climatic conditions, must be considered, and he must select the varieties that are best suited to these conditions, and that will pay best. He should try to benefit by the experience of others, providing they are such as he can have confidence in. A little knowledge of the right kind at the start will save many a dollar. When a person buys nursery stock and pays a fair price for it, he should insist that the trees or plants shall be healthy, well-grown, well-rooted specimens, true to name and delivered in good condition, and accompanied by a certificate of proper fumigation. The buyer should see that all these conditions are stated in the order before he signs it, and he should refuse to accept the stock unless the conditions are fulfilled.

**Individuality in Trees.**

Those who are planting hardy varieties of apple trees for the purpose of top-grafting them with the best varieties of marketable apples, are working along right lines to secure profitable orchards, providing other details, such as pruning, spraying, cultivation, fertilizing, etc., are attended to. But there is a pointer here for the grower: Whether he intends to do his own grafting or to employ someone else to do it, he should be casting his eye around at this time of year to see where he can secure the right kind of scions with which to top work his young orchard. Not only should he be on the lookout where to secure the proper varieties, but there is another point of very great importance to the future bearing of his orchard. He should observe the individuality of the trees from which he intends to cut his scions.

This is a new theory to most people, and many are incredulous, but there can be no doubt from the evidence gained by experience that this is not a theory, but a well-established fact—the individuality of fruit trees—that some individual trees will far surpass others of the same variety under the very same conditions as to soil and care, and that scions obtained from such a tree and grafted into another will carry that individuality with it and perpetuate it. Here is simply another evidence of our ability to control the forces of nature for our own benefit, and the fruit-grower should not be slow to take advantage of it.

**Good Potato Crop.**

On the London Insane Asylum farm last season over 6,500 bushels of potatoes were grown on 31 acres, the variety being the Rural New Yorker. Last year's potato crop in Western Ontario suffered severely from rot, in some cases almost the whole crop being lost. The Asylum potatoes, however, were remarkably free from this trouble. In 400 bushels carried through winter in a pit not one potato was found rotten, and in the cellars are a large quantity now being used daily, perfectly sound. Other potatoes grown on similar soil in the vicinity rotted badly. Mr. Murdock, the farm superintendent at the Asylum, states that the only difference in his method of treatment is the application of bone meal at the rate of 300 pounds per acre, sown broadcast and drilled in with the seed at planting time. On this farm, all the bones of slaughtered animals are dried in cribs and ground, about ten tons per year being made. Mr. Murdock believes that an application of slacked lime would, to some extent at least, be effective in preventing rot.

Note the premium announcements describing the Premiums which may be had for getting new subscribers to the "Farmer's Advocate."

**QUESTIONS AND ANSWERS.**

1st.—Questions asked by bona-fide subscribers to the "Farmer's Advocate" are answered in this department free.  
2nd.—Our purpose is to give help in real difficulties; therefore, we reserve the right to discard enquiries not of general interest, or which appear to be asked out of mere curiosity.  
3rd.—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, as a guarantee of good faith, though the name is not necessarily for publication.  
4th.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

**Veterinary.**

[Answered by our Veterinary Editor.]  
**CEREBRO-SPINAL MENINGITIS.**

A neighbor's horses, four in number, became drowsy and dull, having loss of power, spasms and twitching of muscles, unable to drink, would reel and sometimes fall. A vet. was called, who at once pronounced it cerebro-spinal meningitis, and treated accordingly. Only one survived. These horses had been kept in clean and well-ventilated stables, but had access to a small spring into which a number of partly decayed box drains were running, and in which muskrats had been working. The horses were also pasturing in a field on which a quantity of manure had been spread. Was there anything in this to cause the disease, or would you attribute it to the water? Would you think it safe to let the horses continue to drink the water? A quantity of the water has been sent to be chemically examined. If it is pronounced all right, do you think the manure might be the cause of the disease?  
T. M. F.

Huron Co., Ont.

Ans.—An outbreak of this disease is always due to the presence of a specific poison, which, in the present case, will probably be found to be in the water, but it might be in the manure. The water should certainly not be used till you are thoroughly satisfied of its purity, and I would advise that no more horses should be pastured in this field this season, and it should be plowed up and cultivated.

**"SWEENEY."**

Kindly inform me through your columns of the cause, nature and cure of sweeney in a horse.  
Welland Co., Ont.

**SUBSCRIBER.**

Ans.—Sweeney is a vague and inexpressive term applied to wasting of the muscles lying on each side of the spine of the shoulder blade; sometimes one muscle only is affected. The condition occurs chiefly in young horses, and is caused by a badly-fitting collar, bruising of the shoulder, heavy drawing and jerking, especially in plowing, etc. The treatment consists in applying the following blister once every two weeks: Cantharides, pulv., four drams; vaseline, three ounces; mix. It will take from four to six months for the muscle, or muscles, to regain their normal condition. Rest and a long run at grass is necessary.

**PIGS AILING.**

I have a number of young pigs running out on clover pasture. When they come in for their feed they go around the pen with the back bent down till the belly nearly touches the ground. They eat well and appear to thrive.  
W. M. Wentworth Co., Ont.

Ans.—The description you give of your pigs is not symptomatic of any disease, and is probably due either to their skin being sunburnt or to an over supply of succulent food. Let them have some meal each day, and as the season advances and the clover becomes less juicy, the trouble will likely disappear. If the trouble is caused by sunburn, unsalted grease or oil applied should give relief.

**DEPRAVED TASTE IN COWS.**

Will you please inform me the reason of and cure for the habit acquired by some herds of cows of eating all the horse manure they can get?  
Huron Co., Ont.

**YOUNG FARMER.**

Ans.—Farm stock sometimes develop a depraved appetite while in winter quarters, due to a craving for the constituents of the soil, which usually passes away as soon as turned on grass. Let them have free access to salt in which lime has been mixed in the proportions of one part lime to ten parts salt.

**COWS WITH A COUGH.**

I have four cows and they have all been coughing all summer. They eat and milk well. What are the symptoms and treatment for tuberculosis?  
Lanark Co., Ont.

**G. A. M.**

Ans.—There is no treatment for tuberculosis in cattle. The symptoms are very insidious and depend upon the organ involved. Coughing, such as yours, indicates pulmonary tuberculosis. The best means of diagnosing is the tuberculin test. I would advise you to have yours tested. I am inclined to the opinion that they are tubercular.

**LAME MARE.**

Mare slightly over in the knees got lame in front, and does not get better. Feet appear all right; no heat, lump or swelling.  
Prescott Co., Ont.

**A. H.**

Ans.—It is probable your mare has navicular disease. Give her a long rest and blister her coronet once every month, in the ordinary way so often described in these columns.



**INVERSION OF THE VAGINA.**

Old cow in calf inverts the womb every night when she lies down. I wash it every morning before returning it.

Renfrew Co., Ont.

Ans.—A pregnant cow cannot invert the womb until after delivery. It is the vagina she inverts. Tie her in a narrow stall, build up behind with straw until her hind parts, whether she stands or lies, are about 1½ feet higher than her fore quarters. Keep her in the same stall after calving until the inversion ceases. If this will not prevent it, you will have to arrange a truss, which will press against the vulva and prevent inversion. In this case you will have to watch her closely, and remove the truss when labor pains come on. Do not breed her again. When inversion takes place wash with alum water, one ounce to the quart, before returning.

**PERIODIC OPHTHALMIA.**

My three-year-old mare is frequently affected with sore eyes. Between the attacks she is all right, except the eyes are a little dull. When sore they run water, and there appears to be a scum over them.

E. B. D.

Dufferin Co., Ont.

Ans.—Your filly has a constitutional disease called periodic ophthalmia. The attacks cannot be prevented, and in all probability she will eventually go blind from cataract. When she is affected, keep her in a partially-darkened stall, excluded from the sun and wind; give a slight purgative of say, six drams aloes and two drams ginger; feed on soft food; bathe the eyes well three times daily with warm water, and put a few drops of the following lotion into each eye after bathing: Sulphate of atropia, ten grs.; distilled water, two ozs.

**LIGHTNING STROKE.**

About a week ago I went into my stable after a thunderstorm and found one of the horses had partially lost control of his senses, pressing his head against the rack and not noticing anything. When taken out of the stable the symptoms were shown more plainly, and acted like a horse with blind staggers. I allowed him to stand for a few days and thought he was improving, but when taken out he acted as bad as ever.

Lincoln Co., Ont.

G. O.

Ans.—There is little doubt he is suffering from lightning stroke. Give him a slight purgative of say, six drams aloes and two drams ginger; allow him to rest in a comfortable box stall; feed on a little grass and bran, and do not expose to the heat of the sun. He will recover control of his actions in time. In some cases it takes considerable time, so you must have patience.

**INTERNAL HEMORRHAGE.**

We castrated a calf and it died in 20 hours. It seemed bloated when dying. It lost little blood.

J. A. D.

Wellington Co., Ont.

Ans.—It is probable the calf bled slowly from the cord, but the blood lodged in the abdominal cavity. It would have required a post-mortem to ascertain for certain the cause of death. Death may have resulted from causes entirely independent of the operation. The bloating indicates stomach trouble.

**COWS EATING FILTH.**

I have a couple of cows that have a habit of chewing leather and bones, and do not seem to be doing as well as they ought. Will you please give me the cause, and also a cure through your veterinary columns?

W. A. L.

Grey Co.

Ans.—See similar query in this department.

**Miscellaneous.****PLANTING STRAWBERRIES.**

I have about 2½ acres of good sandy loam, in which I purpose putting strawberries this fall. I would like to know what my prospects for a good crop next year may be, and if the returns would pay for the trouble of planting, etc.? I was unable to put the plantation in this spring, and am rather doubtful if my plan will work out satisfactorily or not.

A. N. M.

Hastings Co., Ont.

Ans.—In growing strawberries the first object is to get a good stand of plants. This is commonly done by planting about the 10th of May in well-prepared soil, and then giving good cultivation during summer. By fall there will be a thick row of plants firmly established, that will bear a good crop the following season, if conditions are favorable. By planting in the fall it cannot be expected that the plants will be very well established by the next spring. In fact, it is doubtful if they would be as far advanced by the second fall as they would be if set in the spring. We do not approve of the plan of planting in the fall, and would recommend giving the land good treatment in the fall and planting the following spring. Some of the plants will bear the first season they are set out, but this should not be allowed. When cultivating, any blossoms that appear should be nipped off. Better grow a crop of white turnips or rape this season if the land is not already in some kind of crops.

**PLUM ROT AND APPLE-TREE SCORCH.**

1. I send you half-dozen partly-grown plums affected with what resembles brown rot, but that trouble has never appeared on my fruit till at least a month later than the present time (June 20th), or when the plums are full size and beginning to turn in color.

2. I also enclose some dead apple-tree leaves and fruit buds, which appear in little bunches or clumps among the green ones all over the tree. Many trees in this locality are affected. Kindly identify and suggest treatment in the "Farmer's Advocate."

ORCHARDIST,

Western Ontario.

Ans.—1. The cause of the early rotting of the plums is a fungus called brown rot (*Monilia fructigena*). This is the fungus which also causes the rotting of the peach and cherry, but it does not usually make its appearance until July. Conditions for its development this year, however, have been very favorable, as the early part of May was abnormally warm. This fungus winters over in the "mummy" plums which usually hang on the trees. On the return of spring, spores are produced, which are carried to the young leaves and fruit. It is worthy of note that all the specimens which were sent in for examination were stung by the curculio. It is quite possible that this insect may be the unconscious agent in inoculating the half-grown plum. The cool weather conditions of late have probably been the chief factor in the production of the brown and shrunken plums. Threads of the fungus penetrate the tissues of the fruit in all directions, and soon kill the tissues, producing the characteristic brownish rot. To-day I found the characteristic spores of the fungus on the surface of the plums you sent me, which I had kept in a warm, moist chamber. This disease is apparently on the increase in the Province, and greater attention should be given to the picking and destroying of the mummy plums on the tree before winter sets in, and to early spraying with the Bordeaux mixture.

2. Many complaints have been received within the last two or three weeks regarding the dead leaves and fruit which are found on apple trees. This is the result, I believe, of the excessive transpiration of the moisture from the leaf during the very fine weather in May, for the dead patches on the leaves began to appear about this time. It is not due to any fungus, but rather to sudden scorching and the transpiration of more water from the leaves than the roots can supply. In the summer of 1899 this scorching of the leaves was very prevalent in many districts—cherries, maples and sugar beets showing evident traces of it.

W. LOCHHEAD,

Ontario Agricultural College.

**PROBABLY TWIG BLIGHT.**

1. A lot of leaves are dying on my apple trees, same as enclosed. The more fruit on the tree the more it is affected, Talman Sweets being the worst. I sprayed once with copper sulphate solution, and twice with Bordeaux mixture, containing, first time, four pounds copper sulphate, four pounds lime, to forty gallons water; second time, five pounds copper sulphate, five pounds lime, and forty gallons water, and put in two ounces Paris green to each forty gallons water.

2. I have a book which says to prepare Bordeaux mixture as follows: Dissolve six pounds sulphate copper in sixteen gallons water and four pounds lime in six gallons water. Would that be too strong?

G. L.

Elgin Co., Ont.

1. The specimens are not in very good condition for determination of the cause of the trouble. On two or three of the leaves the summer stage of *Fusicladium* (apple scab) is showing. The Bordeaux mixture properly applied effectually holds this fungus in check. Cool, damp weather is very favorable to its development. The cause of the reddening or browning of the leaves is, probably, twig-blight. This is a bacterial disease, to which the pear and certain varieties of apple are liable. It is supposed to invade the tree through the blossoms and soft-growing tips of the twigs, and is identified by the reddening of the leaves and the browning and shrinking of the tips of the twigs. The germs are said to be carried from blossom to blossom by insects. If this theory be true, it accounts for the fact that one or two varieties in an orchard are affected while the others escape, owing to differences in time of flowering. At any rate, the disease is most perceptible on flowering twigs or fruiting spurs. The leaves do not fall, but remaining on the tree, give it, in parts, a scorched appearance. For this disease there is no other remedy prescribed than the knife and fire. It is also known as fire blight.

2. Your own mixture of the ingredients of the Bordeaux mixture was not too strong. In the United States the popular mixture is six pounds of copper sulphate, four pounds quicklime, and fifty gallons of water. Canadian horticulturists generally use a third less copper sulphate and the same proportion of lime, but ten gallons less water.

J. DEARNESS,

[Note.—Weed's book, "Spraying Crops," states that the original Bordeaux mixture was six

pounds copper sulphate, three pounds lime, and twenty-two gallons water; but experiments by Prof. Weed, at the Ohio Station in 1889, and also trials in 1890, showed that apparently as good results were secured from six pounds copper sulphate, four pounds lime, and fifty gallons water, which became generally adopted in the United States.—Editor "Farmer's Advocate."]

**CURING MEAT.**

As a subscriber to your valuable paper, I will be very glad of your advice re a recipe for preserving meat in brine. I recently purchased a quarter of beef, and, upon the direction of the butcher, put it in a solution of salt and water "strong enough to float a potato." By degrees the meat has become so badly tainted as to be almost unfit for consumption. It is not exactly putrid in smell, rank is more the word. It started to "turn" when it had been in salt about a month, and hoping to save it, I changed the solution, but to no purpose. It was put in the brine after being thawed out from the refrigerator. As purchasing meat here in bulk effects a considerable saving, I am naturally anxious to obtain a recipe which can be relied on through all weathers.

Balfour, B. C.

J. W. F.

Ans.—It is more than probable that the meat had become infected before it was put into the refrigerator. While there the development of the taint would be checked, but upon being thawed out would again go forward. Brine of that strength invariably preserves meat if pure when put in. See April 1st issue.

**LIME AND KAINIT FOR MIDGE.**

Please tell me through the "Advocate" how much lime or kainit to sow per acre for clover midge; also, what kainit is, and where it can be bought, and its cost?

SUBSCRIBER.

Norfolk Co.

Ans.—To check the clover midge, lime or kainit should be applied after the clover is harvested, when the larvae are preparing for winter quarters in the ground. This treatment will, of course, only reach what insects are in the fields; many will be found in the heads in the barn. Kainit is a potash fertilizer containing about twelve per cent. of pure potash, and is imported in large quantities from Germany. It is one of the cheapest of commercial potassic manures. The W. A. Freeman Co., of Hamilton, will quote prices. From two hundred and fifty to three hundred pounds per acre is a good application. From two to three tons of lime should be sufficient for the checking of midge.

**SICK HENS.**

Can you tell what is the matter with my hens? They are well cared for, but have lost several lately, and more are sick. They get "dumpy," mope around, do not eat, and finally die.

OLD SUBSCRIBER.

Prescott Co., Ont.

Ans.—We can scarcely tell what the trouble is from the symptoms given, as they are of such a general nature. Would recommend examination for lice, and also thorough cleanliness in the pens. Give the wall and floor a good coat of whitewash. It would also do no harm to give a tonic. Dissolve common hard soap in water, to the consistency of soft soap; put a tablespoonful of this to the gallon of water, it will act as a mild purgative, and clean out the throat. Green onions might be fed to tone up the system, or red peppers dried and chopped fine, fed in a mash, would be excellent. Be careful not to feed too much corn, peas or other grains at this time of the year. Make sure the water is clean and fresh.

**MILK TESTER.**

Could you inform me through the columns of your paper where I can get a milk-tester, and what are the standard tests of milk and cream?

G. B.

Ans.—Write the creamery supply companies advertising in this paper. If it is desired to test only the milk of the cows for butter-fat, then all that is required is a Babcock tester and the glassware necessary to make the test, but if the milk is to be tested for adulteration, a lactometer will also be required. The minimum amount of fat allowed in milk supposed to be pure varies in different countries and in different parts of the same country. In most places 3% fat is the lowest allowed. Milk, however, may contain over 3% fat and yet be adulterated or skimmed, and this adulteration or skimming can be exactly determined by the use of the Babcock test and lactometer. In Canada we have no standard for milk or cream, but suspected samples are detected by the use of the test.

**BLACK SPOTS ON PIGS.**

This spring I purchased from a breeder of pure-bred Chester White pigs, one sow in pig, registered pedigree. She has farrowed, and has litter of seven pigs, and two of them has several black spots on them, some as large as a 25 cent piece. Please give me the reason.

Hastings Co., Ont.

J. C.

Ans.—Black spots are really black, both skin and hair, and should say there is ground for suspicion that they are not pure-bred Chesters, but if the spots are blue, and only on the skin, and the hair is not black, they do not necessarily indicate impurity of breeding.



**UNTHRIFTY PIGS.**

I wean my pigs at seven to eight weeks old. They get dry in the hair, get paunchy, and stop growing. This spring I scalded all their feed (shorts at first), and mixed with skim milk; later on fed oat chop and skim milk; still they slowly failed—you could trace their skeletons through their skin. When I turned them out on lucerne clover the smallest of them took scours; eight or ten died. How much feed should a pig eight weeks old get at a time? I feed a bunch of ten pigs about half a gallon of slop three times a day; slop not very thin. Am I feeding too much or too little? Is oat chop and mangels good food for a sow when nursing pigs? Is it wrong to have the pigs eat with the sow at feeding time? I give them shorts and milk in a trough by themselves, but they will always get more or less of the sow's feed. I always have my pigs in clean and warm quarters, and cannot account for my failure.

Bruce Co., Ont.

Ans.—A half-gallon of swill to ten pigs would seem to be light feeding, unless it was very nutritious. Since the pigs have done badly on sloppy food, it might be well to try a change, giving their shorts and chop dry in one trough, and milk or swill in another separate trough. We have had pigs do exceedingly well on this method of feeding. This case seems to indicate a lack of constitution in the pigs, and raises the question whether they are bred from parents too close akin. We do not consider oat chop and mangels suitable feed for a sow nursing pigs. She should have more nutritious feed, such as shorts and oat or barley chop, and be fed liberally after the pigs are a week old. With this kind of feed there is no harm in letting the pigs eat with the sow, but warm milk should be supplied them in a separate trough at the same time.

**SEEDING CLOVER IN CORN.**

Can clover be sown with corn; if so, what is the best way to sow it?

Carleton Co.

Ans.—A stand of clover is sometimes obtained by seeding in corn, but the stubble of the corn prevents mowing the clover with a machine, hence the method should only be practiced when the clover is for pasture or manure, or on limited areas that can be mown with the scythe. In such cases the seed is sown broadcast just before the last cultivation. The seed should be sown thicker than usual, as much of it will be lost by lodging in the leaves of the corn, and, possibly, from the effects of dry weather.

**REGISTERING JERSEY CALF.**

Kindly inform me, through your valuable paper, how old a Jersey calf should be before it is registered in the "A. J. C. C."? Also, how to proceed, and what is the cost?

Westmoreland Co., N.S.

Ans.—If the calf is registered before it is two years old, the fee is \$2; if over two years, \$4. Write the secretary, Mr. J. J. Hemingway, 8 West 17th St., New York, for blank forms of application and rules.

**TEDDING CLOVER.**

I would like to ask if you think it advisable to try the green-saving of clover without the use of a hay tedder?

Simcoe Co., Ont.

Ans.—For the speedy drying of clover and timothy the tedder has come to be regarded as almost indispensable under most circumstances. The principles and practice of green-curing clover was very fully set forth on pages 550 and 566 of the June 15th "Farmer's Advocate."

**DRYING UP A COW.**

I have a heifer two years old that is very hard to milk. How can I dry her up?

York Co., Ont.

Ans.—If possible, keep her off the grass a few days and milk her once a day, gradually extending the time to every other day. Only milk her to ease her udder. If a cow is not milked she will dry up in a short time.

**DEVICE FOR MOWER.**

Can you tell me if there is any device for an attachment that will enable one to use a Massey-Harris mower as a reaper?

B. C.

Ans.—The only apparatus of the kind is a table that is attached to the cutting bar of a mower for the purpose of gathering short clover into bunches. It is not suitable for grain, and would not leave it in sheaves that could be bound.

**FALL LAMBS.**

What breed of sheep is best suited for fall lambs?

Antigonishe Co., N.S.

Ans.—Dorset sheep, advertised in this paper by R. H. Harding, Thorndale, Ont., bring earlier fall lambs, as a rule, than any other breed, and the ewes are good nurses.

**FERRETS WANTED.**

Where can I procure ferrets, or fitches? I have watched the advertising columns of the "Advocate" in vain for some time, hoping to get the name of some breeder of ferrets.

Lambton Co., Ont.

**BLADDER CAMPION IN LAMBTON.**

Enclosed find a species of some weed growing in one of my fields. I bought the farm last fall, and I find that one field is very thick with this, and I would like to know what it is and the best means to destroy it, and if it is a bad weed?

Lambton Co., Ont.

C. H. R.

Ans.—This is bladder campion (*Silene inflata*), one of the cockle family, sometimes called catchfly or campion. It is quite a persistent weed, the root being perennial; the cockles differ in this respect, they having annual root stems. A system of crops that introduces roots, corn and red clover quite frequently will keep the weed in check. It is most frequently introduced in grass and clover seeds, and thrives well where grain and hay crops are grown.

**BLADDER CAMPION AGAIN.**

Please inform me of the name of sample of plant enclosed, also what is the best plan to get rid of same? It is growing thickly in one of my neighbor's fields. Is it injurious to crop, and what is its character?

Ontario Co., Ont.

S. St. J.

Ans.—This is bladder campion. See a similar query in this column. It is something similar to cockle, and should be stamped out, as it spreads quite easily in seed of grain, grass and clover. Follow direction given in answer to the other question to subdue it.

**BINDWEED IN NOVA SCOTIA.**

I enclose herewith a sample of a weed that is likely to overrun my fields and destroy all the hay, as I notice wherever it grows there is not a spear of hay to be seen. Will you please give me its name, and the best and most expeditious way to eradicate it?

Ans.—This is a specimen of black bindweed (*Convolvulus arvensis*), the very worst weed that we know of. Carefully read the article in April 16th issue on the "Conquest of Bindweed." If the field is a large one, so that its size prohibits the practice of digging out the roots, as mentioned in the article, you had better keep it in roots, rape, corn, garden crops, etc., until the number of plants is greatly reduced.

**NOTES AND NEWS.**

**The Eastern Ontario Winter Fair.**

The Ontario Legislature has empowered the city of Ottawa to issue debentures to the extent of \$10,000 to provide funds for the erection of a building to permanently house a fat stock and poultry show. Three thousand dollars has also been voted to aid in financing the show. In spite of this, however, it is scarcely thought probable that a fair will be held in Ottawa this year. Last year the show was not the success it should have been, largely because it was very late in being announced and farmers had but few animals held over that they considered worthy of exhibiting. Many were disappointed, when coming to the show, at the way many of the classes failed to fill, due largely to this. Although it is thought this deficiency could be entirely obviated another year, there is not yet nor is there likely to be any suitable building available in time for the show. The one used last winter was entirely unfitted, although it answered its part in completing the whole experiment. Another difficulty which yet remains to be solved is the proper date. It is impossible to run concurrently with either Guelph or Umherst, on account of the same speakers having to be present at each place. To have it before Guelph would conflict with the Chicago International, and to have it after Amherst runs it into Christmas week. The only objection to holding it after New Year is that there is not at that season the demand for high-priced meat that there is during the Christmas season. In all probability, therefore, the officials will delay action for a year in hopes of completing all arrangements satisfactorily.

**Eastern Ontario Crop Prospects.**

In two weeks the outlook of the average farmer in Eastern Ontario has changed completely. Until nearly the middle of June crops of all kinds were becoming more withered every day, and many long faces and serious forebodings were the result. The middle of June, however, saw the long-continued drought broken, and the whole district was visited with several days' steady rain, followed by a week of dull weather. The return of warm weather caused, under the circumstances, a phenomenal growth. Meadows and pastures seemed to grow as much in a few days as they had during the entire two months previous. The rain came, however, too late to insure more than a light cutting of hay, and some of the spring grains will be quite short, and on some lands, where the seed scarcely more than germinated, a failure. It is not too late for farmers to provide substitutes for some of the crops thus affected, and many are resorting to millet to insure rough fodder in place of hay, and turnips where the mangel crop failed to come up. Fortunately, the corn crop will be little injured, and it is on this that many of the dairy farmers of the eastern counties chiefly depended for roughage.

**How to Save Money.**

Mangolds did not come well, and many are sowing turnips instead. Good crops of all the grains are expected. Hay generally will be light in this county, as the rain was rather late in coming to be of much benefit, but still, except on very light land, there will be fair crops. Corn and potatoes are making fair headway. Good seed corn was scarce and hard to get. The prospects for apples are not very bright, but the crop varies very much in different localities. Pastures are fairly good, and cows are milking very well. Our May milk averaged a little over 90 cents per 100 pounds to the patrons who hauled their own milk, and it took 11.05 pounds of milk to make one pound of cheese. Our factory is getting a larger flow of milk than in any previous year, several farmers having left the creamery on account of the high price of cheese. Our average price for May was 10.97½ cents. The cheese that was made on Saturday evening was shipped on the Monday afternoon. The price is a little easier now, but is ruling about 10½ cents.

There has been considerable mortality amongst dairy cows; mostly milk fever. The articles in the "Farmer's Advocate" re milk fever were of a very timely nature, and to an intelligent reader were worth the cost of twenty-five years' subscription to the paper. The articles on the care of the brood mare at foaling time were really splendid. I read them over when the paper came from the office, and then took the "Advocate" out to the stable and read again by the light of the lantern while I was watching the mare. Quite a number of farmers have lost their colts, some of which could have been saved by following the carefully detailed instructions given in the "Advocate." A fifty-dollar colt would pay for the "Advocate" for fifty years. That would be an easy way to get the paper, and look at the valuable information given in every other department of farm economy. The Canadian farmer who does not subscribe for this, which is easily the best of agricultural papers, is surely penny wise and pound foolish.

Live hogs are a little easier in price, \$5.50 being paid last week, with the tendency downwards. We had a bunch of spring pigs that had got a little sunburnt, and were scratching and not thriving. One day it rained, we took soft soap and a scrubbing brush and gave them a good clean-up and opened the pores of their skin, and gave an application of Little's Sheep Dip. They seemed to thrive much better afterwards.

Ox-eye daisy and seed docks are getting to be quite a pest in this neighborhood. If some farmer with experience will give us, through the "Advocate," a sure and inexpensive method to exterminate these pests he will confer a very great benefit on us.

A great many mares are being bred this season, but we do not think that much more than fifty per cent. of the mares that were bred last season have healthy living colts. Quite a number did not get in foal at all, and quite a number of foals died.

Several men were gathering up calves to send to Toronto to be manufactured into "canned chicken," so that we were saved the trouble of killing them for the skins. We got from 75 cents to \$1.25, according to age and size.

Oxford Co., Ont.

**Peel Co., Ont.**

The hay crop is going to be very short, and many of the old meadows will not be worth cutting. The mangel crop is a complete failure this year in this district, and they mostly all have been cultivated up and resown with turnips or corn. Owing to recent rains, all kinds of early-sown grain crops are doing well, but those that were put in later will be short and light. The clover will be cut earlier this year, on account of the midge, and the farmers will be looking forward for a second crop, which, no doubt, will be much heavier than the former.

As this is a good section for alsike, beekeepers bring their bees from far and near and place them on the farms of those who grow alsike. The effect that the bees have on the bloom adds greatly to the yield of the alsike. The strawberry growers find it a difficult task to secure pickers in Port Credit and Clarkson districts, and are greatly worried over this drawback. They are driving over the country and sending for Indians as far as Brantford and Western Ontario, but they only meet with partial success. The rains have loaded the vines with large red fruit, and in three and five acre patches there are only to be seen about half a dozen pickers. The growers are looking very serious over it. Some have sent to the Immigration offices for help, but without success. Strawberries are of very fine quality and equal in quantity, and it is possible that a smart picker can make from \$2 to \$3 per day. The prices this year ranged from 4c. to 8c. a box.

**O. A. C. Graduates at Work.**

Several of the 1903 graduates of Ontario Agricultural College have already entered upon work along their respective lines. W. J. Rutherford goes to the Iowa College as Assistant in Animal Husbandry; W. T. McDonald has joined the staff of "The Farmer," of St. Paul; E. G. de Coriolis has been appointed Assistant Chemist at the O. A. C.; A. P. Kitchen has entered the Department of Agriculture at Ottawa; T. D. Elderkin takes up similar work at Toronto, and H. Rive is giving instruction in buttermaking at the College. The field of advanced agriculture is a broad one, and there is a constant demand for men of exceptional ability to take up the different branches of work.



**P. E. Island.**

Still no rain. Though showers have fallen both east and west, here, in the center of Queen's County, we have had no more moisture than would result from a heavy dew. The weather still keeps cold, with the prevailing wind from the east. Vegetation is at a standstill. Hay is exceedingly short. If rain does not come soon much of it will not be worth cutting on the old meadows. Pastures are very bare, though there is a good bottom of grass that would quickly respond to warm showers. The early grain keeps its color pretty well, but the later sown is doing nothing. Clover and grass have germinated very poorly. There is very little of it to be seen in the newly-seeded meadows. Turnips that have been sown for three weeks have not come up yet, except in some few cases where the land was a little more moist. The few turnips and mangolds that have come have suffered from fly and grub. Potatoes are coming pretty well. Altogether the agricultural outlook here is gloomy for this time of the season, but, of course, a good rain even at this late date would put a much brighter face on our agricultural prospects. The milk supply at the dairy stations is very small, and if this drought continues much longer our dairymen will have the poorest season for years. Beef cattle continue very low. The best would not bring over 4½c. just now. Ontario beef quarters coming to Maritime markets in refrigerator cars is taking these markets from us.

The few May cheese that were made were sold for 11c. Butter has dropped from 26c. to 22c. A few horses are being shipped, prices ranging all the way from \$100.00 to \$250.00. Live hogs are worth \$6.00 per 100 lbs. Eggs sell for 12c. The bloom is just beginning to go off the apple trees. Not nearly so much bloom on them as last year. This is the off year for apples here, and we don't look for a large crop.

A contract has been let for a new market house in Charlottetown to replace the one burnt some months ago. It will be a very imposing building, costing about \$40,000, and will be located on the old site on Queen Square. This is our farmers' market, and is held on two days of the week, Tuesdays and Fridays, when the finest collection of foodstuffs is displayed that is to be seen in the Maritime Provinces, or, indeed, in Canada. It is on these days of the week that most of our farmers visit our capital city to sell their produce and buy their supplies. W. S. June 20th, 1903.

**Central Canada Fair, Ottawa.**

The Central Canada Exhibition, annually held at the seat of Government of the Dominion, is fixed to take place, beginning September 11th and running till the 19th. Many readers of the "Farmer's Advocate" are aware of the excellence of this fair. For those who are not, it may be stated that the show is looked upon by many to rank among the greatest annual shows of the world. The association has grounds which for accommodation in all departments and picturesqueness are all that could be desired. We can bear testimony to the fact that exhibitors have been well treated. Expense has been a secondary consideration in providing for the comfort, instruction and entertainment of the multitudes viewing the show. It is an exhibition that offers the greatest encouragement to the farmer and the stock-breeder. Special competitions are arranged and costly gold medals offered annually as special prizes to these classes of exhibitors. The gold-medal prize list—indeed, the entire premium list—this year is bigger and better than ever before. The special attractions are always the best to be had. All together, there is every reason why readers, if they have not exhibited at or attended the Central Canada Fair, should be advised to do so in their own interests. Mr. Ed. McMahon is the secretary, and will readily supply all information desired.

**International Judging Competition.**

Announcement is made that Messrs. Clay and Saunders, of Chicago, will again contribute \$250 each to the International judging competition. The money will be divided into twelve prizes, ranging from \$100 down. The rules and regulations will be published in the preliminary classification, which will soon be published. The judging competition is one of the most interesting features of the International Live Stock Exposition, and should be contested by large numbers of young stockmen.

**Canada at St. Louis.**

A large delegation of stock breeders waited upon the Government at Ottawa, on June 23rd, asking a grant of \$100,000 towards making an exhibit of pure-bred stock from Canada at St. Louis in 1904, being \$20,000 for expenses, \$70,000 for prizes and \$10,000 for contingencies. Hon. Mr. Fisher thought the first item too small, but the second was new to him. Consideration was promised.

**Call to Prof. Day.**

Prof. G. E. Day, Agriculturist at the Ontario Agricultural College, has been offered the position of Live Stock Commissioner in the Orange River Colony, South Africa, at \$5,000 per year.

**Flatt & Son's Yorkshire Sale.**

The large and enthusiastic company of farmers and breeders brought together by the announcement of the auction sale at Hamilton, Ont., on June 25th, of the seventy head of Large English Yorkshire hogs imported by Messrs. D. C. Flatt & Son, Millgrove, Ont., were delighted with the character and quality of the importation, which quite exceeded their highest expectations and fully justified all that had been claimed for it. The remarkable uniformity of approved type, smoothness and high-class quality was the admiration of all present, and the result of the bidding, an average of \$115 per head, amply sustained Mr. Flatt's sound judgment and business sagacity in rightly reading the signs and requirements of the times. While Canadian farmers, alive to the importance of the bacon trade and of the fitness of the Yorkshires to meet that trade, were present in large numbers, and bid pluckily all through the sale, securing a good share of the best of the offering, the presence of a number of United States breeders, and their purchase of a large percentage of the best, augurs well for the future of the breed and of the trade on this continent. The presence of a lady bidder and buyer, persistently competing for the best in the sale of swine, was a novel feature to Canadians, and Mrs. Wilcox, representing the Wilcox Co., of White Bear, Minnesota, displayed excellent judgment in her selections, securing fourteen head, for which her bill was \$2,035, or an average of \$145 each, and including the grand boar, Borrowfield Clipper, at \$290, the highest-priced male in the sale. Mr. T. H. Canfield, Lake Park, Minn., was one of the principal buyers, claiming nine among the best at an average of \$180, and including the beautiful and typical yearling sow, Summerhill Dalmeny Cotgrave Lady Frost, bred by the Earl of Rosebery, at \$400, the highest price of the sale, and the first animal offered. The sale was admirably conducted in every respect. The auctioneers, Messrs. Ingram, Robson and Smith, did excellent work, well sustaining the interest throughout. Following is the list of purchases amounting to \$50 and over. The prefix, Summerhill, applies to the name of each animal.

Summerhill Dalmeny Cotgrave Lady Frost; T. H. Canfield, Lake Park, Minn.	\$400
Borrowfield Clipper (boar); Wilcox Co., White Bear, Minn.	290
S. H. Dalmeny Cotgrave Lady Frost 2nd; Jno. Hill, Wellesley	260
S. H. Colston Eclipse 2nd (boar); T. H. Canfield	225
S. H. Cotgrave Dolly 2nd; Wilcox Co.	210
S. H. Borrowfield Rose; Wilcox Co.	205
S. H. Dalmeny Cotgrave Long Lass 2nd; W. E. Rockhill, Etna Green, Ind.	190
S. H. Nottingham Lady Sarah 6th; Wilcox Co.	180
S. H. Dalmeny Cotgrave Lady Frost 3rd; Wilcox Co.	180
S. H. Dalmeny Long Lass 7th; T. H. Canfield	175
S. H. Nottingham Lady Sarah 4th; T. H. Canfield	175
S. H. Dalmeny Duchess 39th; Wilcox Co.	175
S. H. Nottingham Lady Sarah 3rd; Ontario Agricultural College	170
S. H. Dalmeny Dolly 4th; Ont. Ag. College	160
S. H. Colston Eclipse (boar); D. Kilmer, Elkhart, Ind.	166
S. H. Dalmeny Duchess 21st; T. H. Canfield	150
S. H. Botesford Emperor (boar); F. Rabler, Lehigh, Nebraska	150
S. H. Nottingham Lady Sarah 2nd; H. Jennings, Cottingham	145
S. H. Colston Lass 6th; W. E. Rockhill	140
S. H. Cotgrave Duchess; Adam Straub, Elmira	135
S. H. Nottingham Lady Sarah 7th; Wilcox Co.	135
S. H. Nottingham Lady Sarah 8th; J. Featherston, Streetsville	135
S. H. Dalmeny Verbena; T. H. Canfield	130
S. H. Dalmeny Long Lass 7th; John Hill	120
S. H. Dalmeny Cotgrave Dolly; S. G. Little, Hagerman	115
S. H. Dalmeny Duchess 36th; Russell Dymont, Copetown	115
S. H. Dalmeny Duchess 38th; Wilcox Co.	105
S. H. Dalmeny Duchess 40th; T. H. Canfield	105
S. H. Dalmeny Topman 3rd; W. E. Rockhill	105
S. H. Dalmeny Duchess 35th; Wilcox Co.	105
S. H. Dalmeny Dolly 6th; D. Kilmer	105
S. H. Dalmeny Cotgrave Long Lass 3rd; J. M. Richardson, Lowville	105
S. H. Nottingham Lady Sarah 12th; J. E. Brethour, Burford	105
S. H. Nottingham Lady Sarah; M. L. Loudon, Bithbrook	105
S. H. Nottingham Lady Sarah 11th; S. G. Little	105
S. H. Nottingham Lady Sarah 5th; Wilcox Co.	100
S. H. Dalmeny Empress 17th; S. G. Little	100
S. H. Nottingham Lady Sarah 14th; T. H. Canfield	100
S. H. Dalmeny King (boar); Wilcox Co.	100
S. H. Dalmeny Dolly 5th; J. M. Richardson	100
S. H. Dalmeny Dolly 8th; J. M. Richardson	100
S. H. Nottingham Lady Sarah 10th; Mrs. H. Drummond, Flamboro	100
S. H. Dalmeny Long Lad (boar); J. A. Bradley, Orchard	95
S. H. Nottingham Lady Sarah 13th; W. E. Rockhill	95
S. H. Nottingham Lady Sarah 17th; E. R. James, Windpeg	95

S. H. Dalmeny Empress 16th; Wilcox Co.	85
S. H. Nottingham Lady Sarah 9th; Wilcox Co.	85
S. H. Dalmeny Duchess 37th; J. I. Flatt, Hamilton	85
S. H. Nottingham Lady Sarah 15th; L. Rogers, Weston	85
S. H. Colston Sunshine; John Hill	85
S. H. Dalmeny Dolly 8th; Hudson Usher, Queenston	85
S. H. Cotgrave Scott (boar); J. M. Richardson	75
S. H. Dalmeny Fusilier (boar); Adam Straub, Elmira	75
S. H. Borrowfield Faith; J. A. Bradley	75
S. H. Borrowfield Rose 78th; J. M. Richardson	75
S. H. Dalmeny Dolly 3rd; Wilcox Co.	70
S. H. Dalmeny Topman 6th (boar); John Hill	60
S. H. Borrowfield Topman 20th (boar); J. A. Russell, Precious Corners	50
S. H. Dalmeny Turk 2nd; E. R. James, Windpeg	50
S. H. Dalmeny Topman (boar); J. H. Snell, Hagersville	50
S. H. Borrowfield Lady Gainsboro 77th; J. M. Richardson	50

**Eighth Annual Meeting of the American Association of Farmers' Institute Workers.**

For the first time in the history of this association the annual meeting was held in Canada, on June 23rd to 26th. The association convened at the Parliament Buildings, Toronto. Delegates were present from as far south as Texas and Alabama, from as far west as Regina and the Eastern States, and the Maritime Provinces sent up several of their best authorities on agricultural subjects. Representatives of the different States and Provinces reporting were: Dr. C. A. Cary, of Alabama; W. Webb, Delaware; E. M. Conner, Florida; H. G. Easterly, Illinois; W. C. Latta, Indiana; L. R. Taft, Ag. Col. of Michigan; O. C. Gregg, Minnesota; J. C. Hardy, Mississippi; W. W. Hubbard, New Brunswick; F. Dye, New Jersey; F. E. Dawley, New York; B. W. Kilgore, North Carolina; E. E. Kaufman, North Dakota; Geo. Harcourt, Northwest Territories; W. W. Miller, Ohio; G. C. Creelman, Ontario; A. L. Martin, Pennsylvania; C. A. Gigault, Quebec; Geo. McKerrow, Wisconsin; Prof. Brown, Connecticut; W. G. Vincenheller, Arkansas; Dr. Sylvester, Maryland; John Hamilton, Farmers' Institute Specialist, Washington, D. C.

During the past year Prof. W. C. Latta, of La Fayette, Ind., has been President; Major J. C. Lee, of Baton Rouge, La., Vice-President; and G. C. Creelman, Toronto, Secretary-Treasurer.

**PREMIER ROSS' ADDRESS.**

Premier Ross, of Ontario, welcomed "the agriculturists of the United States and Canada," and flattered the Americans upon the example they had set us in the teaching of agriculture in high schools, and the liberal manner in which they supported their agricultural institutions, but commiserated our neighbors good-naturedly on their failure to look at trade relations in the broad light in which we regard it. However, said the Premier, they will learn better.

Dr. J. C. Hardy, of Mississippi, responding to the address of welcome, eulogized the very important part Canadians had played in the development of the agricultural resources of the State of Mississippi. The influences emanating from the O.A.C. have rejuvenated and stimulated the agricultural life of all the Southern States, raising agriculture from the lethargy into which the degenerating influences and practices of slavery had plunged it, into a vital, progressive and most productive industry.

The annual address of Dr. W. C. Latta, of Indiana, emphasized the undeniable fact that the Farmers' Institutes had been conducive of very much intelligent discussion by farmers, engineers, scientists and others, which had materially raised the standard of agriculture.

**THE PRESIDENT'S ADDRESS.**

The President said that the Institute holds a unique place in disseminating the knowledge and results formulated and obtained by the experimental farms and agricultural colleges, and expounded the doctrines of bulletins and of the agricultural press. And, further, the personality of the institute speaker entuses the farmer and increases his interest in his business more than any other influence could do. The requisites of a directing board of management of institutes should be conservative, but broad; enthusiastic, but practical; and such a management should have ample power to accomplish the maximum good. Speakers at meetings should have:

- 1st—A country birth, with a thorough knowledge of farm life.
- 2nd—Should have a good school education.
- 3rd—A good agricultural education.
- 4th—Should have a special education along some particular branch, and he should be a student of his business, with all that that implies. Just in proportion as he has been successful, will his remarks and teaching be appreciated and appropriated.

At an institute meeting the comic song and



the embryonic elocutionist should be eliminated, and the more educative features kept prominently to the front.

The problems before the farmers' institutes are: How to reach the great inert mass of farmers and inspire them to achieve something more than mediocre success; how to rouse the young men and women of the farm to seek adequate preparation for life in the country and success on the farm; how to get the rank and file of farmers and farmers' wives to see that intelligent labor is not drudgery, but a joy and blessing to him who performs it, and that the rewards of such labor are as sure and satisfactory on the farm as elsewhere; how to get the average farmer to realize that the farm gives the ideal setting for a cosy, convenient, sanitary and beautiful dwelling; how to get the farmer to realize that the farm furnishes just the conditions for an ideal home in his beautiful dwelling; and how to encourage and arouse the poor, tired farmer's wife not only to yearn for, but also to resolutely strive for such a home, and meanwhile seek to equip herself mentally and spiritually to hold gentle sway therein.

But to descend to the practical: How to uproot the false ideals which lead thousands of fathers and mothers to undergo slavish toil and privation to accumulate material riches which their untrained and uneducated children will squander and quarrel about; how to get these parents to see that their misguided, though well-meant labors for their children are certain to prove harmful, and likely to be disastrous to them; how to get the "practical" farmer to plan and act as if he really thought more of himself, his wife and his children than of his acres and stock; how to get the young people to realize that the farm offers better opportunity for improvement and happiness than the shop, office or factory; how to get them to realize that agricultural education increases the earning power of and adds zest to life in the country; how to banish forever the farmer's low estimate of himself and his calling, and his petty jealousies, which prevent him from intelligent co-operation with his brother farmers for their mutual protection and advancement. The greatness of your opportunities as workers is the measure of your responsibility.

TRAINING FOR INSTITUTE WORK.

Hon. Franklin Dye, of New Jersey, addressed the convention on Wednesday morning upon "The training for institute work; prime qualifications of speakers, and how to obtain them," and said: By reason of the nature of farm work, an institute speaker must have a most comprehensive knowledge of the subject upon which he speaks. Visionary theorists, semi-oration speakers and "dronery" utterers of platitudes kill any institute. In the future speakers will be required to be more thoroughly trained than have speakers up to the present time. The prime qualifications of a speaker, according to Prof. Dye, are:

- 1st—A gentlemanly, dignified appearance—not foppish; not slovenly.
- 2nd—A good, well-trained voice, giving a clear and impressive enunciation.
- 3rd—Chaste speech; nothing is gained by vulgarity or careless language.
- 4th—Should have something to say, and speak to the point.
- 5th—Should not use sarcasm in answering an honest questioner, however crudely the question may be put.
- 6th—State all important matters so clearly that they need not be misunderstood.

Some institutes demand addresses along advanced lines, others are in the primary class, and still others have pupils in all grades. We may not introduce the graded institute. The "practical" farmer should be encouraged to speak. A class of speaker that we should appreciate is the scientist who is at the base, and who is looking forward, trying to understand the essential principles upon which the superstructure of correct and profitable agricultural practice rests. The purpose of the institute being to correct and elevate agricultural thought and practice, it follows that the standard of institute work should gradually be elevated. This growth will not be so much by having something new as it will by having something better. Schools of pedagogy and declamation might be endowed and equipped to train speakers. The work of the institute speakers should be to elevate and help those who are discouraged with their conditions. Too many ignore the rising light of science, agricultural chemistry and rational practice. They seek to increase their income by adding profitless acres; by adding to their dairy herds animals not capable of paying expenses, and they lose by unwise rations for farm animals. This is the class we want to reach.

DISCUSSION.

In the discussion upon Mr. Dye's address, Mr. Martin, of Pennsylvania, emphasized the importance and great advantage of having speakers who have had experience in the working

out with their own hands and heads of the problems which they discuss. Boys in certain parts of Pennsylvania were taken from schools and given special instruction in the different branches of farming, and afterwards were put upon farms and given a chance to work out and put in practice the theories taught at the schools. When such training proved successful, the fortunate student made a most useful institute speaker.

Mr. Dawley, of New York, brought to the notice of the convention the necessity of uniformity of ideas in the different institute speakers. To accomplish this end, the institute speakers of New York held a week's convention before going upon the road. Addresses were delivered to this meeting of workers by the highest authorities on different branches of agricultural work and science. It had been found that unless a uniformity of expression and presentation of truths by speakers were followed, diversions of opinion arose among listeners, which tended to throw discredit upon institute work. If we are to make an impression upon a piece of iron we must all strike in the same place.

G. C. Creelman, of Ontario, called attention to the benefits the institute workers derived from a week's special lectures preparatory to a campaign. The educational features of the winter fair and the experimental union were made use of in Ontario. At the round-up of workers the opinions of the different speakers were toned down and their doctrines made to dovetail, and the importance of principles was impressed rather than mere details which, though varying, gave identical results.

The subject of organization for institute work was taken up by Prof. L. R. Taft, of the Michigan Agricultural College. The drift of the address was an outline of institute work as carried on in Michigan. Their plan of conducting institutes is followed by some of the States, but differs very widely from others. Permanent organizations are found to give better results than temporary ones, or those in connection with the Grange or other organization.

Mr. O. C. Gregg, of Minnesota, discussed the importance of securing speakers who are practical, and who will handle the main question. He favors the plan of having work well organized, and directed from a central point to avoid sectionalism. The central office should have power, but also tact. As President Roosevelt says: "Speak softly, but carry a big stick."

Mr. Creelman pointed out the advantages of permanent organization for the purpose of maintaining a live interest throughout the year. Organization of institutes in Ontario is now so complete that if the superintendent should drop out of the work there would be a dozen other men who could conduct operations just as successfully as they are at present conducted.

Accessories in institute work was the subject of a paper by Fred H. Rankin, of Urbana, Ill. Mr. Rankin would encourage the boys in corn-breeding, in plowing matches, etc., and thinks the institute should be extended to the boys and girls in order to keep them interested in farm life.

The following officers were elected: President, B. W. Kilgore, North Carolina; Vice-President, E. G. Kaufman, North Dakota; Secretary-Treasurer, G. C. Creelman, Toronto (re-elected). Executive Committee—George McKerrow, Mississippi; H. G. Easterley, Illinois; J. C. Hardy, Mississippi.

This report will be concluded in next issue.

The Ames Suspension.

The recent suspension of A. E. Ames & Co., of Toronto, Ont., bankers and stock brokers, bids fair to be only of a temporary character. As already intimated in the "Farmer's Advocate," their difficulties arose from an uncalled for depreciation in certain stocks which they were handling for investors. They have been enabled to issue a statement showing a surplus of \$300,000 and proposing a settlement of their liabilities upon a basis of payment in full with interest at six per cent. This has given very general satisfaction to the public. The confidence reposed in them, not alone by their creditors, but by the banks, whose course has done so much to save the situation, must be gratifying to them in the extreme.

The Weather.

The weather man at Toronto has announced that, judging from average conditions and temperatures extending over many years, we are likely to receive more than an average amount of aqueous precipitation this summer. We don't like to hear it, but we know from experience what to do when it rains. It is to be hoped, though, that the hay crop will not suffer as it did a year ago. The intimation must not be taken as a notice to neglect the earth mulch in the corn and root fields. The weather forecasts are only guesses, and it is well to be prepared for a dry day as well as a wet one.

Postponement.

As we go to press, we have received a telegram from Hon. M. H. Cochrane, of Hillhurst, Que., postponing the sale of his herd of Shorthorns to have been held at Hamilton, on August 11th.

MARKETS.

Toronto Markets.

Export Cattle.—Choice, \$5 to \$5.25; general run, \$4.80 to \$5; medium, \$4.30 to \$4.70.  
Bulls, \$2.75 to \$4.25.  
Butchers' Cattle.—Picked lots, \$4.60 to \$4.80; choice, \$4.40 to \$4.50; fair to good, \$4.10 to \$4.30; cows, \$2.50 to \$3.  
Stockers and Feeders.—Best feeders, \$4.40 to \$4.60; medium, \$4.40; light, \$3.60 to \$4; stockers, \$2.75 to \$4.  
Milk cows, \$30 to \$50 each.  
Calves, \$2 to \$10 each, and 4¢. to 5¢. per lb.  
Sheep.—Export, \$2.75 to \$3.90; lambs, \$3.50 to \$4.50; culls, \$2.50 to \$3.50.  
Hogs.—\$5.75 for selects, \$5.50 for light and fat, and \$4 to \$4.25 for sows.

GRAIN AND PRODUCE.

Wheat.—Red and white, 74c., middle freight; goose, 66c., middle; Manitoba, No. 1 hard, 89c., grinding in transit; No. 1 northern, 88c.  
Barley.—No. 3 extra, for export, 44c. to 45c., and No. 3 at 42c. for export.  
Oats.—Oats, 31c. north and 34c. at Toronto, and 33c. east for No. 1.  
Corn.—Canadian, 53c., and 55c. for American, on track at Toronto.  
Peas.—Sold for milling purposes at 65c. west, and 64c. for No. 2 for export, middle.  
Rye.—51c. middle and 52c. east.  
Bran.—City mills sell bran at \$16 to \$17, and shorts at \$18, car lots, f. o. b. Toronto.

TORONTO STREET MARKET.

Grain.—Wheat: red, 75c. to 77c. per bush.; white, 76c.; spring, 74c.; goose, 69¢. to 70c.; barley, 44c.; beans, \$1.30 to \$1.50; beans, hand-picked, \$1.75; peas, 78¢.; rye, 45c.; oats, 36c.; buckwheat, 43c.  
Hay and Straw.—Hay, \$12 to \$13 per ton; clover, \$6 to \$9; straw, loose, \$5.50; straw, sheaf, \$7 to \$8.50.  
Fruits and Vegetables.—Apples, winter, \$1 to \$1.25 per bbl.; potatoes, \$1.25 to \$1.30 per bag.  
Poultry.—Chickens, 80c. to \$1.25 per pair; spring chickens, 75c. to \$1; spring ducks, 90c. to \$1.50; turkeys, 12c. to 15c. per lb.  
Dairy Produce.—Butter, lb. rolls, 16c. to 20c.; eggs, new-laid, 16c. to 18c. per dozen; cheese, 11¢. to 11½¢.  
Fresh Meats.—Beef, fore quarters, cwt., \$4.50 to \$5.50; beef, hind quarters, cwt., \$8 to \$9.50; mutton, light, cwt., \$7.50 to \$8; mutton, heavy, cwt., \$6 to \$7; spring lambs, each, \$3.25 to \$4.50; spring lambs, d's'd, cwt., \$11 to \$12.50; veal, carcass, cwt., \$7 to \$9; dressed hogs, light, cwt., \$7.75 to \$8.25.

Chicago Markets.

Chicago, June 24.—Cattle—Good to prime steers, \$5 to \$5.50; poor to medium, \$4.25 to \$4.80; stockers and feeders, \$2.75 to \$4.70; cows, \$1.60 to \$4.50; heifers, \$2.25 to \$4.75; canners, \$1.60 to \$2.80; bulls, \$2.25 to \$4.25; calves, \$2.50 to \$6.25; Texas-fed steers, \$3.50 to \$4.60.  
Hogs.—Mixed butchers', \$5.70 to \$5.80; good to choice, heavy, \$5.75 to \$5.85; rough, heavy, \$5.60 to \$5.75; light, \$5.70 to \$5.85; bulk of sales, \$5.75 to \$5.80.  
Sheep and Lambs.—Good to choice wethers, \$4.40 to \$5; fair to choice, mixed, \$3 to \$4.25; native lambs, \$4 to \$6.80.

Buffalo Markets.

East Buffalo, June 24.—Cattle—Prime and shipping steers, \$5 to \$5.50; butchers' steers, \$4.25 to \$5; heifers and culls, \$2.75 to \$4.85; bulls, \$3 to \$4.25; feeders and stockers, \$3.50 to \$4.40.  
Veals, \$5.25 to \$5.35.  
Hogs.—Heavy, \$6.30 to \$6.35; mixed, \$6.30; Yorkers, \$6.30 to \$6.40; pigs, \$6.45 to \$6.55; roughs, \$5.40 to \$5.65; stags, \$4 to \$4.50; dairies, \$6.15 to \$6.25.  
Sheep and Lambs.—Lambs, \$5 to \$5.75; yearlings, \$5.50 to \$5.75; ewes, \$4.25 to \$4.35; sheep, mixed, \$2 to \$4.75; wethers, \$5 to \$5.25.

Montreal Markets.

Montreal, June 24.—Prime beefs, 5¼c.; medium, 3¼c. to near 5c.; common stock, 2¼c. to 3¼c. Veal calves, \$7 to \$15, or about 5c. per lb.; common, \$2.50 to \$5, or from 3c. to 4c. per lb. Sheep, 3c. to 3¼c. per lb.; lambs, \$2.50 to \$4.50 each. Fat hogs, 6c. to a little over 6¼c. per lb.

British Live Stock Markets.

London, June 24.—Live cattle firm at 11c. to 11½c. per lb. for American steers, dressed weight; Canadian steers, 10¼c. to 11¼c. per lb.; refrigerator beef, 8¼c. to 9c. per lb. Sheep, 10¼c. to 13c.  
In Marion Co., Indiana, 48 Unions of the American Society of Equity have been started, the object being to get \$1 per bushel for wheat next fall.





"Sing a song of roses,  
The garden all ablow,  
White and cream and crimson  
All standing in a row."

### Jottings from the Isles of Scilly.

NO. I.

In quaint old Devonshire dialect I shall now be able to say, "I've abin" to Scilly at last. When I was younger, some thirty years ago, I had an all too short holiday amongst those wonderful Islands, and on leaving them made up my mind that if it were only possible I would visit them once more. The time and the opportunity offered at last, rather late in the day, it is true, but not, I am thankful to record, before my old joints became altogether too stiff to carry me over wind-swept bluffs, across gleaming white sands, strewn with shells, and in and about and around curiously grouped rocks, which are a marked feature of Scilly Island scenery, and which have for centuries stood as dumb witnesses to histories so wrapt in the mysteries of the past that it is almost impossible to separate fact from fiction, the real from the ideal, actual happenings from legendary records. Perhaps this is one of Scilly's greatest charms, especially for the imaginative, whose pretty little fancies, however, are likely to be met by terribly knock-down blows from prosaic geologists and matter-of-fact scholars, who from a fragment of stone or a splinter of bone can give you a reason for everything, a reason which no one would attempt to dispute. But even these learned folks dare not positively assert that the story of the "Faire land of Lyonesse" was altogether legendary; that once upon a time, far back amongst the ages, there did not exist "a plain stretched from Land's End to Scilly, and that upon this plain was built the City of Lyonesse, with its churches, smaller towns and villages dotted here and there, until a mighty tempest arose, accompanied by a convulsion of nature, causing the sea to break over them all, submerging nearly the whole forty miles of inhabited coast, and wiping out Faire Lyonesse from the face of the earth, leaving only the Scilly Isles, the Seven Stones Reef and the Wolf Rock standing out above the waste of waters."

The history of Scilly, or "Rocks dedicated to the Sun," is that of Phœnician mariners, Druidic rule, Roman and Danish invasion (leaving an intermixture of Norse blood), a stronghold for piratical descents upon the Cornish coasts, and raids up the Bristol Channel, until in A. D. 927 Athelstan got the upper hand and ousted the invaders.

A most chequered history is that of the Scilly Isles, but one well worth the study. Domesday Book has no record of them, so one can only suppose that their inaccessibility neutralized their value as property. Later on this was not so, for the Abbot of Tavistock held a large proportion of them until the dissolution of the Monasteries in 1539. Thieves and pirates had possession of several safe refuges amongst the big boulders, concealing their hiding places, and in the time of Henry VI. the Islands "were held of the King at a yearly rent of fifty purlins and six shillings and eight pence." In Richard III.'s time their value was returned "at forty shillings in time of peace, and in time of war, nothing." The old historian Leland, in the 16th century, records "that the ground on the Isles bere grass, exceeding good pasture for catail (cattle), but not been be glad to inhabit these islettes for all their plenty, the robbers by sea take their catail

by force. These robbers be Frenchmen and Spaniards." It took shrewd Queen Elizabeth to recognize "the strategical value of Scilly as the key to England"; hence the various batteries on St. Mary's, now in ruin, and Star Castle, in the garrison around which gathered the harried and driven Scillonians of that day. The ancestors of the sturdy race of this generation must have had hard times. No wonder smuggling was rife, and a wreck looked upon less as a calamity for the unfortunates whose lives were lost by it than as a providential provision for their own wants. The old mill still stands on Peninis which ground the little corn they could raise, but the fine breeds of cattle and sheep which graze on the gorse-crowned hills of Scilly to-day, must be very unlike the poor stunted specimens which in those years of hardship were hardly worth the killing.

At the dawning of the 19th century the outlook for the poor Scillonians was very dreary. They had led for years but a hand-to-mouth existence, trying kelp-burning, fish-curing, potato-raising and shipbuilding, but in all these they were superseded by more conveniently-placed traders, and failed from this and other causes. Spasmodic efforts were made in the reign of William IV. to lighten their burdens, but it remained for Mr. Augustus Smith, once M. P. for Truro, who became Lord Proprietor of the Isles—a kind of King of Scilly—to find a remedy for existing evils, and to establish such a new and practical form of government that brighter days dawned for the disheartened people, many of whom, however, resented at first his somewhat despotic rule and could not see how really beneficent it was. Why should their children be obliged to go to school? Why should their sons be forced, as was the result of the new regime, to go away from their beloved Islands to seek a livelihood in other fields? Now they are proud to remember that the "youth of Scilly entered into the world's arena with the advantages of a generous educa-

are of a very general type, where you may get everything from a gorgeous hat, with cockatoo or ostrich feathers, to a frying pan or row of pins, but there is no special effort at embellishment, no catchpenny attractions to invite the passer-by. If you want an article in Scilly you go inside and ask for it, and after patient waiting until a friendly gossip is over between a previous "shopper" and the proprietor, sometimes you get it and sometimes you don't. Even as a possibly profitable customer you realize you are not a Scillonian, but a "foreigner," and as such have naturally your limitations.

H. A. B.

### THE QUIET HOUR.

#### "One of These Little Ones."

"The Shepherd signs His lambs in haste,  
Ere on the mountain waste  
He loose them, far and wide to stray;—  
And whoso mars their way,  
Or scorns the awful name they show,  
That Shepherd counts him foe."

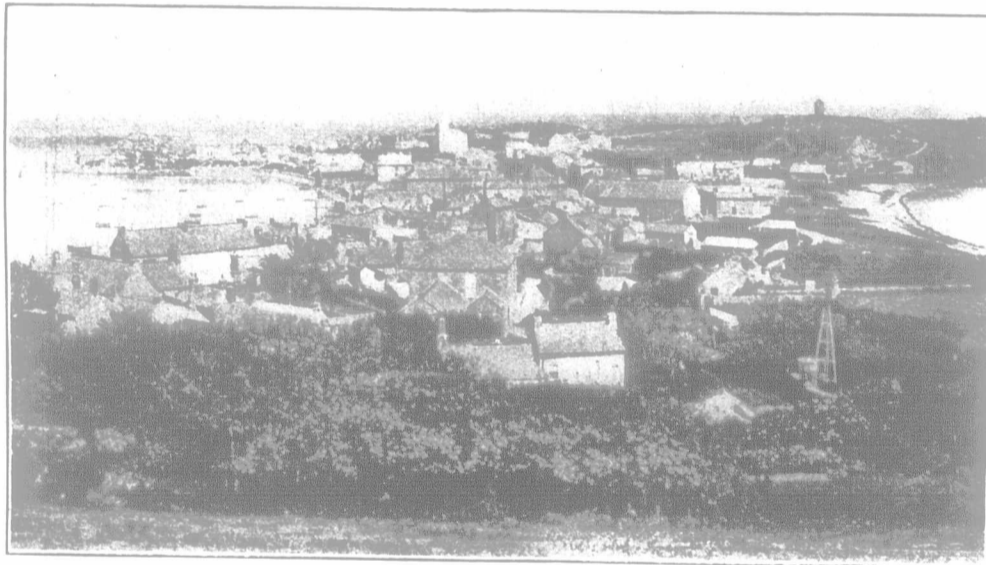
As I painted the front doorsteps a few days ago, and did several other routine jobs which left the mind free, one question kept repeating itself over and over again in my brain: "What shall I write about this week?" As a rule, before one "Quiet Hour" is typewritten and sent off to the "Advocate" office, the next has already begun to force itself on my attention, but this week it was not so.

"What does it matter, after all? Who has time or energy to read sermons in July?" Surely Satan must have whispered that suggestion in my ear, but I respect the "Advocate" readers too much to send them anything less than my best—whether they care to read it or not—and I hold myself responsible to Him who has given me the great privilege of carrying His messages to thousands. I dare not carelessly fling away such an opportunity.

While I pondered the question, wondering whether God had really no particular message that He wanted me to pass on to you this week, a letter reached me from a friend in Toronto, asking me if I could interest any of my friends in the "Children's Fresh-air Work." My friend says: "If some of God's people, surrounded by all the beauty of their country homes, could see the eager, pinched little faces that have been asking us for weeks past to send them to the country, they would long to share their blessing with them."

The children are sent to country places, within reasonable distance from Toronto, for two weeks' holiday. They go two and two, so as to prevent homesickness, and the Mission pays their railway fare both ways. I quote from the circular enclosed by my friend: "Is a child worth saving? One has said, if you save a man you save a soul, but if you save a child you save also a life.....God opened the hearts of friends in all parts of Ontario, to receive these needy and deserving ones. And the best evidence of the generosity and hospitality of these friends, is the testimony of the boys and girls, that they had a real good time, and always as much as they could eat. Many of them had never seen the country before, and to them the sights and experiences on a farm were wonderland. It rejoices our hearts to hear from the lips of the boys and girls themselves, how the friends were so interested in their spiritual welfare as to teach them a morning and evening prayer. Where do the children go? This is a question often asked. Wherever the hearts of God's children are opened to receive them into their farm homes. We believe there are many living on good comfortable farms in the country who, if they only knew the need of these children, would be only too glad to receive them for a two weeks' holiday.....We desire to send them all out early in July."

What do you say, my friends? Don't you think we might help a little in this work? The Secretary of the Mission is C. D. Gordon, Dominion Bank, Esther St. Branch, Toronto. Some can help with offerings of money, and others may be willing to receive two of the children for a fortnight. One Lord's love for the lambs of His flock is shown over and over again in the Gospels. He warns us not to despise one of these little ones whose angels always behold the face of their Father in heaven. It is not our Father's will that one of these little ones should perish. We are warned that to lead one of these children astray is a crime. "It were better for him that a millstone were hanged about his neck, and he



HUGH TOWN, ST. MARY'S, SCILLY.

tion at a time when England was still debating whether it would be safe to educate the masses, and to know that in many houses of business in the Royal Dockyards Scillonians are to be found holding master's rank, and that for one common sailor from these little Islets there are twenty certificated officers." The backbone of the wealth of Scilly is the flower industry, so wisely introduced by the late proprietor, and fostered by the example and precept of his son, Mr. Dorrien-Smith, the present Lord of the Isles, for, oddly enough, fishing as an industry never seems to have found favor with the individual Islander. This may be from the many risks which would be entailed in the fulfilment of large contracts with importers in London and elsewhere, owing to the treacherous winds and currents of the coast. Plenty of fishing smacks come into St. Mary's harbor for the shipment of their cargoes to Penzance, but they hail from other ports than that of Scilly. Facts are eloquent in proof of the wisdom of the present-day legislation for Scilly. There is only one policeman for the whole of the archipelago of 200 islands. He is a strong, athletic looking man, with only the usual complement of arms and legs, and certainly to the casual observer does not appear to be ambitious. What he would do if a disturber of the peace in one island should take refuge in another, deponent sayeth not. There are special constables sworn in for emergencies, which never seem to arise, for the story goes that, the ceremony being over, the newly-appointed officer hangs his baton on a nail, and there it remains for his year of office, until his successor transfers it to another nail in another house when his turn comes. There is, I believe, only one doctor and only one chemist shop in St. Mary's. I have heard of but one butcher, and from outward appearance he seems to sell his meat from the central hall of a private house. The other "stores"



cast into the sea, than that he should offend one of these little ones." Surely it is not enough that we should not actively cause them to offend—God punishes sins of omission as severely as sins of commission. The rich man, who suffered torments after death, seems to have committed no crime but that of selfishly neglecting the poor man he might have helped. Do not let our Lord be forced to say to us, "Inasmuch as ye did it not to one of the least of these, ye did it not to Me." He never forgets the smallest kindness done for His sake, and says, "Whosoever shall give to drink unto one of these little ones a cup of cold water only in the name of a disciple, verily I say unto you, he shall in no wise lose his reward." We can give not only water but rich country milk, either with our own hands or by sending money to help the Fresh-air Work. Think of the wild delight which poor city children can find in the hay-field, gathering eggs in the barn, feeding chickens, eating fresh fruit, and having a glorious time out of doors. "Feed my lambs," says the Good Shepherd, and we can feed both bodies and souls if we are willing to take a little trouble. Riis tells of a lad who was hanged as a murderer at the age of nineteen, and who explained his crime by saying, "I never had no bringing up." Another boy, who was only fifteen when charged with murder, was born in a section of New York where more than three hundred thousand people lived "out of sight and reach of a green spot of any kind." He grew up without a chance to enjoy every boy's birthright of a reasonable quantity of healthy, happy play. Who can blame him if his highest ambition was to have his name in the papers as a notorious criminal?

The children in Toronto are not in such a desperate case as that, and those sent out to the country are the "best behaved and most deserving boys and girls." What are we going to do about the matter this summer? Surely we can be kind to some neglected children, near home or at a distance, remembering our Master's words, "Whoso shall receive one such little child in My name receiveth Me."

"Ye elder brethren, think of this!  
Think of the mighty bliss,  
Should He, the Friend of babes, one day,  
The words of blessing say:  
'My seal upon My lambs ye know,  
And I shall honor you.'  
And think upon the eternal loss  
If on their foreheads ye deface the glorious cross."  
HOPE.

**Dainty and Pretty Rose-bags.**

Our grandmothers considered daintiness in every detail to be the great secret of a gentleman's life. Their delicacy of taste was never shown more effectively nor more daintily than, in their selection of perfumes. Every lady of the period was an adept in preparing her own favorite perfume, and from my dear old-fashioned grandmother I have learned how she gathered the petals of the blush rose which grows so plentifully in Virginia gardens, placed them in little, loosely-meshed bags, sprinkled over them a few drops of some aromatic tincture to coax out of them their peculiar sweetness and then scatter the dainty bags among her linen.

She did not confine herself to the blush rose, but gathered all varieties early in the morning, then shook them lightly in an airy room over newspapers spread upon the floor. Several times during the day she tossed them lightly about to be sure that no moisture remained. The next morning she made flat bags of common mosquito netting, which she filled with rose leaves. The bags were then placed for a day on the paper, turned occasionally, and on the morning of the third day sprinkled liberally with violet toilet water and consigned to their places in the bureau drawers.

More expensive rose-bags may be made if desired. Threads may be drawn and two or three rows of baby ribbon darned in the spaces, a frill of lace may be put about the edges and tiny bows of ribbon fastened at the four corners. Tulle or illusion may take the place of the netting as a receptacle for the delicate leaves.

Whenever the fragrance becomes too dull, another application of the violet water is a stimulus to another outpouring of old-fashioned sweetness.

**To Our Lady Readers.**

Before going to the fair each of our lady friends could easily secure a most useful and stylish hand or wrist bag. We have now a large supply of these goods on hand, purchased in wholesale lots, at greatly reduced prices. The material in these bags is the very best, and they only need to be seen to be appreciated. The small size is particularly suitable for our younger readers, while the larger is none the less adapted for the use of our older friends. A little talk, and talk is cheap, will secure one of these premium bags. See descriptions and regulations on our premium page, 617.

**THE CHILDREN'S CORNER.**

**Petits Bucherons.**

"Let us sit down and rest," said weary Marie.  
"Our baskets are full; there's no hurry, you know."  
Annette and Celeste were as ready as she  
To rest for a while, as our picture doth show.

Though heavy the load, the three faces are bright,  
For a rest fairly earned is pleasant indeed.  
Marie chatters gaily in girlish delight,  
The others more quietly follow her lead.

No money have they, yet true riches are theirs.  
Light-hearted and healthy, gay, useful and free,  
Each day brings much gladness and very few cares  
To Annette and Celeste and little Marie.  
—COUSIN DOROTHY.

**A Chat with the Boys.**

Yes, boys, I know quite well that this is the "Children's Corner," and that you are not children, although you were young once, you know, and not so very long ago either. But surely I may have a chat with the boys sometimes. I was brought up in a family of boys, have taught boys in S. S. for about twenty years, and some of my best friends are boys—at least, I consider them boys yet, although many of them have long ago left their teens behind. Friends are worth having, I can tell you, and I hope each of you will secure at least one lifelong friend. In order to do this, you must be a true friend yourself, not making it the chief object of your life to look after Number One, but holding yourself prepared to sacrifice your own pleasure or comfort when necessary for the good of others.

even grander things than that, for they have sacrificed themselves for strangers. Three or four hundred years ago a French priest, named Vincent de Paul, was in the habit of visiting the convicts at Marseilles. He felt very sorry for these poor galley-slaves, who were in a horrible condition of misery. One poor fellow seemed almost broken-hearted when he spoke of the misery his wife and children must be enduring in his absence. The priest's sympathy was not only shown in words; he actually offered to change places with the convict. He succeeded in this; the prisoner went home, and Vincent wore his chain, did his work, and endured his miserable position with cheerful, uncomplaining patience. He was soon found out and set free, but never really recovered from the injuries received. You may be very sure that the convicts listened to his preaching about the Son of God dying for men when they saw that he too was willing to suffer in the place of another.

Are you determined to live up to the best that is in you, or are you inclined to give up the struggle to be noble, brave and generous? Aim high, and never give in, for where there's a will there always is a way.

"It was a royal Roman, in Rome's imperial day,  
Who heard a coward croaker before a castle say,  
'There, safe in such a fortress, there is no way to  
shake it.'  
'On, on!' exclaimed the hero, 'I'll find a way or  
make it!'"

COUSIN DOROTHY.

**Domestic Economy.**

**HOW TO MAKE SALADS.**

The salad or "salet" of early days was of green herbs dressed with vinegar and other condiments.

Now, eggs, many kinds of meats, fish, fruit and many vegetables, cooked as well as raw, with a dressing containing oil, butter or cream, are used.

Four things are necessary in salad-making—a salad must be cold, the green in it crisp, the ingredients in the dressing must be carefully proportioned and blended, so that it should be neither oily nor acid, and the whole well mixed. With these conditions fulfilled, a handful of lettuce leaves dressed with salt, pepper, oil and vinegar is in its way a perfect dish.

Lettuce is used as a bed for any salad. As soon as it is brought into the house, sprinkle it and put into a covered tin pail and set in the ice-box. To prepare—cut off the stem, separate the leaves and let them lie in the coldest water fifteen minutes; shake dry, looking sharply for insects. If left wet the dressing will run off. Freshen and dry other salad leaves the same way. Cut cooked vegetables in half-inch cubes, except potatoes, which can be cut with a potato-cutter.

A plain French dressing is as follows: Salt, one-half teaspoonful; pepper, one-quarter teaspoonful; olive oil, three tablespoonfuls; vinegar (either malt, wine or tarragon), one tablespoonful; add onion juice if desired. Stir the seasoning into the oil, add the vinegar, and stir vigorously till it thickens. This dressing may be served with any green salad.

A good recipe for cooked salad dressing that I have used in my family for years is as follows: One tablespoonful of ground mustard and two of flour; moisten to a smooth paste with water. Put a pint of vinegar and half a cup of sugar on the stove to heat; when it is scalding hot pour in the flour and mustard, to which has been added two eggs (or the yolks of four) and a lump of butter as large as a walnut. Stir this constantly until cooked. When wanted for use, thin it with sweet cream to the proper consistency. Either mayonnaise or cooked dressing is appropriate with string beans, tomatoes, celery, or cauliflower. Cooked dressing is used with cabbage and mayonnaise with meat or fish. A very palatable salad is made with shredded cabbage and cold-baked beans mixed with the cooked dressing.

The arrangement of a salad is worthy of thought. Have a pretty dish that looks well with the green frill of leaves on the edge, with the center of cool shadowy green. The arranging of salads gives the girls a chance to display their



Petits bucherons

Lacoste et Arlaud, phot., Genève. — Déposé

**PETITS BUCHERONS.**

Of course you have heard of Damon and Pythias, the two famous friends of Syracuse; but perhaps you may not remember exactly how they made their friendship famous. Pythias was unjustly sentenced to death by Dionysius, but he asked as a special favor to be allowed to go away to arrange his affairs, promising to return at a certain time to be put to death.

Dionysius, who was a tyrant and a coward, and trusted nobody, laughed at him; for he felt quite sure that Pythias would never come back if he once found himself free. But Damon offered to go to prison instead of Pythias, declaring that if his friend failed to return in time he would die in his place. Dionysius could not understand such confidence in any man's word, but agreed to the plan, wondering how it would end.

As the time fixed for the execution drew near, a close watch was kept on Damon, but he was quite cheerful, saying that he knew his friend would return if possible. If any accident had caused the delay he would gladly die to save him. The appointed day arrived, and Damon cheerfully prepared for death, even then not doubting his friend's truth and honor. He was on the way to execution when Pythias, who had been delayed by storms, burst through the crowd and demanded to take his place. As the true-hearted friends embraced, each pleading to be allowed to die for the other, the excited crowd burst into tears, and even the tyrant Dionysius was conquered. He set them both free, and asked to be admitted as a third in their friendship, declaring that he would gladly give all his wealth to have such a friend. But true friendship can never be bought, and a man as suspicious and distrustful as Dionysius could never understand, much less obtain it.

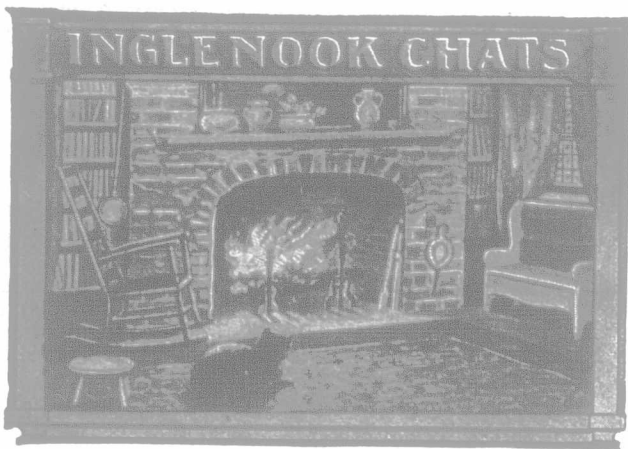
But, although it is a grand and noble thing to be ready to die for a friend, some men have done



artistic taste the same as in embroidery or sketching. It is also very satisfactory to be able to arrange the left-over vegetables, as peas, beans and potatoes, in a pyramid of pretty color with green and blossoming with rose-bud radishes. The radishes can be cut down with a knife to imitate rose leaves and put in ice water, and they will curl back in very good imitation of buds. The beauty of tomatoes nestled in pale green lettuce leaves, crowned with golden mayonnaise, is always appreciated.

#### ESCALLOPED RHUBARB.

Before the season of rhubarb has passed, try a dish of the plant scalloped, as demonstrated at the Boston Cooking School. Stir one pint, solidly packed, of bread crumbs into one-fourth of a cupful of melted butter. Cut one pound of rhubarb into half-inch pieces. Butter a pudding dish, sprinkle in a layer of crumbs, add a layer of rhubarb, about a dozen raisins (stoned), a grating of lemon rind, a little juice, and a generous sprinkling of sugar. Continue the layers until the bread and rhubarb are used, having bread upon the top. Use nearly a cupful of sugar and the juice of half a large lemon. Cover and bake in a moderate oven about forty minutes, then remove the cover and brown the top. Serve hot with powdered sugar or with hard sauce.



Will you be just "as mad as mad can be" at me if I go on in this paper with the song referred to in the last, and sung too, too often, to that doleful old tune, "Drudgery on the farm"? Mad or no mad, however, I am going to keep on at it to-day again—is that very wicked?—and for this reason: I am very much interested in the subject, and I think every other farm "body" is too.

Personally, I do not know what drudgery on the farm is; I have come into much closer touch with it in the city. I love the farm too much, and am always interested and contented there, no matter how tired I may be. When one is thoroughly interested, you know, one cannot feel drudgery.....Yet I am well aware that many, many farm-women are so circumstanced as to have altogether too much to do, so much that life is just resolved into a round of milking and scrubbing, washing and sewing, sweeping and ironing, getting meals and running after cattle, from morning till night, month in and month out; no time to read, no leisure in which to lie down and rest a while in the heat of the summer days; no chance of going out and getting freshened up a bit, except once in an age; scarcely time to have a friend in to tea. This sort of thing is really too bad. It turns one into a sort of human machine, and one cannot blame any woman so conditioned for just rebelling against the drudgery of it all.

Nevertheless, the farm life is not to blame for all this, but the circumstances. There are farms upon which drudgery is unknown; on which the work is done well, and on time too; on which prosperity and plenty reign; yet on which the farm people have time to rest as much as is good for them; time to read and to visit, and to make little trips to the city now and again, and keep in touch with all the world; time to think, and grow cultured, and be happy in. Thank goodness, there are such which may serve as ideals for us all.

I do think we should strive to attain this ideal life. It is of no use to be cross and envious about it, and to think that "there's no use of our trying; we could never have things like that." It is much better for us to try to improve our condition, and by just seeking to find out in what way we can improve it, we may learn many things. Little "handy" things make such a difference sometimes, and "mony a mickle mak' a muckle," as the old Scotch saying is. Of course, one can't get everything in a convenient shape all at once, but conveniences soon accumulate; and, really, many of the "handy" things do not cost much, often nothing but the outlay of a few cents and a little time.

Now I am sure we are, each of us, anxious to know every plan which may help to give us more leisure to spend on things outside of the regular

routine of "must-be-dones." And we may learn so much from one another, if each one is only willing to tell her plan, of anything at all which she has proved to be handy or helpful. It will not take much time, either, to write about it on a postal card. I am going to extend the time for the receiving of these hints, and I do hope to be just inundated with them during the next few weeks. Perhaps, too, there are some readers of the Nook who have particular difficulty in doing certain things. If these would write of their difficulties, it might be that we could find a solution of them from some member of our Ingle Corner. I shall be so glad to acknowledge receipt of suggestions; if you do not wish your name published, however, kindly mention the fact when you write, or give a non-de-plume.

Again, I repeat that there will be no competition for prizes about this. The only competition on hand at present is the essay contest, "Why I am proud to be a farmer," upon which subject essays are arriving, and will continue to arrive, I trust, until the fifth of July.

Lately I have been reading, as often as possible, from the Discourses of Epictetus. Do you know all about Epictetus; wise old pagan that he was? Some of you, perhaps, do not. For you, then, he was a philosopher of the time of Nero, who began life as a slave in the City of Rome; a poor, lame slave, whose leg had been broken, it is said, by the tortures of his master, Epaphroditus. However that may be, Epaphroditus seems to have understood the remarkable intelligence of Epictetus, for he permitted him to attend the lectures of an eminent Stoic philosopher, Rufus, who had founded a school in Rome. Later in life, Epictetus obtained his freedom, and also began to teach in Rome. He wrote nothing, but his words were faithfully copied by a pupil, Arrian, and thus the greater part of his lectures have been handed down to us.

Opening the book at random this morning, I came upon these words: "He is free who lives as he wishes to live; who is neither subject to compulsion, nor to hindrance, nor to force; whose movements to action are not impeded; whose desires attain their purpose, and who does not fall into that which he would avoid." The passage seemed to suit so exactly our idea of the ideal rural life, that I give it to you without comment. As you pick out the meaning, bit by bit, you will find the connection recommending itself to you as it did to me.

And now, we'll come down again from Epictetus and his high, calm philosophy, to our little housekeeping affairs. No, I must take that back. There is no coming "down" about it. Of what does true philosophy treat, if not of our daily living; of the attitude we should bear toward those things we have to do? Nothing that concerns us so closely as this can be low or trivial. Did it ever strike you that one beauty of our farm work is that so much of it is such that we may be going on with it with our hands and thinking about all sorts of lofty and interesting things at the same time? It is quite possible to pare potatoes, or to milk cows well, and con over the sayings of an Emerson too; to sweep floors properly, and be keeping time to the broom, all the while, with the rhythmic measures of a Tennyson, or a Wordsworth, or a Scott. But one must have a little time in which to become familiar with these things first. I am not so sure that this species of freedom exists in many other kinds of work. When one is typewriting, or bookkeeping, or a hundred other things, one's mind must not wander with the same latitude. And so, in this, is there not, more than on the farm—unspeakably more—drudgery?

There, I'm back to it again. I knew I'd get back somehow. Once for all, then, let us make war on drudgery. Send those postal cards in as quickly as possible, and let us hope that every member of the Nook will find something helpful out of them, as well as— DAME DURDEN.

#### How Does it Seem to You.

It seems to me I'd like to go  
Where bells don't ring, nor whistles blow,  
Nor clocks don't strike, nor gongs don't sound,  
And I'd have stillness all around.

Not real stillness, but just the trees'  
Low whisperings, or the hum of bees,  
Or brooks' faint babbling over stones  
In strangely, softly tangled tones.

Or maybe a cricket or katydid,  
Or the songs of birds in the hedgehog hid,  
Or just some such sweet sounds as these  
To fill a tired heart with ease.

If 'twere't for sight and sound and smell,  
I'd like a city pretty well,  
But when it comes to getting rest  
I like the country lots the best.

Sometimes it seems to me I must  
Just quit the city's din and dust  
And get out where the sky is blue,  
And, say, now, how does it seem to you?

—Eugene Field.

#### Signs of the Times.

How dear to our purse is the sound new potato  
Which orpulent grocers present to our view  
At five cents a pound, plus a penny for freight, oh,  
To bring it to us from the land where it grew.  
The tempting potato,  
The tiny potato,  
The costly potato of delicate hue.

How sweet to our taste is the lambkin's hind quarter  
When roasted and served with a dressing of mint;  
We're apt to consume really more than we'd order,  
Then imagine that we possess wealth without stint;  
The juicy hind quarter,  
The tender hind quarter  
Alluring hind quarter all flavored with mint.

How soft and seductive the first balmy breezes  
So warmly, caressingly, fanning our cheek;  
We discard winter flannels and coats—then it freezes,  
And we are laid up with la grippe for a week;  
The early spring breezes  
That sigh through the trees,  
The treacherous breezes that make our eyes leak.

How sweet to our ear is the first bluebird's singing  
That joyfully trembles upon the calm air;  
Alas! that a blizzard should send him a-winging  
To fool other folks in like manner elsewhere;  
The premature bluebird,  
The frostbitten bluebird,  
The truth-scorning bluebird that says spring is here.  
—Colorado Springs Gazette.

#### The Boy Next Door.

Yells that brought to mind the savage  
In his war paint, all alert;  
Raids that oft recalled the ravage  
Of some borderland expert!  
Hanging on to trees and fences,  
In his efforts to explore;  
Startling to a body's senses  
Was the little boy next door!

If a window pane was shattered,  
Or a missile cleaved the air,  
If the street's repose was shattered—  
Heads out peeping everywhere—  
Little need for explanation;  
All had happened oft before;  
Mite of terror and vexation  
Was that little boy next door!

Cats and dogs, by intuition,  
Knew of his approach and fled;  
Jaunty was the hat's position  
On his roguish, curly head;  
As, with bearing indyphant,  
He would bound the crossing o'er,  
With good nature all resplendent  
Was the little boy next door!

Brave, chivalric and respectful  
To the old who came his way,  
With a sympathy regretful  
Toward each beggar, day by day;  
How the wild and tame were mingled  
In his nature's bounteous store;  
How my nerves were hourly tingled  
By that little boy next door!

When, at sunset, homeward walking,  
Once I missed the children's noise;  
Marked their group in whispers talking,  
Leaving all their romping joys;  
Saw the snow-white ribbon streaming  
From the house I stopped before—  
Tear-drops on my cheeks were gleaming  
For the little boy next door.

—[George Cooper, in the Independent.

#### Ned's Mistake.

Ned goes to the circus with grandpa,  
And sits on a nice cushioned seat,  
While he beams upon the performers,  
With a smile confiding and sweet;  
But after a while he grows restless,  
And then he softly observes,  
"If these are preserved seats, grandpa,  
Why don't they pass the preserves?"

#### To Our Lady Readers.

We are now offering premiums which will delight your hearts. When we bought these we had you all in mind, and we have what you all want. In obtaining them you can give us just what we want—new subscribers.

Wrist and hand bags such as we offer you are what every girl and woman must have. How can you get them easier than by securing new subscribers to the "Farmer's Advocate"? Don't miss this chance. It is a good one.

By looking up the premium page, 617, you will get some idea of the quality of these bags. When you see them you will want one.



**Where to Go for a Summer Holiday.**

In our last number we presented to our readers some beautiful views of Muskoka scenery, and in our present issue we show scenes in the Kawartha Lake District, which, although perhaps not so widely known as the Muskoka lake region, is still an ideal spot for a summer holiday.

These lakes are situated in the counties of Victoria and Peterborough, Ont., and those who have enjoyed the delights of touring around these glassy lakes, with their mountain and forest scenery, grassy and vine-clad shores, tell us that they are almost a reproduction of the Trosachs of Scotland. There is a steamer route of 70 miles, from Lakefield, a pretty village near Peterborough, on the G.T. R., to Cobocok.

Boating, hunting and fishing are unexcelled, and one can form an idea of the natural beauty of the scenery from the fact that Stony Lake alone contains some 800 islands within an area of twenty square miles.

Excellent and very moderate accommodation is to be had in the hotels and boarding-houses along the route, or if camp-life is preferred, no place could be found more adapted for this healthful recreation.

The day returns and brings us the petty round of irritating concerns and duties. Help us to play the man, help us to perform them with laughter and kind faces, let cheerfulness abound with industry. Give us to go blithely on our business all this day, bring us to our resting beds weary and content and undishonored, and grant us in the end the gift of sleep. Amen.—Robert Louis Stevenson.

**Of Interest to Ladies.**

Fashion decrees the use of the wrist bag, and it is just here we wish to assist you with our premium offers. To our lady friends who secure subscriptions to our magazine we are able to offer wrist or hand bags of superior material and most beautiful design, that only need to be seen to be appreciated. Carefully study our premium page, 617, and secure a bag before visiting the summer or fall fair.

**An Insane Lawyer's Remarkable Will.**

The following document, a will framed with such perfection of form and detail that no flaw could be found in its legal phraseology or matters, yet "devising" only those beauties and blessings which the Great Father long ago devised to all human creatures, was recently rescued from a large collection of other legal, but less interesting, papers:

"I, Charles Lounsberry, being of sound and dis-

flowers of the fields and the blossoms of the woods, with the right to play among them freely, according to the customs of children, warning them at the same time against thistles and thorns. And I devise to children the banks of brooks and the golden sands beneath the waters thereof, and the odor of the willows that dip therein, and the white clouds that float high over the giant trees.

**TO THE CHILDREN.**

"And I leave the children the long, long days to be merry in, in a thousand ways, and the night, and the moon and the train of the milky way, to wonder at, but subject, nevertheless, to the rights hereinafter given to lovers.

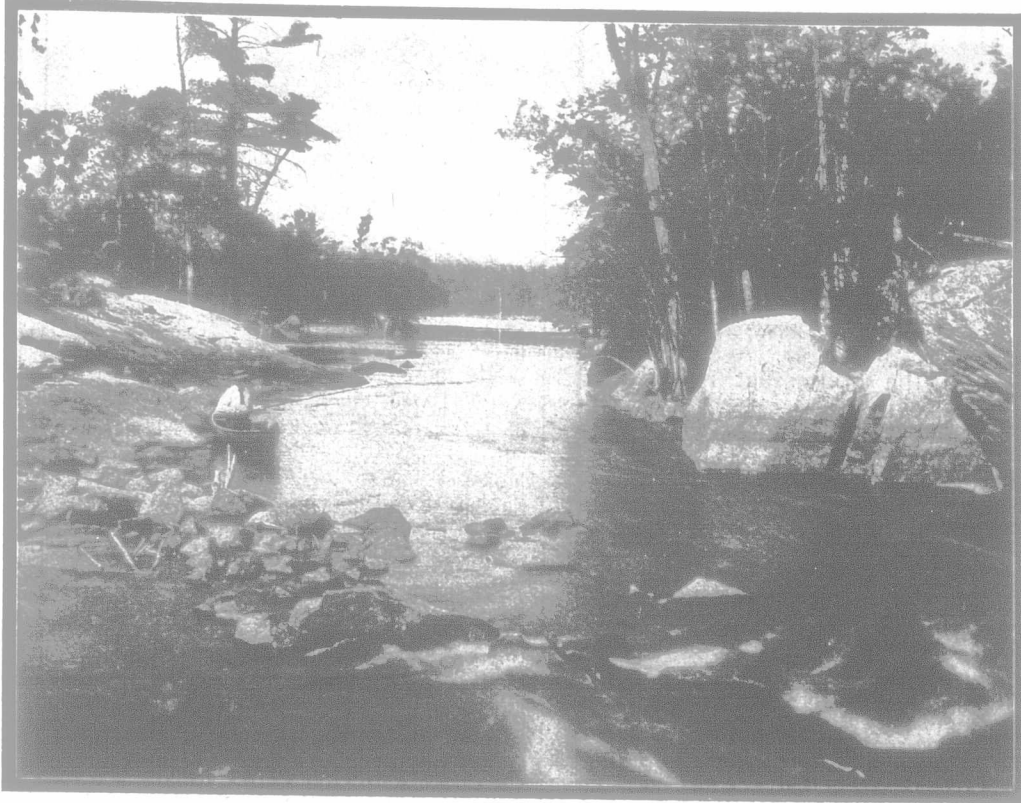
"Item: I devise to boys jointly all the useful, idle fields and commons, where ball may be played, all pleasant waters where one may swim, all snowclad hills where one may coast, and all streams and ponds where one may fish, or where, when grim winter comes, one may skate, to have and to hold the same for the period of their boyhood, and all meadows, with the clover blossoms and butterflies thereof, the woods, with their appurtenances, the squirrels and birds, and echoes and strange noises, and all distant places, which may be visited, together with the adventures there found. And I give to said boys each his own place at the fireside at night, with all pictures that may be seen in the burning wood, to enjoy without let or hindrance, and without any encumbrance or care.

"Item: To lovers I devise their imaginary world, with whatever they may need, as the stars of the sky, the red roses by the wall, the bloom of the hawthorn, the sweet strains of music, and aught else they may desire to figure to each other the lastingness and beauty of their love.

"Item: To young men jointly I devise and bequeath all boisterous, inspiring sports of rivalry, and I give to them the disdain of weakness, and undaunted confidence in their own strength. Though they are rude, I leave to them the power to make lasting friendships and of possessing companions, and to them exclusively I give all merry songs and brave choruses to sing with lusty voices.

"Item: And to those who are no longer children or youths or lovers I leave memory, and I bequeath to them the volumes of the poems of Burns and Shakespeare and of other poets, if there be others, to the end that they may live the old days over again, freely and fully, without tithes or diminution.

"Item: To our loved ones with snowy crowns, I bequeath the happiness of old age, the love and gratitude of their children until they fall asleep."



AMONG THE ISLANDS OF STONY LAKE—KAWARTHA LAKES DISTRICT.

posing mind and memory, do hereby make and publish this my last will and testament, in order, as justly as may be, to distribute my interest in the world among succeeding men.

"That part of my interests which is known in law and recognized in the sheep-bound volumes as my property, being inconsiderable and of no account, I make no disposal of in this my will. My right to live, being but a life estate, is not at my disposal, but, these things excepted, all else in the world I now proceed to devise and bequeath.

"Item: I give to good fathers and mothers, in trust for their children, all good little words of praise and encouragement, and all quaint pet names and endearments, and I charge said parents to use them justly, but generously, as needs of their children shall require.

"Item: I leave to children inclusively, but only for the term of their childhood, all and every the



PERRY CHUTE AMONG THE ISLANDS OF THE KAWARTHA LAKES—GRAND TRUNK RAILWAY SYSTEM.





Dirty woodwork or any other part of the house that requires cleaning can best be cleaned by using

## SUNLIGHT SOAP

It will remove every particle of dirt and make the whole house bright and cheery. Absolutely pure, and every bar possesses remarkable cleansing power.

ASK FOR THE OCTAGON BAR.

Sunlight Soap washes the clothes white and won't injure the hands.

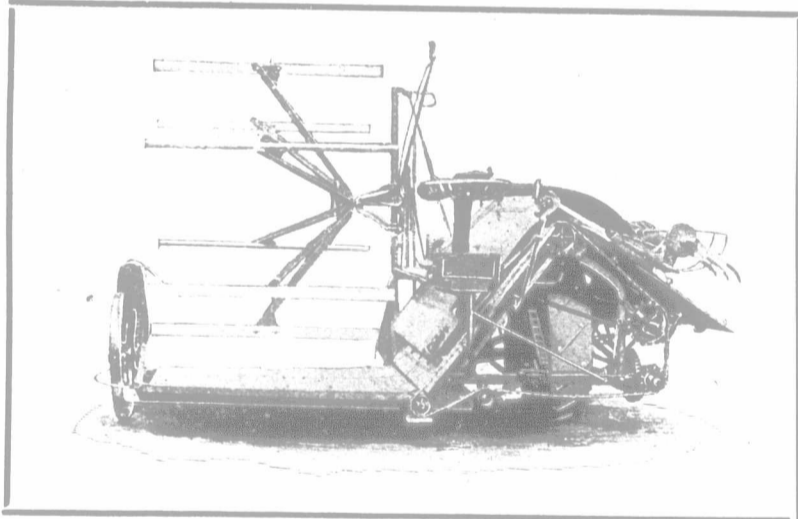
LEVER BROTHERS LIMITED, TORONTO.

13a

### THE NOXON

## OPEN-BACK BINDER

Is Acknowledged by Practical Farmers to be the Best.



#### SOME SPECIAL FEATURES:

- |                            |                                  |
|----------------------------|----------------------------------|
| Built of Steel Throughout. | The Lightest Made.               |
| Open Back.                 | A Pair of Ponies Can Handle It.  |
| Removable Dividers.        | Runs Without Noise.              |
| Telescopic Packer Shaft.   | Always Reliable.                 |
| Three Packers.             | No Neckweight.                   |
| Weight Trip.               | Handles Tangled Grain Perfectly. |

EVERY PURCHASER GIVES A TESTIMONIAL.

THE NOXON CO., Ltd., INGERSOLL, ONT.

**Joseph Rodgers & Sons**  
Limited,  
SHEFFIELD, ENGLAND.

Please see that this EXACT MARK is on each blade.

JAMES HUTTON & CO., MONTREAL, SOLE AGENTS IN CANADA.



### TRADE TOPICS.

**HORSE BOOK FREE.**—Dr. B. J. Kendall Co.'s book, "A treatise on the horse and his diseases," is written from a scientific standpoint yet in practical form, so that anyone can apply its teachings. The horse and his handling are described, and there is hardly a trouble peculiar to the horse which is not discussed, symptoms and cause suggested and treatment suggested. It is published by the proprietors of Kendall's Spavin Cure, that world-known remedy for horseflesh ills, and contains the gist of their many years' experience. They send this practical book free of charge, and our readers should address the Dr. B. J. Kendall Co., Enosburg Falls, Vt., for a copy, mentioning the "Farmer's Advocate."

**CANADA PAINT COMPANY EXTENDING.**—The Canada Paint Company has purchased a tract of land on Hunter street, bounded by Chatham street and Notre Dame lane, which has the merit of being central and close to their present extensive plant upon William street, Montreal. It may not be generally known that this Company is by far the largest paint and varnish manufacturing company in the Dominion of Canada, and the only company in Canada who ship large quantities of painting material to the United States, in spite of the high tariff which our American friends have against us. Shipments are also made to Great Britain and to the Australian colonies. For some time it has been difficult for this enterprising Canadian company to take care of all the business offered, and now the directors feel warranted in doubling the color-making capacity and enlarging in all departments. They employ their own engineers, carpenters and machinists, and the new works will be erected by their permanent staff, and will be the most complete yet devised upon this continent.

### GOSSIP.

Shropshire rams, shearing ewes and ewe lambs of choice breeding are advertised for sale in this issue by Geo. Hindmarsh, Ailsa Craig, Ont., whose flock has an excellent reputation.

Two Shorthorn bulls of serviceable age and two bull calves, all the offspring of the bull, Director 2nd =32060= (imp. in dam), are advertised in this issue by J. F. Bell, Amber, Ont.; also, Tamworth boar pigs.

Abram Rudell, Hespeler, Ont., advertises Shropshire sheep for sale, yearling and two-year-old rams, ram lambs and ewes of various ages, from lambs to two-year-olds. See the ad., and write for particulars.

### BRITISH COLUMBIA.

"Fruitland," Kamloops, B. C. Newly developed irrigated lands in the beautiful fertile valley of the Thompson River, on the main line of the C. P. R., within half a mile of the City of Kamloops, the inland capital of British Columbia, and a well-known health resort. Magnificent soil for fruit of all kinds: Apples, pears, cherries, plums, peaches, grapes, strawberries, and all kinds of vegetables grown in abundance. Perfect climate; air dry and bracing. Good schools, churches, boating, shooting, fishing, etc. For full information apply to: **Manager, Canadian Real Properties, Ltd., Box 185, Kamloops, B. C.**

### Ordered Corsets by Mail



There's an individuality about your figure. The store corset simply cannot fit you in all respects. Our corsets meet your personal requirements. Write for free catalogue, showing how to order exactly what you want. Our guarantee covers every thing.

**Durability. Perfect Finish.**

Don't forget the catalogue.

Robinson Corset Co., London, Ont.

## LAME AND ACHING IN BACK AND LEGS

In Quick Time Mr. Oughtred and His Neighbor Were Cured by Using

### Dr. Chase's Kidney-Liver Pills.

Constipation, clogged kidneys and sluggish, torpid liver are derangements which usually accompany one another. Because of their direct and combined action on the kidneys, liver and bowels, Dr. Chase's Kidney-Liver Pills are the most prompt and thoroughly effective treatment for these ailments that money will buy. This statement is fully borne out by letters of recommendation which are daily received at these offices. Here is one.

Mr. J. W. Oughtred, farmer, Marbleton, Wolfe Co., Que., writes: "Dr. Chase's Kidney-Liver Pills deserve to be recommended. I was lame all through my back, legs and arms, and had a continual dull pain in my bowels. Every little thing I did required great effort, I was so sore and lame. I took lots of other pills, but they only made me sick. When haying time came on I had sixty tons of hay to pitch, and felt that I could not possibly do it.

"Just at this time Dr. Chase's Kidney-Liver Pills came to my notice, and did me so much good that I worked at the haying and did lots of other hard work with ease. I sent and got five boxes, and gave away one box to a neighbor, who was suffering so badly with backache that he could not do any work. He afterwards told me that they were the best pills he ever used, and is now real well. I found that by taking two a week they kept me feeling well. Other pills give me sick headache, but Dr. Chase's Kidney-Liver Pills cure sick headache and suit me better than any others."

Dr. Chase's Kidney-Liver Pills, one pill a dose, 25 cents a box, at all dealers, or Edmanson, Bates & Co., Toronto.

To protect you against imitations, the portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box of his remedies. om

### FOR SALE: 2 SHORTHORN BULLS

11 and 17 months old; also 2 bull calves got by Director 2nd (imported in dam) =32060=. Also 2 Tamworth boar pigs.

J. F. BELL, Amber, Ont.

**BERKSHIRES AND YORKSHIRES.** For Sale—Boars fit for service; sows in farrow and ready to breed, and younger stock, all of the ideal bacon type. Pairs not akin. **JOHN BOYES, Jr., Rosebank Farm, on Churchill, Ont.**

**H. SMITH, EXETER, ONT.**

### SCOTCH SHORTHORNS

Bred for utility. More fat show champions produced than in any other herd. Some choice heifers to spare. Come and see them, or write. Farm joins Exeter, on G. T. R. om

### AYRSHIRE BULLS FOR SALE.

Four calves, 11 and 12 months old, \$25 each if taken this month; from deep-milking dams, and sired by Rosland of St. Anne.

D. LEITCH, Cornwall, Ont.

**SHROPSHIRE** shearing rams, shearing ewes, ram and ewe lambs of choice breeding. Prices right. **GEO. HINDMARSH, Ailsa Craig, Ont.**

**SHROPSHIRE**—A flock of 110 head, fine, healthy and ram lambs; also 2-year, 1-year and ewe lambs. Prices reasonable. **ABRAM RUDELL, Hespeler, Ont.**

## WANTED

Experienced herdsman, Aug. 1st, to fit Shorthorns for show and sale; best of references required. Apply, stating wages expected, to


M. H. COCHRANE, HILLHURST, P. Q.

Messrs. B. H. Bull & Son, Brampton, Ont., write us, just as we go to press, that they will exhibit their herd of Jerseys at the Winnipeg Fair, to be held July 20th to 25th.



# VALUABLE PREMIUMS.

EXACT SIZE OF KNIFE.



**AN A 1 FARMER'S KNIFE**  
 Finest Steel Blades. Strong and Durable.  
 Beautiful Nickel Handle.

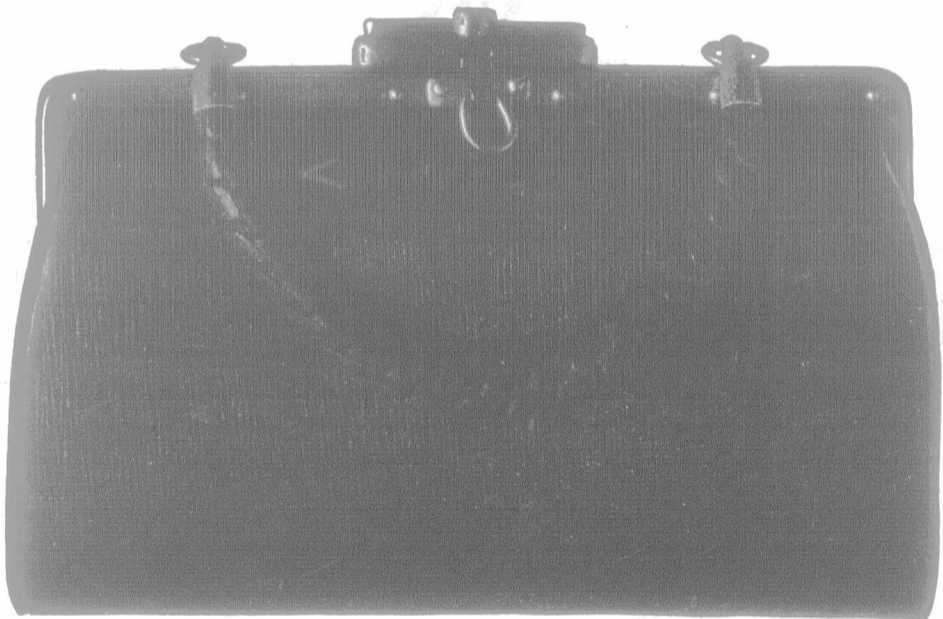
Manufactured by Joseph Rodgers & Sons,  
 SHEFFIELD, ENGLAND.

**CANNOT BE DUPLICATED.**  
 Every Farmer and Farmer's Son Should Have One  
 of These Knives.

START OUT FOR THE NAMES TO-DAY.

SEND  
 New Subscribers **2** New Subscribers  
 TO THE  
**FARMER'S ADVOCATE**  
 And we will send you the knife, postpaid.

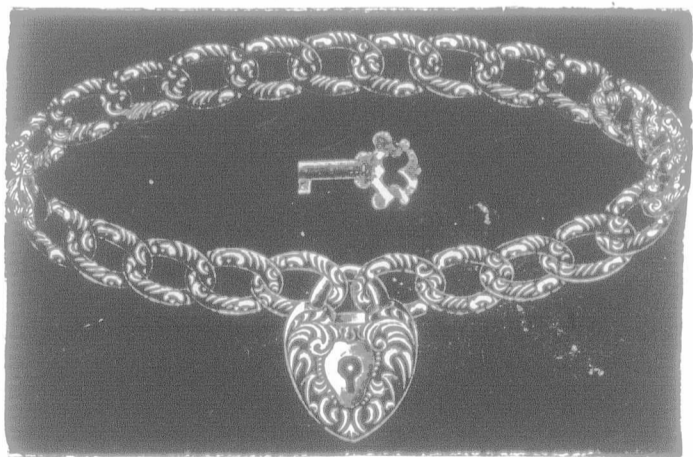
## Lady's Hand - bag.



SIZE, 4½ x 7½ inches.

A magnificent Hand-bag, leather-lined, leather handle, nickel-plated clasp, for 3 new subscribers. Cash price, \$1.50.

## Handsome Curb-link Bracelet: Silver Filled

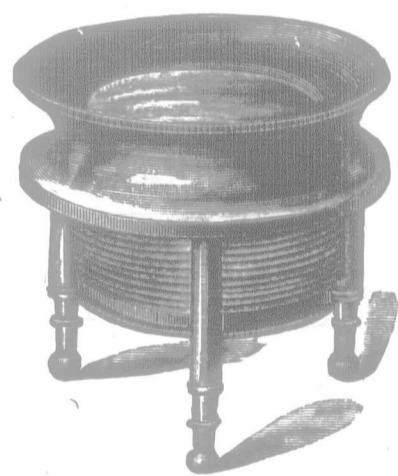


For 2 new subscribers. Sterling silver for 3 new subscribers. For each additional new subscriber, two Sterling Silver Friendship Hearts.

## Our Self-Binder

HANDY, DURABLE and ATTRACTIVE. Made to contain the 24 issues of the year. We will forward this Binder, postpaid, to anyone sending us the names of TWO NEW SUBSCRIBERS and \$2.00.

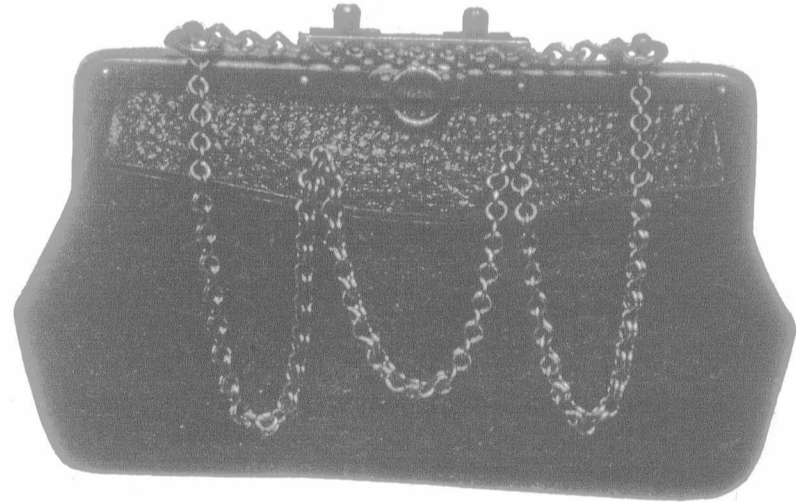
## MICROSCOPE



Is a means of great entertainment and instruction in the home and out of doors. To meet the wishes of many subscribers, we have arranged with a first-class firm for a supply of those instruments; which we now offer:

Tripod Microscope, with strong magnifying lens, useful for examining weed and other seeds, insects and other small objects, for obtaining one (1) new subscriber to the FARMER'S ADVOCATE.

## Lady's Wrist - bag.



SIZE, 3½ x 6 INCHES.

This handsome Wrist-bag, leather-lined, nickel-plated clasp and chain, for 2 new subscribers. Cash price, \$1.00.

## BEGIN TO CANVASS AT ONCE

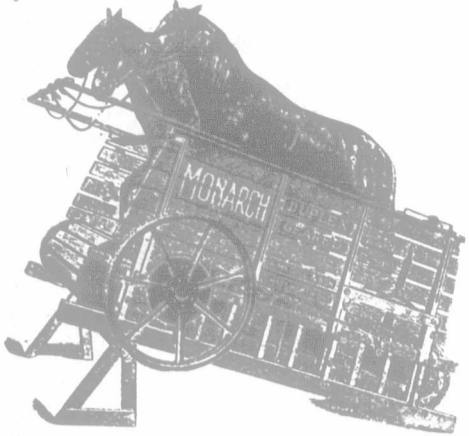
Subscriptions may begin with any month, and include our annual Christmas number. Write for sample copy. CASH MUST ACCOMPANY NEW NAMES. Subscription Price, \$1.00 per Annum.

THE NAME OF SENDER DOES NOT COUNT ON LISTS OF NEW SUBSCRIBERS.

# THE WM. WELD COMPANY, LTD., LONDON, ONTARIO.



# MCGILL TREAD POWERS



The McGill Monarch Tread Powers are the best general farm powers on earth, and the only Powers made having Angle Steel Track, Cold-rolled Steel Shaft, 7-inch Travellers, Solid Hardwood Lags, with brake entirely independent of Band Wheel. A patent Governor or Speed Regulator with each machine.

**A. MCGILL & SON,**  
CHATSWORTH, ONT.

## Agricultural College.

- (1) Two Years' Course—Associate Diploma—Sept. 14, '03
- (2) Three Years' Course—Associate Diploma and Specialist Certificate in Agriculture or Horticulture—Sept. 14, '03.
- (3) Four Years' Course—B. S. A. Degree—Sept. 14, '03.
- (4) Courses in Nature Study and Domestic Science—Sept. 14, '03.
- (5) Three Weeks' Creamery Course—Dec. 1st, '03.
- (6) Three Months' Dairy Course—Jan. 4, '04.

LADIES ADMITTED TO DOMESTIC SCIENCE AND DAIRY COURSES.

Send for General or Special Circulars.

Guelph, July, 1903.

**JAMES MILLS, M.A.,** PRESIDENT.

## OTTAWA'S FAIR

THE CENTRAL CANADA EXHIBITION.

SEPT. 11th to 19th,  
1903.

The Stock Breeders' Greatest Show.

A GRAND PRIZE LIST THIS YEAR.

Exposition will surpass any previously held.

ENTRIES CLOSE 9TH SEPT.

**W. HUTCHISON,**  
President.

**E. McMAHON,**  
Secretary.

Better No Cows at all Than a Herd Without Profit.



GET a New Century American Cream Separator and bid farewell to dairy losses. It's superior in every sense and made in sizes that suit. Nothing like it for saving dollars and drudgery.

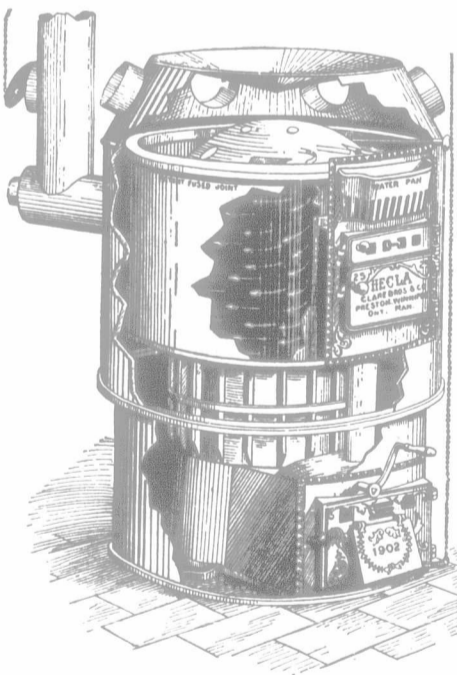
WRITE us about it.

**C. RICHARDSON & CO.,**  
P. O. Box 1948. ST. MARY'S, ONT.

## ABOUT HEATING

Is the title of a booklet which we are sending free to all who ask for it. It describes in detail the construction of our

## Hecla Furnace



This furnace gives excellent satisfaction with either  
**COAL or WOOD.**

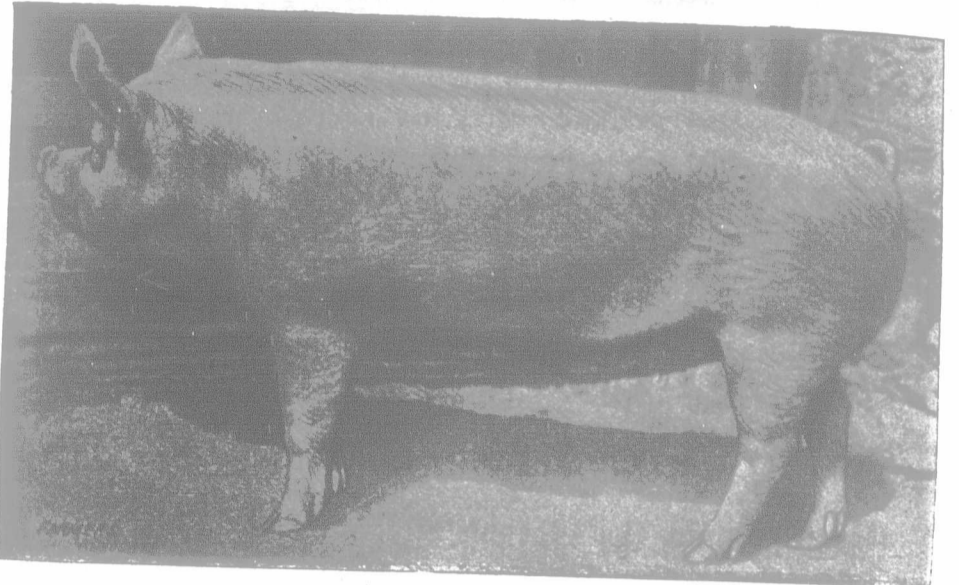
A special wood grate is supplied without extra charge. Write us for further information.

**CLARE BROS. & CO.,**  
LIMITED.

PRESTON, ONT., AND WINNIPEG, MAN

## SUMMERHILL HERD OF Large English Yorkshires

HEADQUARTERS FOR THE IDEAL BACON HOG



Our winnings at the large shows, for 1901, are as follows: At Toronto every possible first prize and five seconds, two silver medals, and first for pen of pure-bred bacon hogs, also sweepstakes on bacon hogs over all breeds; at London every possible first but two; while at the Pan-American, where our herd was divided, half going to Toronto, we won six out of ten possible firsts, also sweepstakes on boar any age. At the Pan-American (Buffalo), Toronto and London there were thirty-six first premiums and medals given; all the medals and every first prize but six won by the Summerhill Yorkshires. When in need of the best write **D. C. FLATT & SON, MILLGROVE, ONT.** on Telephone: Millgrove, Ont.

## Farmers Know a Good Thing When They See It

Which is the reason there is such a large and increasing demand for

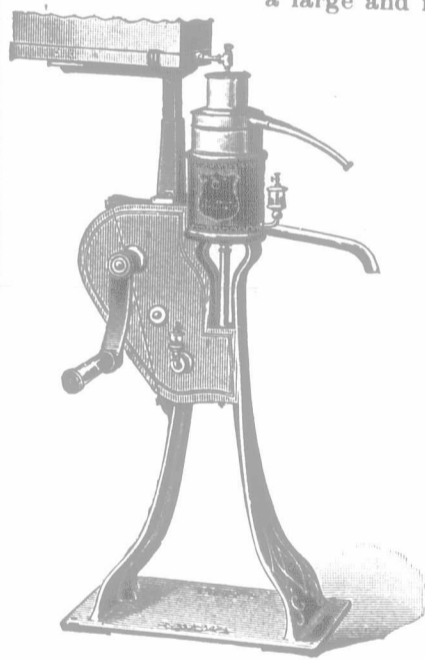
## U.S. Cream Separators

They have many points of superiority, but the three following are sufficient to make them

The Most Desirable to Own:

- CLEAN SKIMMING—** Hold the world's record.
- SAFETY—** All gears entirely enclosed in iron case.
- DURABILITY—** Most thoroughly and substantially made.

Read the testimony of one. We have hundreds of similar ones:



THE U. S. SKIMS CLEAN AND IS DURABLE.

I have had a No. 7 U. S. Separator about a year and one-half, and during that time have paid out nothing for repairs, aside from a couple of bowl rings, and it runs as well to-day as ever. There is nothing worn about it. Some of my neighbors who have purchased other makes of machines, ask me every now and then if I am not troubled with boxes getting hot and cutting, thereby implying that they have trouble. We have never been troubled with anything of the kind. The U.S. skims clean, is durable and gives the best of satisfaction. The enclosed gear is much better than open gears.  
J. H. HAYWOOD.

For further information write for illustrated catalogues.

For Manitoba and the West we transfer our separators from Chicago and Minneapolis, and for the Eastern Provinces from Quebec, Sherbrooke, Montreal and Hamilton. Address all letters to Bellows Falls, Vt. gm

**VERMONT FARM MACHINE CO.,**  
BELLOWS FALLS, VERMONT.

Hon. M. H. Cochrane, Hillhurst, P. Q., advertises elsewhere in this issue for a herdsman—good opportunity for competent stockman.

Mr. D. Leitert, Cornwall, Ont., has had a good season selling Shorthorns through the "Farmer's Advocate." Read his change of advt., offering four bull calves from heavy milking dams.

**TORONTO ENGRAVING CO.**  
**92 BAY ST**  
CUTS BY ALL PROCESSES  
LIVE STOCK A SPECIALITY

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.



**GOSSIP.**

Labori (10791), the fine Clydesdale stallion, son of Hiawatha, owned by Mr. A. B. Matthews, Newton-Stewart, has again been hired by the Scottish Central Horse Breeding Society for 1904. It is a far cry to that date, but time these days must be taken by the forelock. Labori was hired before this date last year to travel the same district this year, and is now on his rounds. He was bred by Messrs. Robertson, Clendrie, Kirkcolm, and has been a noted prize-winner, standing close up to the winners at the Glasgow Show for three seasons, and in 1901 was the junior premium horse of the Glasgow Agricultural Society.

The pair of trotting-bred colts, Ethel and Fanny, illustrated on another page in this issue, with their dam, Favorite, are the property of ex-Warden A. Wilson, of Pugwash, Cumberland Co., N. S. Favorite is by Bashia 16750, and is considered one of the fastest trotters ever bred in Nova Scotia. She distanced a field of seven from the Maritime Provinces, as a three-year-old, in Charlottetown, P. E. I., besides carrying off the honors several times in the free-for-all. The sire of these colts is Fair Oaks, imported from Ohio by Mr. Brownell, North Port. Fair Oaks 18571, record 2.26, is by Adrian Wilkes 6560, sire of nineteen with records of 2.06½ to 2.20.

Mr. George D. Fletcher, Binkham, Ont., proprietor of the Green Grove herd of Shorthorns, in ordering a change of advertisement, writes: "The imported Orange Blossom cow, Blossom 2nd, which sold for the highest price paid for a female at Messrs. John & George Isaac's sale on May 13th, which I had the good luck to purchase, is proving an excellent breeder, and is now raising a very choice bull calf of a very fleshy, smooth type, from Rustic Chief (imp.). My herd is now in a very healthy condition, and the young stock by Spicy Robin are a very growthy lot. The bulk of my this year's calves are bulls, among which are some very choice ones."

**"A FREE SAMPLE PACKET"**

of Delicious **"SALADA"** Ceylon Tea (Black, Mixed or Natural Green) will be sent to any person filling in this coupon and sending it to us with a two-cent stamp for postage. (Write plainly and mention Black, Mixed or Natural Green.)

Name.....

Address.....

"Farmer's Advocate."

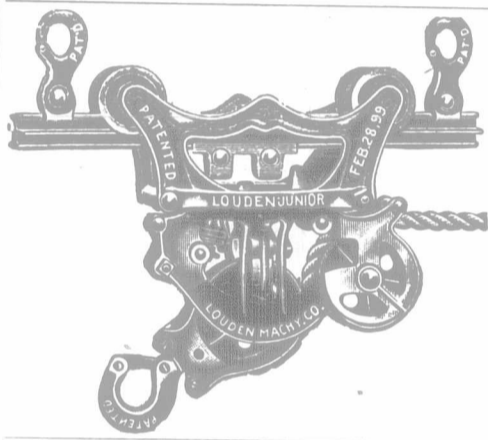
Address **"SALADA" TEA CO., TORONTO.**

**The Livingston Linseed Oil Co., Ltd.,**  
BADEN, ONTARIO,

Manufacturers of strictly pure

**Old Process Linseed Oil Cake and Meal, also Ground Flax Seed.**

Write for prices.



We make the best line of Barn-door Hangers on the market. Write for catalogues and circulars.

**Louden Machinery Co., Guelph, Ont.**

Do Not Buy an Old-Style, Out-of-Date Hay Carrier When You Can Buy the Latest Improved

**LOUDEN**

Worth three times as much. Always works easy and never misses. Will fill your barn FULL and never bind on the track nor break the fork pulley. Twice as strong and durable as ordinary carriers.

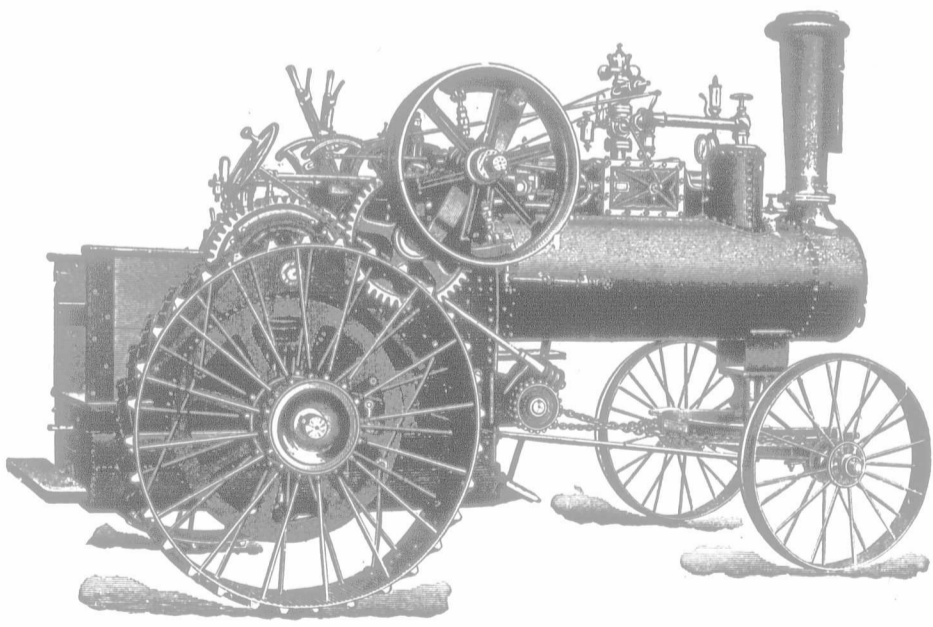
15 Different Styles to Choose From

We make them to run on steel, wood, rod or cable track.

Rosebank Stock Farm, J. Boyes, Jr. proprietor, breeder of Large English Berkshire and Improved Yorkshire hogs and Barred Rocks, advertised in this paper, is situated in the village of Churchill, Simcoe Co., Ont., two and a half miles from LeRoy station, Northern Division of G. T. R. The Berkshire herd at present is headed by York Lodge Big Fellow and Willow Lodge Longfellow 4th (11134), two hogs of extra quality and breeding. Principal sows are Princess (6276), litter sister to Major Lee, winner of second prize for aged hog at Pan-American; Model Girl (7988), a strong sow and excellent breeder, litter sister to Model Princess 6905, winner of first prize Pan-American; Snelgrove Winnie 8889, winner of third prize for sow under 12 months, 1901; Nell 7010, a choice sow and winner of many prizes; Bright Lady 8270, a very choice breeding sow, with three other sows bred from Princess. Berkshire herd numbers forty head, with four choice sows safe in pig. Yorkshire herd headed by Oak Lodge Cambridge 30th 9267. Breeding sows: Pleasant Maid 6835, a choice sow and extra breeder; Oak Lodge Florabelle 12th (7262), a show sow and the ideal type; O. H. C. 700 (7945), a sow of the model type, now suckling ten choice pigs from Oak Lodge Cambridge 30th; Cotgrave Pearl 11650, an ideal young sow which will make a mark in the showing in the near future. Yorkshire herd numbers forty head of different ages.

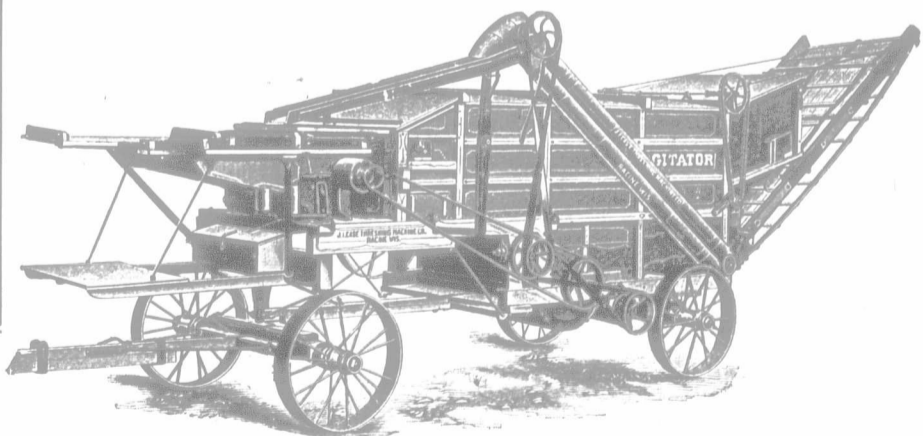
ONTARIO WIND ENGINE AND PUMP Co., Limited, Toronto, write: "Never in the history of our company were we so busy as at present. The Canadian Airmotor is in such good favor with the Canadian public that we are unable to meet the requirements of our customers. The Canadian public has tested this machine for years, and the immense increase of our business is the verdict. Our firm took no part in the recent windmill contest in London, England, and it is only justice to us to remove any impression from the public mind that the Canadian Airmotor was outdone. The fact that the prize medal was given to this firm at the Paris Exposition, 1900, speaks for itself."

**J. I. CASE THRESHING MACHINE CO.**



**Case Machines are Popular Everywhere!**

THEY ARE DURABLE AND MONEY-MAKERS FOR THE THRESHERMEN.



If You are an Intending Purchaser, it is to Your Interest to See Our Goods.

CANADIAN BRANCHES:  
Toronto: 75 Jarvis St. Regina, N.-W. T.  
Winnipeg, Manitoba.

A full line of Repairs, Drive Belts, and all requisites for the Threshermen kept in stock.

WRITE US FOR CATALOGUE.

**J. I. CASE THRESHING MACHINE CO.,**  
RACINE, WIS., U. S. A.



## Ensilage Cutters

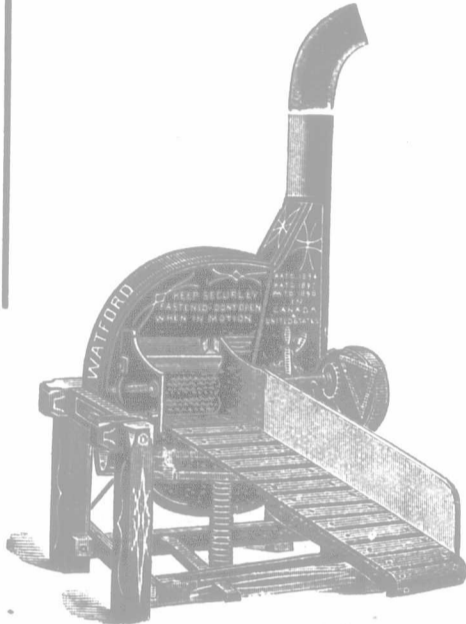
with BLOWER ELEVATORS.

### THOM'S PATENT

The only successful

### SILO FILLER.

Beware of imitations.



Adapted for all kinds of farm power, from the two-horse tread up to the heavy engine; capacity up to 30 tons per hour. Thousands in use. Send for testimonials. Also

### GRAIN GRINDERS AND TREAD POWERS.

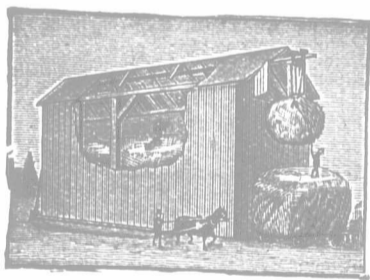
CANADA'S BEST.

### Thom's Implement Works

WATFORD, CANADA.

### BUCHANAN'S (Malleable Improved) PITCHING MACHINE

For unloading hay and all kinds of loose grain



Unloads on either side of barn floor without changing car. No climbing necessary. Malleable Iron Cars. Steel Forks. Knot Passing Pulleys. Will work on stacks as well as in barns. Satisfaction guaranteed.



### The Common-Sense Sheaf-Lifter

Works in connection with Pitching Machine, and is the most complete apparatus ever offered to the public for pitching sheaves. Sheaves left in the mow just as they come from the loaf.

### RESPONSIBLE AGENTS WANTED

Circulars, Prices and Terms on application to M. T. BUCHANAN & CO., Ingersoll, Can.

### THE Excelsior Life INSURANCE CO.

Head Office: Toronto, Ont. Absolute Protection. Profitable Investment. Agents wanted.

### GOSSIP.

At the dispersion sale of the Holstein-Friesian herd of Messrs. Averill & Gregory in Syracuse last month, the highest price at auction since 1888 for a cow of the breed was made. The coveted matron was Segis Inka, which went to Dr. W. N. Landon, of New York State, for \$1,600. During the bidding, Mr. Matteson offered the service of Paul de Kol, J. and \$750 for the bull calf of a mating with the great cow. The offer was accepted. Bidding all through the sale was quite spirited, and the prices were considered satisfactory. Altogether, 118 females and 41 bulls were sold for \$25,590, or an average of \$161 per head.

Mr. Jno. McFarlane, of Dutton, Ont., who breeds Shorthorns, Oxfords and Berkshires, sends us the following interesting items concerning his herd: "I have sold two cows to Cameron Bros., of Dunwich, Ont., and the red bull, Billy of Dutton to Frank Kunz, of Harrietsville. I have now for sale heifers in calf to Royal Prince (imp.). Some of them are from Bernice, a large, handsome cow of the Barrington family. One of her ancestors, owned by John Ainsley, Esq., near Northallerton, Eng., was a most wonderful animal. Her dimensions were as follows: length from nose to rump, 11 ft. 3 ins.; height of rump, 6 ft.; height of shoulder, 5 ft. 10 ins.; girth of body, 11 ft.; knee, 7 1/2 ins.; square of back, 3 ft. 3 1/2 ins. Her weight at time of measurement was 3,094 lbs., and this in her four-year-old form. We have also for sale as advertised, Blue Ribbon 2nd, by Blue Ribbon (imp.), his dam sired by Royal George (imp.), at a reasonable figure."

### GOOD SHORTHORNS SOLD.

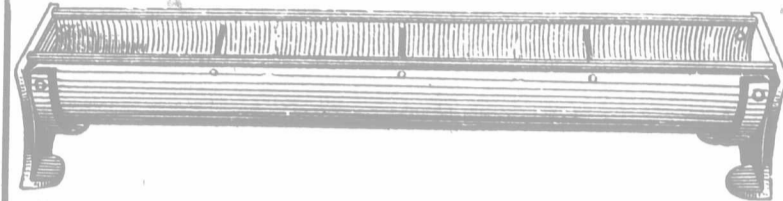
At a recent combination sale of Shorthorns in Chicago forty-eight head realized \$17,820, an average of \$371. The top price was \$2,105, for the imported bull, Lord Banff, a three-year-old roan. M. E. Jones, of Williamsville, Ill., was the buyer. This is the best Shorthorn that has been offered in the sales this summer, and the price is considered quite conservative. The highest priced female was British Glory (imp.), sire Pride of the Realm. J. H. Miller, Deland, Ill., was the buyer. Others that brought good figures were: Imp. Stars and Stripes, \$760; cow, Red Lady 4th, \$565; Gloster's Venus, \$550; Imp. Patience and Queen Victoria 4th, \$500 each; Imp. Roan Butterfly, \$450; Banff's Arabella, \$445, and Imp. Rosy Beauty, \$435.

### TRADE TOPICS.

STEEL TROUGHS.—One naturally expects that hogs in clover will be satisfied, but they won't unless they have a good, clean trough to drink from. In the fields, wooden troughs will open up with the heat, cement troughs are out of the question for this purpose, but steel troughs just suit the case. They are practically indestructible. They are clean, light and convenient. See them advertised on another page, by W. Gordon, of Tweed, Ont.

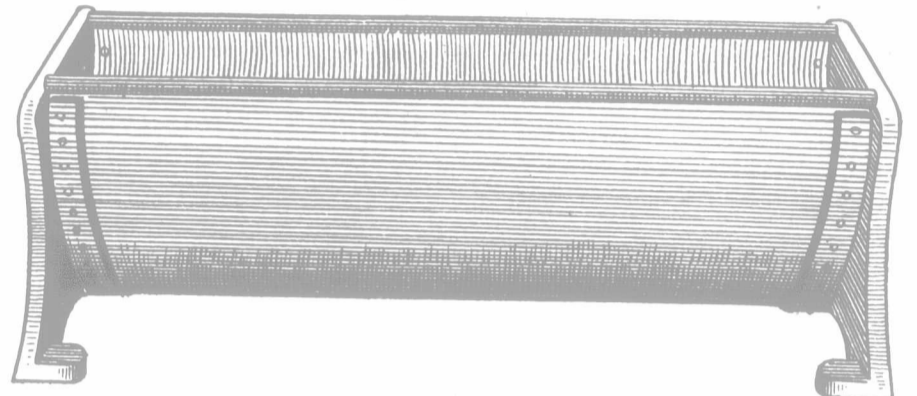
ATTAINING SUCCESS.—Success affords us the means of securing additional success, as the possession of capital enables us to increase our pecuniary gains.—[Stanislaus. Every one likes to succeed, no matter what the undertaking may be. The merchant strives to build up a large business, the scholar seeks to perfect himself in his studies, and the farmer is tireless in his efforts to increase the yield of his crops. It is impossible to save all of the corn crop without using machines, and the McCormick corn machines enable the corn grower to double the value of his crop. They are the machines to buy if you wish to attain success.

## PATENT STEEL HOG AND WATER TROUGHS



Hog-proof  
Rust-proof  
Frost-proof

I am placing on the market the Steel Hog Trough, made of 14-gauge sheet-steel boiler plate; a trough that it is impossible for the hog to chew or destroy. Edges finished with 3/8 pipe, slotted and driven on and riveted. Cross-bars to prevent hogs from crowding or lying in trough.



### Fill a Long-felt Want.

Here you have a water trough, or tank, made like the hog trough, only much larger. These troughs are made first-class in every particular, and fully warranted. They are something every farmer is going to have when he finds out what they are. They are practically indestructible.

WRITE FOR PRICES AND AGENCY.

WILBER S. GORDON, TWEED, ONTARIO.

### EXPERTS TELL US

THAT THE

## Princess Cream Separators

EXCEL IN COMPACTNESS AND SOLIDITY OF DESIGN.

A COMPACT SEPARATOR.

Stands low and saves much heavy lifting.

A SOLIDLY-BUILT SEPARATOR.

Runs absolutely true and entirely free from vibration.

### COMPACTNESS. SOLIDITY.

You Find Them Both

In The

## PRINCESS

More Than Any Others.

NO SEPARATOR CAN BE A SUCCESS THAT DOES NOT EMBODY THESE FEATURES.

CAMPBELL ARNOTT & CO., 186-188 KING ST. E., TORONTO.

## Bargains in Tank Pumps.



We offer the Windsor Tank Pump, capacity 2 1/2 bbls. per minute, complete with hose bands, strainer and brass nozzle, for \$6.65. We guarantee it to be equal to any tank pump on the market, and if you are not thoroughly satisfied with it, we will send you either a Barnes or a Myers pump in place of it, without extra charge. For the Windsor pump complete, with 20 ft. of 2-inch wire-lined suction hose, made by N. Y. Belting and Packing Co., and 10 ft. discharge hose, with hose bands, strainer, nozzle, etc., our price is \$15.00.

If you need a drive belt, get the best made. Our Veteran Canvas Drive Belt has 20 per cent. more rows of stitches than any other make sold in Canada. It weighs 5 to 10 lbs. heavier, being made from heavier canvas, and price for the 6-inch 4-ply is 19c. per ft.; for the 7-inch 4-ply, 21c. per ft., and for the 8-inch 4-ply, 25c. per ft.

Our Veteran Rubber Drive Belt is made for us by the Rubber Goods Mfg. Co., the largest concern making rubber belting in the world, and it is guaranteed by them to be the best belt it is possible to make. Our prices for them are: 6-in. 4-ply, 37c. per ft.; 7-in. 4-ply, 42c. per ft.; 8-in. 4-ply, 46c. per ft.

For Ham Headlight, our price is \$9.00; for complete set of Barnes Monitor Jr. Clover Huller, \$15.00; for 1 bbl. Best Cylinder Oil, holding 25 imperial gallons, \$9.75; Jacketed Can, holding 8 imperial gallons, same oil, \$3.75; Weller Jack, capacity 4 tons, \$7.50; 3-in. 4-tone Chime capacity 12 bbls., \$21.00.

Our 1903 catalogue is ready for distribution. Every thresherman and owner of an engine should have it. We send it free to all who write for it.

WINDSOR SUPPLY CO., Windsor, Ont.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.



**"The Stretched Forefinger of all Time" is on the dial of an Elgin Watch**

—the world's standard for pocket time-pieces. Perfect in construction; positive in performance. Sold by every jeweler in the land; fully guaranteed. Booklet free.

ELGIN NATIONAL WATCH CO.  
ELGIN, ILLINOIS.

**GOSSIP.**

**JERSEYS FOR CANADA.**

Mr. P. Clarke, of Ottawa, one of those thorough business men whom we all enjoy knowing, having spent a good part of his life in the mercantile world, where he not only acquired a good store of this world's goods, but that painstaking care and system that goes with the successful merchant, has established upon his fine farm (just outside the city of Ottawa) not only a fine herd of Jerseys, but a retail milk and cream trade for the sale of "pure milk and cream." In a circular which Mr. Clarke sends to his trade, he says:

"Every process is open for full inspection, and visitors are always welcome. The best time to see the dairy is between four and six o'clock in the afternoon, as the cows are then in the stables and the men are then milking, cooling and bottling the milk. The methods practiced enable us to produce pure milk. The cows are healthy, the stables are of modern construction, cement floors, well ventilated, light and clean. Before putting on their white duck suits, which are worn at milking time only, the milkers wash their hands and faces."

"The same thoroughness and care," says Mr. Frank W. Hart, of Cleveland, Ohio, in a letter to the Jersey Bulletin, "is employed by Mr. Clarke in the selection of new blood which he proposes to put into his herd. He did not send a man, but came himself to inspect our herd, and after looking it over for two days in the most thorough manner, he selected Gazelle's King of St. L. 49640, a son of the great Gazelle's Fawn 93704 (test 25 lbs. 4 1/2 ozs. in seven days from 33 lbs. of milk) and Joel of Pittsford Farms 28450, a bull having 50 per cent. of the blood of Stoke Pogis 3rd—just the same as a son. Gazelle's King of St. L. already has two tested daughters: Gazelle W. of St. L., 15 lbs. 2 ozs., and Conella W. of St. L., 15 lbs. 4 ozs. Mr. Clarke bought four daughter of this bull, so that he may soon see what Gazelle's King is capable of doing as a sire. They are: Gazelle's Bright Eyes 172828, dam Chief's Bright Eyes, 15 lbs. 8 ozs.; King's Amy 172829, dam Amy H. of St. L., 17 lbs.; King's Doris H. 173008, dam Doris W., 17 lbs. 8 ozs.; King's Viola 172833, whose dam has not yet been tested, but we know she can make a test—and a good one—when the time comes. These heifers are a very choice lot, of good size and perfect dairy form."

"Last, but not least, Mr. Clarke selected a son of King of St. Lambert's King 30752 ('Hart's King,' who now has 30 tested daughters, the last one, Harriet J., has just completed her test, 16 lbs. 9 ozs.), and Exile's Pomona 141106, test 17 lbs. of butter after having a very severe case of milk fever, so that her test is not a true representation of her capacity. We look for Pomona to get quite a bit over the 20-lb. mark under favorable conditions."

Mr. Clarke is certainly to be congratulated in the ownership of these fine cattle, that will be of great benefit not only to his own herd, but the Jersey herds in his vicinity.

**THE MODEL CONCRETE MIXER.**

Do you want a Concrete Mixer? If so, send to

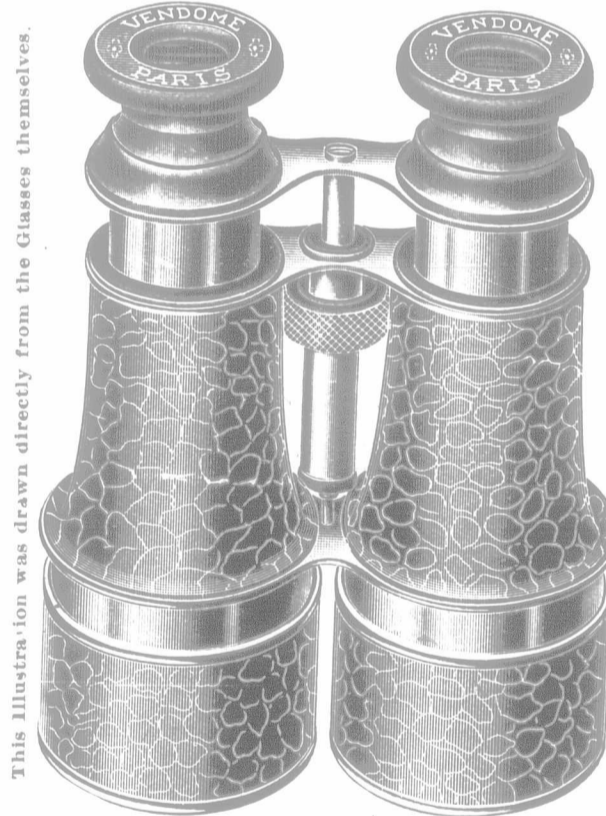
**A. E. HODGERT, EXETER, ONT.**

Best of testimonials. Saves cement, and stronger wall. Also extension steel silo curbing, building any size silo.

**Beautiful Suburban Home**

1/2 miles from Toronto, close to electric cars; first-class brick residence, all modern conveniences, garden, shrubbery and orchard; good stables; 2 acres land. A. F. BANKS, York Mills.

**50-Mile Range Day and Night Field Glasses \$3.55**  
REGULAR PRICE, \$10.00.



WE offer these Field Glasses at the heretofore unheard of price of \$3.55, actually less than the net wholesale price to the ordinary dealer. They are exceptionally fine, High-grade Glasses, 9 inches long when fully extended, and fitted with 6 lenses; the outer or object lenses being over 2 inches in diameter, which gives them great power at long range. ON A CLEAR DAY YOU CAN SEE 50 MILES WITH THEM. The finish throughout is extra fine, the trimmings, cross-bars and draw tubes being heavily nickel-plated and the covering the best grade of brown tan leather, alligator pattern. The distinct feature of this Glass lies in the Hoods, which may be extended beyond the object lenses, as shown in the illustration, thus enabling the Glasses to be used with remarkable results at night. These hoods are found only on the most expensive instruments. We offer this Glass as the equal of Glasses sold by regular dealers at three times our price, and to prove to you what a great bargain we are offering, we make the following liberal proposition: Simply write us, giving your name and address, and nearest express office, and we will ship a pair of these High-grade Glasses in a strong waterproof canvas case, with leather carrying-strap, for your inspection. When they arrive at your express office, call and examine them thoroughly, and then, if perfectly satisfied that they are all that we claim that they are, and you will own as FINE A PAIR OF GLASSES AS ANY DEALER WOULD SELL YOU FOR \$10. Understand, they are not the small pocket Field Glass, of use only on race tracks, but genuine long-distance Glasses that are worth their weight in gold to farmers, hunters, ranchmen, mariners, fishermen, prospectors, tourists, or any one requiring a powerful instrument. W. A. Snyder, Lyndon, Alta., said: "I received the Glasses and am well pleased with them. They are far better than I could buy here for three times the price." John Gleeson, Kingston, Ont., said: "The Field Glasses received and I consider them remarkably good for the low price I paid. I can see objects miles from where I live very distinctly." If you do not live near an express office, send \$3.55 cash with order, and 35c. extra to pay postage, and we will forward the Glasses by mail, postpaid. We guarantee perfect satisfaction, and will refund price if asked for. Do not delay in ordering, as we have only 96 pairs of these special Glasses on hand. Address, very plainly, JOHNSTON & CO., Dept. 561, Toronto, Ont.

**Poultry and Eggs Wanted**

Empty crates forwarded upon application. Highest prices paid. Payments weekly by express order. Correspondence solicited.

**TORONTO POULTRY & PRODUCE CO.,**

470 YONGE ST.,

TORONTO.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

**GOSSIP.**

From Mr. J. C. Truman, of the Pioneer Stud Farm, of Bushnell, Ill., we receive the following: "I am advised by my brother, Mr. H. H. Truman, M. R. C. V. S., of March, England, that he has already purchased a lot of black Percheron stallions in France—the best that money would buy. Our Mr. W. E. Truman sailed from New York on Saturday last on the Lucania direct for our old home in England, and will select at the different shows a lot of the best Shire, Suffolk and Hackney stallions for our trade here and Canada. They will be included in the Percheron lot, and he will return with them the latter part of July or the first of August. Our importation received here in April are doing fine, and while we have sold several of them, we still have a few very select Shires, Suffolks, Percherons and Hackneys that are show horses and will be included in our two show strings this fall. Any of our readers contemplating buying a stallion this fall or next spring will do well to correspond with me, and also ask for one of our catalogues, which are free to all readers of your valuable paper, more especially to those interested in first-class horses." It will be remembered that the Truman Shires had things practically all their own way at the two last international shows in Chicago, and we may safely anticipate that the quality of the coming importation will in every sense maintain the high reputation of their stud.

**Lump Jaw Spavin Curb Splint Sweeny**

**Cure Them**  
Lump Jaw in cattle, Fistula and Poll Evil in horses, and almost every blemish that a horse can have, even bad Bone Spavin, Ringbone and Knee-Springs, can be readily cured by anybody. We want to tell you how to do it, prove that you can do it, and guarantee you success in doing it. Two big booklets explaining everything sent free. Write now. Fleming Bros., Chemists, 45 Front St., West, Toronto, Ont.

Easy Running Ball Bearing.



New Century Washer.

Runs easy because it is ball bearing like a bicycle. Washes all clothes clean—even the heavy ones thoroughly—even the dainty ones without harm. Ask your hardware dealer to show it to you or send for booklet to The Dowsell Mfg. Co., Ltd. Hamilton, Ont.

**THE ONTARIO VETERINARY COLLEGE (LIMITED),**

TEMPERANCE ST., TORONTO, CANADA  
Affiliated with the University of Toronto.  
Patrons: Governor-General of Canada, and Lieut-Governor of Ontario. Fee \$65.00 per session. Apply to ANDREW SMITH, F.R.C.V.S., Principal. 18-9-y-om

**HOLLWELL MANOR FARM.**

FOR SALE:  
7 Scotch Collie Puppies  
om For price apply to  
D. G. GANTON, ELMVALE, ONT.

**CENTRAL Business College**

STRATFORD, ONT.  
Our Motto: "High-grade Work Only."  
Send for Catalogue.  
W. J. ELLIOTT, Principal.

**Barred Rocks Exclusively.**  
Stock for sale: 1 good year-old male bird of Bradley Bro's strain, and a number of good breeding hens of Hawkins' strain, to d'spose of. Write for prices.  
A. E. SHERRINGTON, Walkerton, Ont.

**CLYDESDALES FOR SALE**

New importation just arrived:  
**25 STALLIONS**  
OF  
Choice Breeding, Excellent Quality and Extra Large Size.  
Stock has been personally selected. Inspection is solicited and prices will be found right.  
O. SORBY, GUELPH, ONT.

**John Gardhouse, Highfield P. O., Ont.**

Breeder of SHIRES, SHORTHORNS and LEICESTERS. Young stock for sale, both sexes. Scotch and Scotch-topped Shorthorns of such noted families as Imp. Tollas, Charets, Lovelys, Rosebuds, Blossoms, Circes, Roses, and other noted families. The Imp. Lancaster bull, Prince Louis = 32082 = (77486), heads the herd. Farm 3 1/2 miles from Weston station, G.T.E. and C.P.R., and 14 miles north-west of Toronto.  
om

**CLYDESDALE STALLIONS.**

I am now offering the quality stallion, Highland Harry 2545, by MacInnis (imp.), a perfect model; and the stallion, MacInnis 2nd, by same sire. Also Ayrshire bull, Glencairn's Prince 13568. Write at once, to DONALD CUMMING, Lancaster P. O. and Station.



HORSEMEN! THE ONLY GENUINE IS

**GOMBAULT'S CAUSTIC BALSAM.**

Not genuine without the signature of *The Lawrence-Williams Co.* Sole Importers & Proprietors for the U.S. & CANADA. CLEVELAND, O.

The Safest, Best BLISTER ever used. Take the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. **SUPERSEDES ALL CAUTERY & FRIING.** Impossible to produce scar or blight. Every bottle is warranted to give satisfaction. Price \$1.50 per bottle. Sold by Druggists, or sent by Express, charges paid, with full directions for use. Send for free descriptive circulars. **THE LAWRENCE-WILLIAMS CO., Toronto, Ont.**

**CLYDESDALES**

**AYRSHIRES and POULTRY.**



**R. Ness & Sons, Howick, Que.**

Importers of Clyde, Percheron and Hackney stallions, Ayrshire cattle, and poultry, have for sale 5 Clyde stallions, sired by Baron's Pride, Sir Everitt, and Royal Carrick, 1 Percheron, and 1 Hackney, winners. Ayrshires of both sexes, and poultry.

**RED RIBBON STUD**

Largest Importers and Breeders of

**Shire Horses**

in the Dominion,



including first-prize winner at Royal Agricultural Show in England, and winning more prizes at Industrial and other large shows than all others combined.

Stallions and mares all ages, home-bred and imported, always for sale. Over 50 to choose from.

**MORRIS & WELLINGTON,**  
Fonthill P. O., Welland County, Ont.



Before sending your horse to the sale remove the blemishes with

**ABSORBINE**

Also carry a bottle with you to use in case of accident in shipping. **ABSORBINE** will remove the soreness at once in any fresh Bruise or Strain. No blister, no hair gone. 25¢ per bottle, at regular dealers, or delivered. Write for pamphlet.

**W. F. YOUNG, P. D. F., Springfield, Mass.**  
**LYMAN, SONS & CO., Agents for Canada.**

**Thorncliffe Stock Farm**

**ROBERT DAVIES**

usually has on hand some fine specimens of Clydesdales, Hackneys, Jersey and Ayrshire Cattle, Yorkshire Pigs.

Correspondence solicited. Visitors always welcome at.

**THORNCLIFFE,**  
TORONTO.

**CLYDESDALE MARES**

Registered mares, from three years old and upwards, for sale.

**NELSON WAGG.**

Claremont station, C. P. R., 2 miles.  
Stouffville station, G. T. E., 1/2 miles.



**DEATH TO HEAVES** guaranteed. **NEWTON'S** is a specific for this disease. A veterinary specific for cough, throat and stomach troubles. Strongly recommended. 25¢ per can. Dealers, Major F. S. ... **Newton Horse Remedy Co., Toledo, Ohio.** Distributed by **Lyman Bros. & Co., Toronto and Montreal.**

**BOOK REVIEW.**

Any book reviewed in this department may be ordered through this office.

**UP-TO-DATE SPRAYING.**—The practice of spraying is now recognized as an essential part of the work of the successful fruit-grower. Professor Clarence M. Weed's little manual on "Spraying Crops" has been generally recognized, for the last ten years, as a most useful guide to spraying operations, the book having had an extraordinary sale in its three previous editions. The present, fourth, edition has been rewritten and reset throughout to bring it thoroughly up to date, so that it embodies the latest practical information gleaned by our fruit-growers and experiment station workers. After an introduction which discusses the general principles involved in spraying, the book is divided into four parts, the first dealing with spraying the larger fruits, the second with spraying small fruits and nursery stock, the third with spraying shade trees, ornamental plants and flowers, and the fourth with spraying vegetables, field crops and domestic animals. In each part the principal insect and fungous enemies of the various crops are discussed, and the best methods of combating them are clearly described. So much new information has come to light since the third edition was published that this is practically a new book, needed by those who have utilized the earlier editions, as well as by fruit-growers and farmers generally. The Orange Judd Company are the publishers, and it is a well-bound and copiously-illustrated volume of 150 pages. Price, 50 cents, ordered through this office; or it may be secured as a premium by sending in one new subscriber to the "Farmer's Advocate."

**GOSSIP.**

Readers will please note the advertisement of Lorne Stock Farm. A. McKillop & Sons are now offering young stock of Standard-bred horses, Shorthorn cattle and Oxford Down sheep.

The following is from a letter received by us from Mr. John Racey, Jr., of Glenburn Stock Farm, Lennoxville, Que.: "We have recently sold to Mr. E. P. Smith, Johnville, Que., the young Shorthorn bull, Skipper, by Strathroy =9305=, and out of Bellrose =30678=, an A1 dairy Shorthorn; also, another young bull of the same family, by Nonpareil Victor 2nd., to Mr. Chas. Everett, of Huntingville, Que. We are having a very fair demand for Berkshires. So far those to whom we have shipped, that we have heard from, express themselves as being well pleased with the stock sent. We are also having good reports of the young sows in farrow we sold last spring. Our present offering of young ones is well worth the attention of any who require Berkshires of the long, smooth sort from prolific sows. They are principally of the well-known Highclere family."

Mr. Edwin Battye, of Gore Bay, writing us, says: "Our cattle are doing well, and we have now over twenty calves. We have sold all our bulls that we wanted to spare that were fit for service. We have some calves that will be fit, both for breeding and individuality, to head any herd. Two are from imported cows and sire; two Matchless bulls from imported sire, and a Duchess of Gloster bull, all from Royal Emperor =40416= (79809); also, a nice lot of heifer calves. We have bought from the Hon. Wm. Mulock, York Wanderer (imp. in dam). He is a light roan, calved February 2nd, 1903; bred by Rev. J. S. Smith, Oakland, Boyle, Ireland; got by Wanderer's King (80212); dam Riby Anna (imp.). This is an extra fine individual, and we have great expectations of him, intending to use him on the heifers from Royal Emperor."

**TRUMAN'S PIONEER STUD FARM**



**BUSHNELL, ILL., U.S.A.**

Has for 24 YEARS been headquarters for the CHOICEST

**SHIRE, PERCHERON, SUFFOLK AND HACKNEY STALLIONS.**

Last importation received April 10th, 1903.

**20 to 30 Good Practical Salesmen Wanted.**

Best lot of draft stallions in the United States or Canada. Notwithstanding the superior quality of our horses, it is a fact that our prices are lower than can be obtained elsewhere in America. If there is no first-class stallion in your neighborhood, please write us. For our 24th annual catalogue, etc., address—

**J. G. TRUMAN, Manager,**  
**BUSHNELL, ILL.**

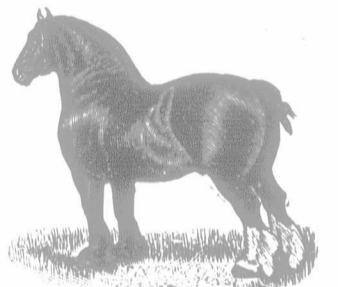
**INTERNATIONAL IMPORTING BARN, SARNIA, ONTARIO**

**J. B. HOGATE, PROPRIETOR.**

IMPORTER OF



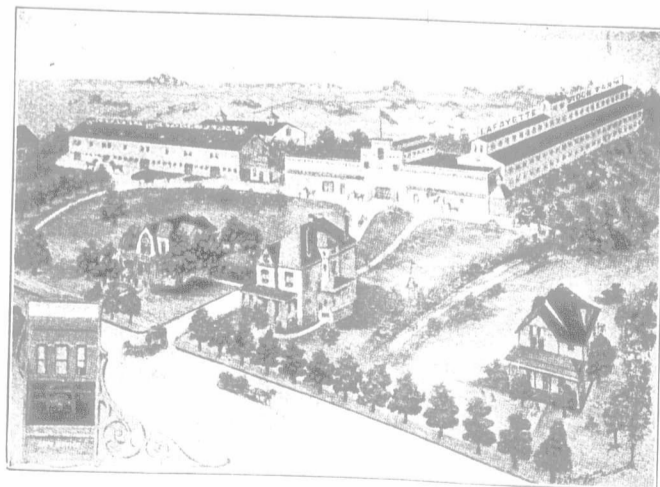
**Clydesdale, Shire and Hackney Stallions, and Spanish Jacks.**



68 head imported in 1902. All sold but 2 stallions and 4 jacks.

My next importation will arrive about Sept. 1st—60 stallions and 20 jacks. Hogate buys bread-winners, and sells them at bread-winning prices. Hogate doesn't advertise all of his stallions to weigh a ton, but some of them do. You can fool some of the people some of the time, but you can't fool all the people all the time. Be sure and see my stock before you buy in the fall. Prices to suit all, consistent with quality. I will be pleased to see all my old customers in the fall, and as many new ones.

**H. H. COLISTER, MANAGER AND SALESMAN.**



**LA FAYETTE STOCK FARM,**  
**J. Crouch & Son, Props.**  
Importers of all breeds of **STALLIONS.**

We are the largest Importers and Breeders of Oldenburg German Coach horses in America. We also import Draft horses of all kinds, including Belgians, Clydesdales, English Shires, and Normans. 359 head of Coach and Draft stallions imported in last 15 months.

**La Fayette, Ind., U.S.A.**  
Terms easy. All stock guaranteed.

**ALEX. GALBRAITH & SON,**  
**JANESVILLE, WIS.**  
**BRANDON, MAN.**

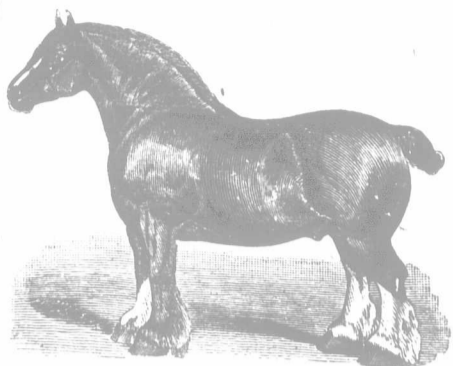
Have a few choice **STALLIONS** left that they offer at a special bargain.

New importation of prizewinners of the various breeds will arrive in August. Buying orders executed on commission.

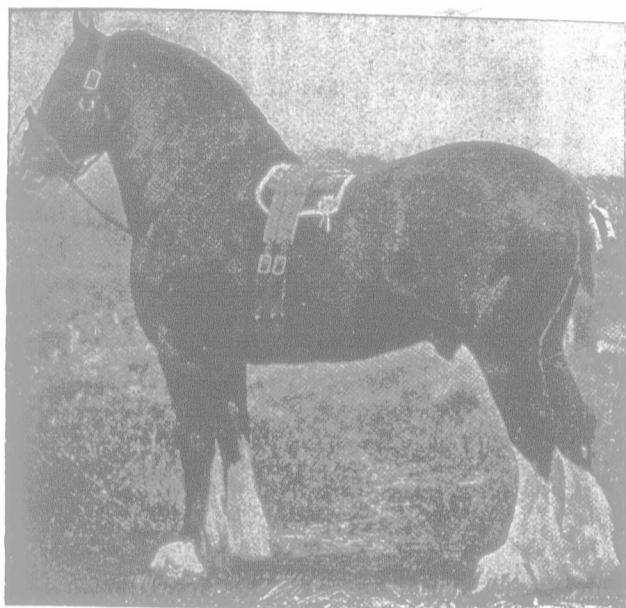


**CLYDESDALES and HACKNEYS.**

Another large importation will arrive in August. Mr. James Dalgety is now in Scotland for the purpose of selecting a better lot of horses than he ever before imported. Some of the lot have already been purchased, and include some extra big prizewinners. Others will come out that have made the season in Scotland. Intending purchasers should have this shipment in mind.



**DALGETY BROS., LONDON, ONT., AND DUNDEE, SCOTLAND.**



**ROBERT BEITH, BOWMANVILLE, ONT.,**  
IMPORTER AND BREEDER OF

**Clydesdale AND Hackney Horses**

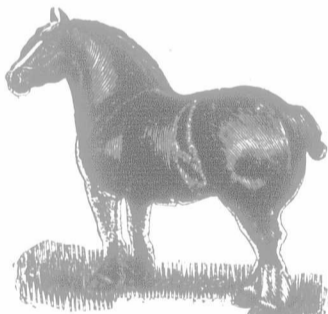
Is offering for sale a number of choicely-bred Clydesdales and Hackney stallions; also a number of Hackney mares. The Clydesdales are sired by the noted horses, Prince of Albion, King of the Roses, Lord Stewart and The Prior.

**ROSEDALE STOCK FARM.**  
IMPORTED SHIRE and CLYDESDALE HORSES.  
SHORTHORN CATTLE and LEICESTER SHEEP.

Newham Duke, the gold and silver medal four-year-old Shire stallion, and the imported Clydesdale stallion, Royal Kerr, in service; also Clyde and Shire stud colts for sale. Imp. Chief Ruler, bred by W. S. Marr, heads the Shorthorn herd. Of the females, 15 are imported, from such families as Marr Misses, Strathallans, Jealous Girls, Crimson Flowers, Orange Blossoms, Wimples, Lovelys, Jilts, Secrets, Verbenas, etc. Farm 15 miles from Toronto, on G. T. R. and C. P. R. Post office, telephone and telegraph.

**J. M. GARDHOUSE, Weston, Ont.**

**JOHN BRIGHT, MYRTLE, ONTARIO,**  
BREEDER OF  
**Clydesdales and Shorthorns,**



Is now offering for sale 8 stallions, sired by such horses as Prince Patrick (imp.), Erskine's Pride (imp.), Sir Erskine (imp.), Royal Laurence (imp.). Also a number of mares and fillies. Shorthorns of all ages, of such families as Miss Ramsden, Clementina, Strawberry, Crimson Flower, Village Girl, Stamford, Rachel, etc.

Myrtle Station, G. T. R. and C. P. R. Farm connected by long-distance telephone.

**'BELGIAN' STALLIONS and MARES**

IMPORTED LAST SEPTEMBER.  
THOROUGHLY ACCLIMATED.

The up-to-date drafter, big and medium weight, dark colors, short, straight back, no hair on legs, immense rumps, pony-built body. Not a shaggy lump of fat. **A Klondyke in your stable.** Honest value for honest money. Write, or, better, come to

**BARON DE CHAMPLouis, Importer,**  
DANVILLE, QUEBEC.



**CLYDESDALES**

A Specialty.

Another important importation of stallions and mares may be looked for in August. Intending purchasers will do well to see our horses, as we import the best. Quality, with sufficient size, is our motto.

**WM. COLQUHOUN,** Mitchell P. O. and Station (G.T.R.), Ont.

**GOSSIP.**

An Oregon packing firm has contracted with the Indian Agent at Fort Duchesne, Utah, for 5,000 Indian ponies running wild on the Utah Reservation, at \$2.50 each. Most of the canned beef made from these ponies will be sent to Japan for army use.

The Oregon Experiment Station has conducted investigations to determine whether the bacteria commonly found in pools of stagnant water can gain access to the milk given by a cow that drinks it. The results were that these bacteria were not found in either the milk, urine or feces of cows that had drunk water to which pure cultures had been added. Even when pure cultures of typhoid bacillus were applied to the teats and allowed to remain for twelve hours, then removed and the teats disinfected, there was no trace of the typhoid in the cow's milk. This last experiment was repeated for five days, with the same result.

**TRADE TOPICS.**

**McCORMICK MACHINES.**—Even if one does not intend to buy anything in the farm machinery line, it will do him good to take a look over the special Canadian catalogue issued by the McCormick Manufacturing Company. Mowers, corn harvesters and twine are the prominent articles listed. The catalogue is issued purely to the Canadian trade, and will be sent on application to the McCormick Division of the International Harvester Company, Chicago.

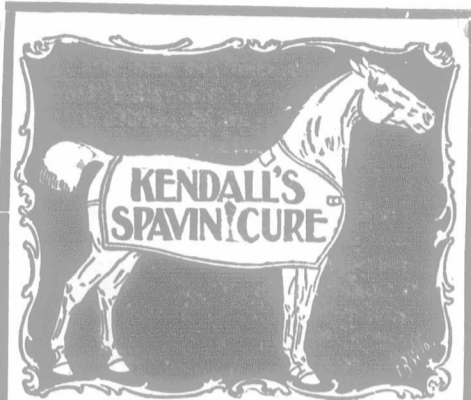
**GASOLINE ENGINES.**—One of our representatives recently called upon the McLachlan Gasoline Engine Co. and had a look over their great variety of supplies. Engines ranging from two to thirty horse-power are manufactured in these works. Our attention was particularly drawn to the twenty-horse-power machine, intended chiefly for Western threshing business. It is certainly a smooth-running machine, and fills a long-felt want.

**DOMINION STATISTICS.**—The statistical branch of the Dominion Department of Agriculture, in charge of Mr. Geo. Johnston, is to be congratulated upon the early issue for the current year of the "Statistical Yearbook" and the general excellence of the work. It is certainly one of the most complete ever issued, and of very great value to journalists and other students of the country's condition and growth.

**WINNIPEG EXHIBITION.**—The first of the Canadian exhibitions for 1903 will be opened on July 20th at Winnipeg, and will last one week. Fifty thousand dollars is allotted for prizes and attractions. The purses for speeding are particularly liberal, and should attract entries from the east. The West has enjoyed the distinction of being the most talked-of place in the world during the past year, and the low rates of travel accompanying the Winnipeg Exhibition furnishes one an excellent opportunity to visit this new and growing country. Those intending to visit the West in harvest might well go earlier to see the exhibition and look the country over before the busy time arrives. The West is a revelation to an easterner, and not the least interesting spectacle is Winnipeg and her splendid exhibition. Mark the dates, July 20th to 25th.

**Christian Endeavor, Denver.**

For the International Convention at Denver, July 9th to 13th, the official route selected by the transportation managers for Ontario and Quebec is via the Chicago and North-Western and Union Pacific Railways. Special train of tourist sleeping cars through to Denver. Tickets on sale July 6th, 7th and 8th. Return limit, August 31st, 1903. Very low rates from all stations in Canada. Write for official Christian Endeavor folder, rates and full information to B. H. Bennett, 2 East King St., Toronto.



USED FOURTEEN YEARS WITH GOOD RESULTS.

721 E. 164 St., New York, Sept. 8, 1902.

**DR. B. J. KENDALL CO.,**  
Gentlemen:—I have used your Spavin Cure on my horses for the past fourteen years and it has always given me good results in every particular. I also have one of your books that I have found very useful. If you have any later edition of the "Treatise on the Horse and his Diseases," will you kindly send me one.

Respectfully yours, **B. F. FRISBIE.**

It is an absolutely reliable remedy for Spavins, Splints, Curbs, Ringbones, etc. Removes the buncle and leaves no scar. Price \$1; six for \$5. As a liniment for family use it has no equal. Ask your druggist for **KENDALL'S SPAVIN CURE**, also "A Treatise on the Horse," the book free, or address

**DR. B. J. KENDALL CO., ENOSBURG FALLS, VT.**



**Curb, Splint,**

contracted cord, thrush, grease heel and all forms of lameness yield readily to

**Tuttle's Elixir.**

Used and endorsed by Adams Express Co.

Dr. S. A. Tuttle, V.S.  
Dear Sir:—I want to add my testimonial to your list recommending Tuttle's Elixir for curbs, broken tendons, thrush, and nails in the feet. I have used it on all of these cases many times, and never failed to make a cure.

Given internally it is sure cure for Colic, Distemper, Founder, Pneumonia, etc.

**TUTTLE'S FAMILY ELIXIR** cures rheumatism, sprains, bruises, etc. Relieves pain instantly. Our 100-page book, "Veterinary Experience," FREE.

**DR. S. A. TUTTLE, 66 Beverly St., Boston, Mass.**  
Beware of so-called Elixirs—none genuine but Tuttle's. Avoid all blisters; they offer only temporary relief if any.

**LYMAN, KNOX & SON, Agents, Montreal and Toronto, Canada.**

**DR. PAGE'S ENGLISH SPAVIN CURE**



For the cure of Spavins, Ringbones, Curbs, Splints, Windgalls, Capped Hocks, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements. This preparation (unlike others) acts by absorbing rather than blistering.

This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by **DR. FREDRICK A. PAGE & SON, 7 AND 9 YORKSHIRE ROAD, LONDON, E. C.** Mailed to any address upon receipt of price, \$1.00. Canadian agents:

**J. A. JOHNSTON & CO., DRUGGISTS, 171 KING STREET, EAST, TORONTO, ONT.**



**New Book** on how to prevent and cure diseases of horses and cattle, to know sound horses, age, constitution, valuable recipes, etc., prepared especially for farmers, from facts gathered in 20 years' practice, by **S. S. Dickinson.** (Out shortly.) Advice by mail, \$1.

Address **S. S. Dickinson, Port Hope, Ont.**

**BAWDEN & McDONELL**



**Exeter, Ont.**  
IMPORTERS OF  
**Clydesdale, Shire and Hackney Horses**

are now offering several imp. Clydesdale, Shire and two Hackney stallions, prizewinners in England, Scotland, and Canada, and representing the best blood alive; also several choice Canadian-bred ones. These animals are all true to type, and possess substance, quality, style and action.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE



## GOSSIP.

We are informed by Mr. A. J. Shean, of Owen Sound, that he did not part with his famous bull, Marengo Heydon Duke, as noted in our May 15th issue.

We are advised by Robt. Hunter & Sons that the whole of the latest importation of Ayrshires recently landed by them will be attached to their herd at Maxville, Ont. In the account of the importation in our last issue the inference might be drawn that these cattle were for the Lachine Rapids farm, but such is not the case.

In this issue the advertisement of the Isaleigh Grange Farm is changed, and special attention is directed to the young stock, which are reported in good order. The Ayrshire stock bull, Isaleigh Prince, has proved himself a good stockgetter, and also won several prizes last season. He is now offered for sale, which is a first-class opportunity to get a fine representative Ayrshire of the Silver King stock.

E. B. Hinman & Sons, of Grafton, Ont., writing us to make a change in their advertisement of Jersey stock, say: "We have sold the two young bulls which we have been advertising. One was shipped to Mr. Harry J. Morris, of Loyal, Ont. The other went to Picton, and in company with him we sent a yearling heifer. She promises to make a good one, and the buyer was lucky in securing this pair. Our young stock bull, Dentonia's Achievement 63463, is developing splendidly, and will be heard from later on.

In making a change in their ad., Fitzgerald Bros., of Mount St. Louis, say: "We are offering four young British Statesman (imp.) bulls for sale. They are right good ones, and, like their sire, are grand handlers, and should develop into first-class sires. We are also offering some calves, both male and female, sired by Imp. Diamond Jubilee = 28861 =. They, like their sire, are coming into good form, being exceptionally well sprung in the ribs, good in the hind quarters, and are grand handlers, and will undoubtedly develop into good animals."

## SHORTHORN SALES.

Sales of Shorthorns across the line continue active, but no sensational prices are realized; E. R. Strangland, of Marathon, Ia., sold thirty-one females on June 2nd for an average of \$257.90. The lot included eight imported head. Imported Flora 2nd, by Prince Charles, realized the top price of the sale, \$505. The lowest price was \$150. The sale-day was considered a splendid bargain time. On the following day, at the sale of N. A. Lind, Sweet Bouquet (imp.), with bull calf by imported Golden Crest, brought \$600 from Mr. A. Chrystal, of Marshall, Michigan. This sale included a goodly number of imported cows with calves at foot. Eleven bulls sold for an average of \$66.35. Five hundred dollars was paid at J. W. Smith & Son's sale on June 5th for the six-year-old American-bred cow, Grand Rose Duchess of Gloster 32nd, and Altona, a red three-year-old, brought \$515. Four bulls got an average of \$201. The very bad condition of the railroads on account of heavy rains deferred many from being present at these sales, or larger prices might have been realized.

## TRADE TOPICS.

**GIRLS' SCHOOL.**—The attention of our readers is called to the course of studies taken up at the Bishop Strachan School, of Toronto. The School enjoys an enviable reputation, extending over a long period.

**THE TREAD POWER** for farm purposes is a device worthy of serious consideration. The first cost of the machine is practically the only cost, and the mechanism is simplicity itself. Note the points of vantage of the McGill Tread Power enumerated in their ad. on another page.

## REMEMBER:

Free-for-all (Trot or Pace).  
Purse, \$2,500.00.

Citizens' Purse (1½ dash).  
Purse, \$1,200.00.

2 10 Trot, 2.15 Pace.  
Purse, \$700.00.

2 15 Trot, 2.20 Pace.  
Purse, \$500.00.

And 21 other Speed Events.

Winnipeg Industrial  
Exhibition, 1903

JULY - 20-25

## BIGGER AND BETTER THAN EVER

\$50,000 in Prizes and Attractions.

## STOCK-BREEDERS:

"THE INDUSTRIAL" draws the people.  
The people buy your stock.  
Be sure and be in it.

## MANUFACTURERS:

An exhibit of your Goods at "THE INDUSTRIAL" last year was inspected by 100,000 visitors. This year we promise 150,000.

J. T. GORDON,  
PRESIDENT.  
F. W. HEUBACH,  
GEN'L MGR.  
Winnipeg, Man.

## SPECTACULAR!

Acrobatic feats each evening  
and afternoon.

"FROM DARKNESS TO  
DAWN," one of the lead-  
ing events, with fire-  
works each ev'g.

"WHIRLING THE LOOP,"  
the sensation of the age,  
and a score of other numbers.

THE KINDERGARTEN STUD FARM, GUELPH  
JAMES HURLEY, Proprietor.  
Breeder of Thoroughbred horses from noted sires and  
dams. All classes of horses for sale.

GEO. STEWART, Howick, Quebec,



IMPORTER OF

Clydesdale  
Horses,

has now on hand for sale 2 three-year-olds, 3 two-  
year-olds and 1 yearling stallion (all imported),  
carrying the blood of Baron's Pride, Mai's of Airies,  
Darnley and Prince of Wales, combining size, style,  
quality and action. The best lot I ever imported.  
Write quick.

GEO. STEWART, Howick, Quebec.

## WANTED

The largely-increasing demand for  
First-class Fruit Trees  
and Bushes, Ornamental  
and Shade Trees,

Rose Bushes, Climbing Vines, Hedges, etc., makes it  
necessary to secure MORE MEN to represent us.  
We would like to hear from any honest, intelligent  
man desiring steady, paying employment.  
We train you at our own expense.

STONE & WELLINGTON,  
"Canada's Greatest Nurseries," Toronto.

## GUERNSEY BULL

For Sale.

ISALEIGH YORK No. 7354: three year-  
old; grand animal. Very best dairy type. Apply:

JAMES ARMSTRONG,  
DONCASTER P. O., ONT.

## ELM PARK STOCK FARM

Fresh importations of High class  
ABERDEEN-ANGUS CATTLE

AND  
SUFFOLK SHEEP.

We have for sale the 1st, 2nd and 3rd prize  
bull calves at Toronto and London, and 1st  
prize bull calf at Guelph, all fitted by their own  
dams.

We have a good crop of strong Suffolk lambs.  
This breed produces the highest proportion of  
lean to fat of any of the improved mutton  
breeds.

JAS. BOWMAN, - GUELPH, ONT.

## THE SUNNYSIDE HEREFORDS.

Onward 120463, by Imp.  
March On 76335, at head of herd.

FOR SALE:  
2 bulls fit for service. Choice  
females, all ages. Registered  
large English Yorkshires, 6 to 8  
weeks old. Visitors welcome.  
O'NEIL BROS., Southgate,  
Ont. Iderton station, L., H. &  
B.; Lucan station, O.T.R.

J. Richards, Bideford, P. E. Island,

Importer and breeder of Aberdeen-Angus Cattle,  
Clydesdale Horses, Shropshire Sheep,  
and Shetland Ponies. Stock always for sale. om

We are offering some young  
Durham bulls, cows and heifers, and 20  
Berkshires and 10 Yorkshires,  
of both sexes. Prices  
reasonable.

Could supply a carload of 2-year-old stock steers.  
Correspondence solicited, or come and see our stock.  
No sale, no harm. Visitors welcome to

CAMDEN VIEW FARM,  
A. J. C. SHAW & SONS, Thamesville, Ont.

GEO. B. BRISTOW, breeder of high-class Scotch  
Shorthorn cattle of the  
noted Village Girl and Wimple families.

LAKELAND FARM, Rob Roy P. O.,  
Duntroon Sta., Co. of Grey.

High Park Stock Farm Galloway Cattle.

6 choice young bulls, from 10 months to 2 years  
old, for sale. Prices right. Come and see them.  
Shaw & Marston, P. O. Box 294, Brantford, Ont.  
Breeders of Galloway cattle. om

ABERDEEN-ANGUS

For Sale: One two-year-old  
bull and one yearling bull, sired  
by Laird of Tweedhill. Will sell  
right. om W. HALL,  
Washington P. O., Drumbo Station.

## SALE! INGLESIDE HEREFORDS.

Young bulls, cows  
and heifers of most  
up-to-date type and  
breeding. If you  
want good Here-  
fords at good value  
prices, send for  
illustrated cata-  
logue, and state  
requirements. Also  
send for bred Here-  
ford cows and  
heifers. om  
H. D. SMITH  
Compton, Que.

A. J. WATSON, CASTLEBERG,  
ONTARIO, CAN.

Offers for sale young Shorthorn bulls and heifers of  
the choicest Scotch breeding. Also one five-year old  
bull, grandson of imported Indian Chief.

## LORNE STOCK FARM.

SHORTHORNS, OXFORDS  
and STANDARD-BREDS.

We now offer possibly the best 2-year  
Wildbrino colt in breeding and quality in  
Ontario. Young stock for sale. Address:  
A. McKillop & Sons,  
West Lorne, Ont.

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## Shorthorns, Clydesdales, Yorkshires

I am now offering the bull, Count Amaranth, imp.  
in dam, 2 years old, and young bulls 10 months old;  
heifers, various ages; Clydesdales, American and  
Canadian registered; and Yorkshires, both sexes and  
all ages. om

A. E. HOSKIN, SPRINGVALE FARM,  
COBOURG STA. & P. O.

Beechgrove Shorthorns. Present offering: 3  
females from 1 to 4  
years old, heavy milking strain; also one roan bull  
calf 8 months old. Prizewinners; a thick, beefy lot.  
C. McNULTY, Rathburn P. O.  
Orillia and Arthly stations.

R. & S. NICHOLSON  
Sylvan P. O. Parkhill Station, Ont.

Importers and breeders of

## SHORTHORNS

Have for sale:

13 IMPORTED HEIFERS,  
20 HEIFERS (choice).

Safe in calf to Imp. Spicy Count.

Home-bred herd composed of Nonpareils, Minas,  
Clementinas, Cruickshank Lovelys, Sathin Rose-  
marys, A. M. Gordon's Estelles, Miss Symes, etc.  
om

om

## Queenston Heights Shorthorns

Two bulls, 16 months, got by Lord Gloster  
= 2995 =; dams by Crimson Chief = 1891 =,  
by Indian Chief. om

HUDSON USHER, - QUEENSTON, ONT.

Farm 3 miles north of Niagara Falls.

om

For Sale: 4 Bulls, sired by Imp. British States-  
man (63729) = 20833 =, 2 reds, 1 roan  
and 1 white, from 12 to 17 months old. Also a num-  
ber of calves, bulls and heifers sired by Imp. Diamond  
Jubilee = 28861 =. Some of their dams are cows  
sired by Imp. British Statesman. Diamond Jubilee  
is now at head of our herd. FITZGERALD BROS.,  
Mount St. Louis P. O.; Elmvalle Sta., G. T. R.;  
Hillside Telegraph Office. om

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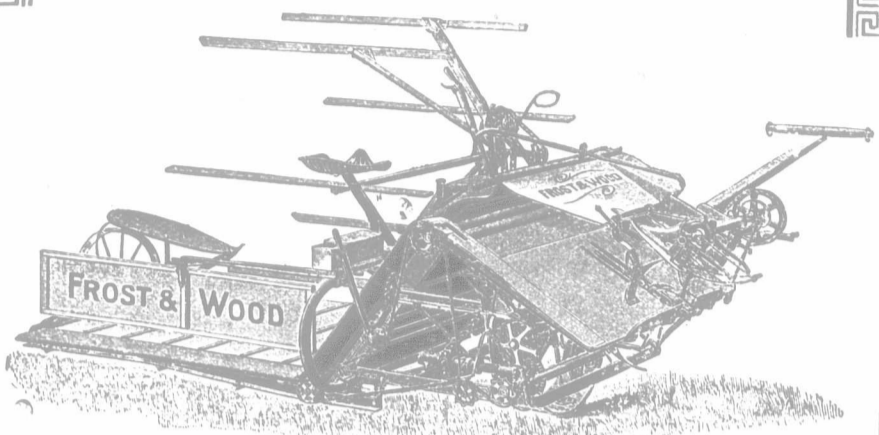
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In answering any advertisement in this page, kindly mention the FARMER'S ADVOCATE.



## Here is a Binder

That Does Its Work Thoroughly  
Through Thick or Thin.



## THE FROST & WOOD No. 3 Open-Rear Binder

is built on the sound basis of GOOD QUALITY of material and workmanship, and will give many years of useful service.

*The Frost & Wood Company*  
LIMITED.

BRANCH OFFICES:  
Toronto, Ont.; Winnipeg, Man.; Montreal, Que.;  
Quebec, Que.; London, Ont.; St. John, N. B.;  
Truro, N. S. Head Office & Works:  
Smith's Falls, Ont.

## SPECIAL

500 Packages  
Given Free.

We will give a 35-cent package of cream for calves free to any person purchasing 50 lbs. of Day's Aromatic Stock Food; price, \$3. Send cash by P.O. note or express.

Ask your dealer, or write to  
**THE Day's Stock Food Co.,**  
MIMICO, ONT.

**T. DOUGLAS & SONS,**  
STRATHROY STATION & P. O.,

BREEDERS OF  
**Shorthorns and Clydesdales**

88 Shorthorns to select from. Herd bulls (Imp) Diamond Jubilee = 28861 = and Double Gold = 37854 =. Young bulls, cows and heifers for sale at all times. Also one (imp.) stallion and two brood mares.

**ROSEVALE SHORTHORNS.**  
Herd comprises Augustas, Polyanthus, Crimson Flowers, Minas, Strawberrys and Lavinias. For sale, both sexes, the get of Imp. Marengo Heydon Duke, Imp. Baron's Heir, Imp. Golden Able and Imp. Golden Conqueror.  
**W. J. Shean & Co., Owen Sound P. O. & Sta.**

**Scotch-Topped Shorthorns**—(Imp.) Captain Mayfly (No. 28858), winner of sweepstakes at Toronto (1900), 1st at Toronto and London (1902), at head of herd. Also all of all ages and both sexes for sale.  
**JOHN C. BRICKER**  
Elmira P. O. and Station, on G. T. R.

**SHORTHORNS** FOR SALE:  
10 choice Shorthorn heifers and 10 young bulls, of choicest quality and breeding, at reasonable prices.  
**G. A. BRODIE,**  
Stouffville Sta. o Bethesda, Ont.

**SPRUCE HEDGE SHORTHORNS.**  
We are offering females of all ages. Among them are prize winners and youngsters that are sure to win.  
**JOHN MCKENZIE, Keward P. O. and Chatsworth Station, C.P.R.**

To  
Stock  
Raisers



### Choice Shorthorns and Shropshire Sheep.

I am now offering bulls from 8 to 16 months old. Heifers of all ages, some in calf. Present stock bull, Roan McKay = 37867 =.

**CHAS. CALDER,**  
Brooklin.

### Shorthorns and Leicesters.

HERD ESTABLISHED 1855.

Scotch Booth and Bates families to select from, grand milking qualities being a special feature. (Imp.) Rosicrucian of Dalmeny = 45220 = heads the herd. Young stock of both sexes to offer; also Leicester sheep.  
**JAMES DOUGLAS,**  
Caledonia, Ont.

**Shorthorns and Yorkshires**—Stock bull, Scottish Lad = 35008 =, and 1 bull, 12 months, for sale. Up-to-date Yorkshires, bred straight from imp. stock. Pigs of spring litters for sale.  
**G. W. KEAYS,**  
Hyde Park, Ont.

**SHORTHORNS AND BERKSHIRES.**  
Six bulls fit for service; also a few cows and heifers—best breeding and quality. A few Berkshires, 6 months old, both sexes. Prices reasonable.  
**F. MARTINDALE & SON,**  
Caledonia Station York, Ont.

### SHORTHORNS

Now offering 5 bulls, from 4 to 17 mos. old, sired by Royal Duke, he by Royal Sailor (imp.). Also females, all ages, some in calf. Prices moderate.  
**J. R. McCALLUM & SON, Iona Sta. & P. O. Ont.**

**Shorthorns and Lincolns** A few choice bulls from 12 to 15 mths. One bull 23 mths. Also females any age for sale.  
**J. K. HUX, RODNEY, ONTARIO.**  
L. E. & D. R. R. and M. C. R.

**Shorthorns, Leicesters and Berkshires.**  
FOR SALE—1 yearling bull, 1 yearling heifer calves; Berkshire boars and sows, ready for service, and suckers ready to wean. Write for wants, or come and see **E. Jeffs & Son, Bond Head P. O., Bradford and Beeton Stns., G.T.R.**

**CHAS. RANKIN, WYEBRIDGE, ONT.**  
IMPORTER AND BREEDER OF

**SHORTHORN CATTLE and OXFORD DOWN SHEEP.**

Herd headed by Pride of Scotland (imp.).  
**FOR SALE**—Females and bulls of all ages, from noted Scotch families.

### GOSSIP.

WANTS A FAST ONE.

It is reported that John D. Rockefeller has given a well-known horseman a commission to buy a harness horse that can take the measure of any performer in the stables of E. E. Smathers, C. K. G. Billings, or H. K. Devereaux. The horses to be defeated include Lord Derby, 2.05½; The Monk, 2.05½, and John A. McKerron, 2.05½. The task is certainly a herculean undertaking, as the above trio have nearly a corner on the harness performers. It would be difficult to name a developed trotter aside from Cresceus, 2.02½, that equals in speed the members of the above distinguished stables. There is no knowing, however, what a fancier with the unlimited capital of Rockefeller might accomplish should he undertake the task of owning the champion of the speedway. It would certainly tone the market for the best harness horses should a few special orders for champion grades be executed. There is not the least doubt that a fine horse driven by his own hand would afford the Standard Oil magnate exquisite pleasure. The public will watch with keenest interest the outcome of the new undertaking, but doubts the ability of one man to forge to the head of the procession of fast road drivers the first season.

### LIVE STOCK AT ST. LOUIS.

The Louisiana Purchase Exposition, in recognition of the magnitude and importance of the live-stock industry, has appropriated a quarter million dollars in prizes at St. Louis next year. This large sum makes possible a classification much in advance of any heretofore attempted, with prizes on a scale of generosity before unknown in the history of expositions. The largest sum previously offered by a like enterprise was \$142,500 at the Columbian in Chicago in 1893. In the classification every branch of improved animal industry is to have its proportionate recognition.

For the accommodation of the exhibits the management has allotted thirty acres of the most desirable ground in all the exposition tract of over twelve hundred acres, most of which it overlooks, and upon this hill will erect the requisite buildings, combining the desired features of utility and adaptation with harmonious and pleasing architectural effect. The building scheme will comprehend between forty-five and fifty structures, including thirty-three barns to accommodate eighty or ninety horses and cattle each, several others with slightly less capacity, four octagonal barns, 100 x 100 feet to accommodate cows to be used in the dairy demonstration, with silos and feed barns, a grand amphitheatre and arena, 250 x 450 feet, for an exhibition ring, and a building for public sales of live stock and for stockmen's conventions, in which will also be made the exhibits and demonstrations with relation to live stock, under the auspices of the Association of American Agricultural Colleges and Experiment Stations.

Aside from those usually shown, various classes of horses not previously taken up at expositions, such as those for artillery, cavalry and ambulance use in the military service, fire department, express and ambulance horses for city purposes, will be given the consideration their importance justifies. Cattle, sheep and swine, as with horses, will be given such a wide range of prizes as to reward generously, independent of the specials given by States and breeders' organizations, the exhibitor, the breeder and the feeder. One of the most interesting and instructive features planned for the exposition will be a comparative test of cows with reference especially to their dairy qualities in both butter and cheese production, and incidentally their gains in flesh.

Poultry, pet stock, dogs and the minor animals and fowls are to be recognized more fully than has ever before been done, and every energy will be bent to have at St. Louis in 1904 the most extensive and instructive presentation of animal exhibits ever assembled.

## Blood will tell



When an animal is all run down, has a rough coat and a tight hide, anyone knows that his blood is out of order. To keep an animal economically he must be in good health.

### DICK'S BLOOD PURIFIER

is a necessity where the best results from feeding would be obtained. It tones up the system, rids the stomach of bots, worms and other parasites that suck the life blood away.

Nothing like Dick's powder for a run down horse.

50 cents a package.  
**Leeming, Miles & Co., Agents,**  
MONTREAL.

### USE ONLY THE BEST



Is the STANDARD article  
READY FOR USE  
IN ANY QUANTITY.

For making soap, softening water, removing old paint, disinfecting sinks, closets, drains and for many other purposes. A can equals 20 pounds SAL SODA.

SOLD EVERYWHERE.

**E. W. GILLETT COMPANY LIMITED**  
TORONTO, ONT.

## HIGH-CLASS Shorthorns AND CLYDESDALE HORSES

Imp. Spicy Count 36117, 3 years old, Four bulls, 12 to 20 months. Cows and heifers.  
**JAS. McARTHUR,** Goble's, Ontario.

**W. R. Bowman, Mt. Forest,**

### YEARLING DURHAM BULL

of an excellent dairy strain (weight 1,200 lbs.) for \$75.00. Two Aberdeen-Angus bull calves 13 and 9 mos., at \$75 and \$90. Yorkshire boars and sows, Suffolk Down sheep, shearing wags and ewes in lamb.

## S. DYMENT, BARRIE, ONT.

Breeder of Scotch Shorthorns

Imported Morning Star at head of herd.

## MERCER'S SHORTHORNS

Comprise Missies, Stamfords, Floras, Clarets, Princesses, Red Roses, Young Angusts, Fashions and Matchless. They number 60 head for sale. There are several choice heifers, 17 heifer calves, 3 bulls fit for service and 4 bull calves. A few older females.

**Thos. Mercer, Markdale P. O. and Station.**

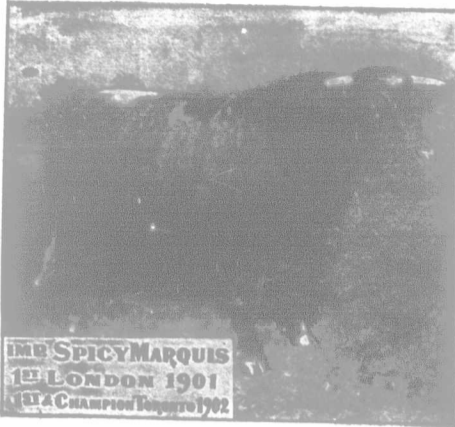
## Shorthorns, Cotswolds, Berkshires

**FOR SALE**—Seven bull calves from 1 to 8 months old; a few young cows with heifer calves at foot; a choice lot of yearling ewes, ram lambs and ewe lambs; young pigs of the long bacon type, from 6 weeks to 2 months old.  
**F. BONNYCASTLE & SON,**  
Campbellford P. O., Ontario.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.



## TROUT CREEK SHORTHORNS



JAS. SMITH, Manager, Millgrove, Ont.  
W. D. FLATT, 378 Hess St. South, Hamilton, Ont.

**Greengrove Shorthorns** Number 35 head of choice Scotch families. For sale: Several young bulls, by Wanderer's Last, Imp. Fitz Stephen and Freebooter. Females of all ages. W. G. MILLSON, Goring P. O., Markdale Station.

**FOUR BULLS** (red), Ury and Stamford dams, sired by Squire Wimple, winner of first here and British Columbia; now owned by Mr. Ladner, Ladner's Landing, on ROBERT BATTY, Glenbourne Farm, Meaford P. O. and Sta.

## OAK LANE STOCK FARM

**Shorthorns, Cotswolds, Yorkshires and Barred Rock Fowls.**

**FOR SALE:** Three bulls (2 imp.), cows and heifers, both imported and Canadian-bred. Still open to take orders for N.-W. trade. Write for prices. Satisfaction guaranteed.

**GOODFELLOW BROS.,** MACVILLE, ONT.

# SHORTHORNS

WE ARE OFFERING FOR SALE a grand lot of young imported Scotch cows and heifers with calves at foot or safely in calf to the best imported bull obtainable.

**Herd Numbers 150 Head.**

**Send for New Catalogue.**

VISITORS WELCOME, AND CORRESPONDENCE PROMPTLY ATTENDED TO. TELEGRAPH OR TELEPHONE.

**H. CARGILL & SON,**

Also have a choice lot of Oxford Down Sheep, either sex, at reasonable prices. Cargill, Ontario, Canada.

## PINE GROVE SHORTHORNS AND SHROPSHIRE.

Our herd comprises over 150 females, including our last importation of 30 head, all of the most esteemed strains. Of Shropshires, we offer a few choice rams, also high-class ewes bred to first-class rams. Address

**W. C. EDWARDS & CO.,**  
Rockland, - - - - Ontario.

# SUPERIOR

MATERIAL, DESIGN, WORKMANSHIP  
IN ALL

# WAGONS

MADE BY

**THE MILNER PETROLIA WAGON CO. LIMITED**  
PETROLIA CANADA

## GREEN GROVE SHORTHORNS

This herd comprises such noted families as Nonpareils, Crimson Flowers, Mysles, Languiques, Butterflies, Jessamines, etc., and is headed by the noted Watt-bred bull, Spicy Robin = 28259 =, winner of second prize at Toronto and London, 1902. A few choice young bulls and heifers from Spicy Robin, also cows in calf to him, on offer; also prizewinning S. C. White Leghorn fowl. Eggs, \$1 per setting.

**GEORGE D. FLETCHER,**  
ERIN SHIPPING STA., C.P.R. BINKHAM P. O., ONT.

**SHORTHORNS.** Imp. Christopher = 28859 = heads herd. A few choice young cows, heifers and bulls for sale, of milking strain.

**A. M. Shaver,** HAMILTON Sta., Ancaster P. O., Ont.

### HAWTHORN HERD

Of Deep Milking Shorthorns.

**FOR SALE:** Four young bulls, from 8 to 24 months old, from 11 dairy cows. Good ones.

**WM. GRAINGER & SON,** Lonsdale, Ont.

### Lakeview Shorthorns.

Herd represented by such noted families as Stamford, Minas, Marr Floras, Crimson Flowers, Village Girls, Bucan Lassies, and Lavinias. Some yearling and two-year-old heifers for sale, on James Bowes, Strathairn P. O., Meaford Sta.

**W. G. PETTIT & SONS**  
FREEMAN, ONT., CAN.  
Importers and breeder of

## Scotch Shorthorns

and SHROPSHIRE SHEEP,  
make special offering for January and February.

2 imported bulls coming 2 years old,  
4 bull calves, from 8 to 12 months old,  
from imported sire and dam.  
6 bulls, 10 mos. to 2 yrs., by Imp. sire,  
Imp. and home-bred cows and heifers of all ages.  
Our entire flock of Shropshire sheep, 75 head.

**JAS. GIBB, SUNNYSIDE STOCK FARM,** BROOKSDALE, ONT.

BREEDER OF SHORTHORN CATTLE. Stock for sale.

### SHORTHORNS.

Importer and breeder of choice Shorthorns. Scottish Hero 156726 at the head of herd. om  
JAS. A. CRERAR, Shakespeare, Ont.

## GOSSIP.

At the sale on the 23rd of June, of Aberdeen-Angus cattle of the herd of Mr. John Grant, Advie Mains, Scotland, an average of £46 18s. was realized, the cow, Evasion, and her heifer calf selling for 150 guineas, the top price of the sale, and the yearling heifer, Erinna of Advie, for 120 guineas.

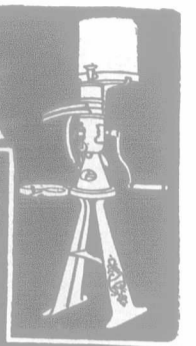
That Hackney-bred ponies of a superior quality sell high in England is evidenced by the figures recorded at an auction sale in Birmingham last month, at which 25 head made the splendid average of £116 17s. 8d., or \$5E5, the six-year-old mare, Lady Horace, standing 13 hands 1 inch, selling for 450 guineas, or \$2,362, and others up to 250 guineas.

At the annual sale of harness horses from the Brookfield Stud of Mr. Burdett-Coutts at Highgate, England, last month, 28 horses were sold for an average of £140. The highest price, 470 guineas, or \$2,467, was paid for a pair of five-year-old browns, 16 hands 1 inch, one of which was a Hackney-Coacher, and the other a pure Hackney. Another pair of five-year-old geldings, 15 hands 2½ inches, brought 400 guineas. At the annual May race sales at York, May 20th, single harness horses sold up to 115 guineas and 135 guineas.

On June 17th, Mr. Jas. Dalgety sailed for the Old Country to bring out a consignment of Clydesdales and Hackneys that includes some of the best horses that were ever selected for Canada. Several of the number have already been bought by the brothers in Scotland, and some that are hired out on the routes this season will be included in the shipment to this side. Dalgety Bros. are in a particularly advantageous position for importing good horses. Having a stock farm in Scotland, they are able to collect some of the best specimens that are offered for sale, and can keep them until a full consignment has been secured. The connection in Scotland also enables them to get a thorough knowledge of all the prizewinners (and their ancestors) at the shows over there. This summer's shipment will first be seen at the Black Horse Hotel, Toronto, and later at the stables in London. Watch for Mr. Dalgety's announcement of the individuals in later issues.

Under the heading, "High-class Stock for Canada," a May issue of the Scottish Farmer has the following: "Mr. James Boden sailed on Saturday last by the Donaldson liner, Kastalia, with a choice shipment of Scots stock. He had 17 cattle on board, several pigs, and some choice poultry. With the exception of two Shorthorns, the pigs and the poultry, all the stock was for Mr. Robert Reford, Tredinnock Farm, St. Anne de Bellevue, Quebec. One Shorthorn, Triumvir, was bred at Jackston, and was purchased from Mr. W. T. Malcolm, Dunmore, for Mr. Clow, Whitechurch, Bruce Co., Ont. The pigs were bought from Mr. Sanders Spencer, St. Ives, Hants, and the second Shorthorn bull from Mr. Selvester Campbell, Toftthills, for Mr. John Isaacs, Markham, Ont. The poultry consisted of Buff Orpingtons from Rev. Mr. Campbell, of Craigie Manse. A shipment so well selected has seldom left our shores." In another place it says: "Mr. R. William Greive, Kirklands, Kirkcubbin, who now owns one of the best breeding herds of Avrshires in the country, has just completed the sale of a splendid three-year-old quey to Mr. Hunter, Canada, for exportation to that country. This quey, which is got by a Tower bull, out of one of the best cows in Kirkland herd, has only been once shown, and this was at the open show at Cumnock three weeks ago, where she easily carried off the first prize. In Mr. Hunter's opinion, this is one of the best in-calf queys which he has taken across the water, and he expects she will give a good account of herself in Canada. And it was only by paying a low price that he could induce Mr. Greive to part with her."

## GET AN EMPIRE



### Guaranteed

to be simpler in construction, easier to turn, easier to clean and keep clean than any other separator made. That's the famous

## EMPIRE Cream Separator.

It is not the oldest separator in the world, but it's the most up-to-date. It's not the biggest, but it is the simplest in construction, and it almost never gets out of order. Don't be talked into buying a separator before you try the Empire. That's all we ask. Just try it and then decide which machine you'd rather have.

Our Separator Book is Free.

**EMPIRE CREAM SEPARATOR COMPANY,**  
28 Wellington St., W.,  
TORONTO, CANADA.

### Shorthorns, Berkshires and Leicesters.

**FOR SALE:** Choice two-year-old heifers, well gone in calf; also yearling heifers, bull calves. Boars and sows fit for breeding, and young pigs.

ISRAEL GROFF, ALMA, ONTARIO.

## ARTHUR JOHNSTON,

GREENWOOD, ONTARIO,

Offers for sale at times' prices, 6 young SHORTHORN BULLS, from imp. dams and by imp. sires.

6 YOUNG BULLS, of purest Scotch breeding.

10 YEARLING and 8 TWO-YEAR-OLD HEIFERS.

Pickering Station, G. T. R.  
Claremont Station, C. P. R.

## SHORTHORN BULLS

First-class  
Scotch Breeding.

**H. SMITH, Exeter.**  
om On G. T. R., 30 miles from London.

### SHORTHORNS.

Dark red bull calf, Blue Ribbon 2nd, 16 months old, sired by Blue Ribbon (imp.) 17095 (63703), dam by Royal George (imp.) (64728). Bull calf, 10 months old, dark red; also yearling and two-year-old heifers, Imp. Royal Prince heads the herd.

JOHN MCFARLANE, DUTTON, ONT.

### MAPLE LODGE STOCK FARM

ESTABLISHED 1851.

**SHORTHORNS.**—First-prize milking strains, best Scotch breeding. Young bulls and heifers for sale.

**LEICESTERS.**—A grand lot of ewes, bred to our imported rams, and a few choice rams now for sale.

**A. W. SMITH,**  
ALISA CRAIG STA., G.T.R., MAPLE LODGE P.O., ONT.  
3½ miles.

## J. & W. B. WATT

BREEDERS AND IMPORTERS OF

**Shorthorns, Clydesdales and Berkshires**

We breed our show cattle and show our breeding cattle.

The imported bulls, Scottish Beau, Viceroy and Scottish Peer, head the herd.

Imported and home-bred cows and heifers for sale.

A few choice young bulls on hand.

Our herd at Toronto won three firsts, a second and third out of five-herd classes.

om  
Salem P. O. and Telegraph Office. Elora Sta., C.P.R., G.T.R.

### PENNABANK STOCK FARM

Three choice Shorthorn bulls from 12 to 14 months old, solid reds. Prices reasonable. Also a few Shropshires left, of choice quality and breeding.

om  
Hugh Fugh, Whitevale, Ont.



**GOSSIP.**

Mr. Henry Dudding's annual sale of Shorthorn cattle and Lincoln sheep at Riby Grove, Lincolnshire, will be held on July 2nd, and not on July 3rd, as previously announced.

**GLASGOW AMERICAN SALES.**

Messrs. Macdonald, Fraser & Co.'s (Ltd.) weekly report says: New arrivals comprised three shipments since last week. Two of these came from Chicago and one from London, Ontario. The former were consigned from J. & J. Watson and Mr. Machattie, the Canadians coming from Messrs. Dalgety Bros., the whole forming a choice selection of high-class matching and Brazilian horses, from 15.3 to 16.1 hands, about five and six years old, a few vanners and heavy cart horses. Such a choice lot of horses drew a goodly turnout of buyers, and for all classes a fairly good demand was got at the quotations. Shippers, however, state there is not much margin left, owing to the extreme rates current in the States and Canada. Best matching horses from \$300 to \$475, vanners from \$235 to \$295, work horses from \$275 to \$340.

**CLYDESDALES IN NEW BRUNSWICK.**

In the report on agriculture for the Province of New Brunswick for 1902, issued by Mr. L. P. Farris, Commissioner, Fredericton, particulars are given of three imported Clydesdale stallions which have been introduced into the Province for the purpose of improving the breed. The horses selected by a committee were Copyright (10724), Chancellor (10327), and Baron Frederic (10681). These were bought by the Provincial Government at the following prices: Copyright, \$1,500; Baron Frederic, \$900; and Chancellor, \$1,300. Baron Frederic is a five-year-old, bred by Mr. R. Frederick, Drumflower, Scotland, and imported in 1900 by Mr. R. Ness, of Howick, Quebec. He is got by Baron's Pride. Copyright is of the same age, stands 16 hands and weighs 1,800 lbs. He was also imported by Mr. Ness, and was bred by Mr. Andrew Mitchell, of Barcheskie, Scotland. He is also by Baron's Pride, and out of the Macgregor mare, Tribby. Chancellor is a seven-year-old, standing 17 hands and weighing 1,900 lbs. He was bred by Mr. R. Davidson, Burnthill, Foveran, and is by Rising Star (7198), out of Young Rosie (13045). It is satisfactory to note that these horses have been extensively used in the Province. They were all sold by auction, after being brought to Princeton, and were purchased by agricultural societies, which gave \$705 for Copyright, \$800 for Baron Frederic, and \$725 for Chancellor, so the Government lost on their purchase price alone \$1,470.

**RECENT SHORTHORN SALES.**

The recent series of June auction sales of Shorthorns in the Western States has resulted very satisfactorily, as the following statement shows: N. A. Lind, Rolle, Iowa, on June 2nd, sold 62 head for \$14,000, an average of over \$230 per head. The highest price was \$600, for the three-year-old imported cow, Sweet Bouquet, bought by A. Chrystal, Marshall, Mich. E. R. Strangland, Marathon, Iowa, the same week, on a very wet day, with the country largely flooded and the people feeling very blue, made an average of \$240, the Imp. four-year-old cow, Flora 2nd, selling for \$505, the highest price of the day. Alexander & Robb, at Morning Sun, Iowa, on June 6th, made an average of over \$200, the top price, \$400, being paid for the three-year-old imported cow, Primrose. J. W. Smith & Sons, at Allerton, Iowa, on June 6th, with the railway service badly demoralized by washouts, made an average of \$200, three cows selling at \$500 to \$515 each, and a bull calf for \$400. At the Briley sale at West Liberty, Mo., thirty-six head averaged \$157.00. The top price, \$300, was paid for Mysie of Meadow Lawn, and \$105 was the lowest mark reached. The Messrs. Flynn & Son's sale on May 27th, near Des Moines, Ia., was badly handicapped by washout on the railway lines, but forty-five head averaged \$162, females and males averaging the same price. These two sales give one a good idea of the general trend of the market.

**What Alexander Galbraith & Son Say About Zenoleum Dip:**  
 "We are pleased to say that we have always found Zenoleum to be effective and in every way as good as represented."  
**ALEXANDER GALBRAITH & SON, Janesville, Wis.**  
 Send for copies of "Zenoleum Veterinary Advisor" and "Piggie's Troubles" and see what others say about it. Books mailed free. Sample gallon of Zenoleum \$1.50, express prepaid. Five gallons \$6.25, freight prepaid.  
**ZENNER DISINFECTANT CO., 113 BATES STREET, DETROIT, MICH.**

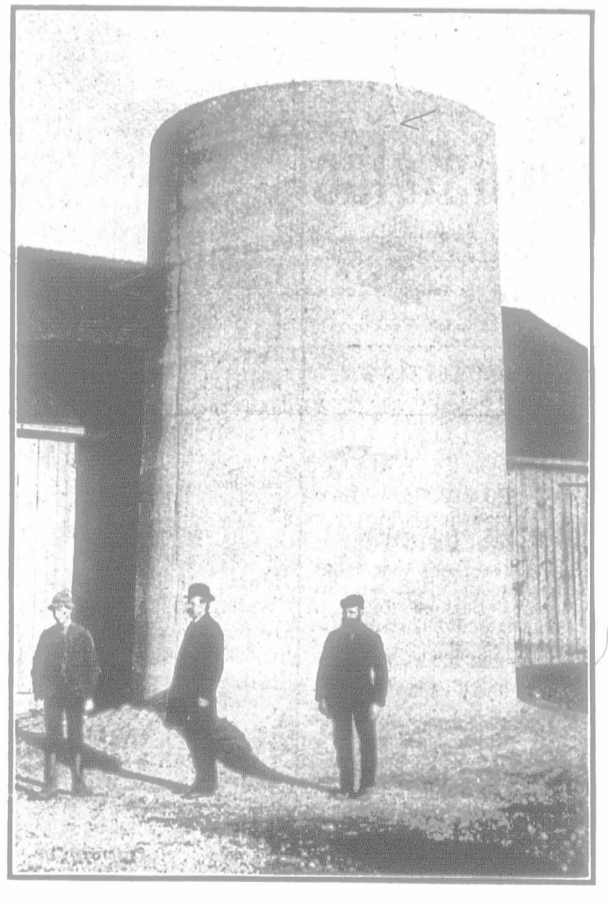
**PAN-AMERICAN EXPOSITION**  
 BUFFALO-NEW YORK-A-D-1901



The Directors, on the recommendation of the Superior Jury, confer their award of  
**A GOLD MEDAL**  
 on *The De Laval Separator Company,*  
 for *Centrifugal Cream Separators*

OUR MACHINES were awarded the ONLY Gold Medal on Cream Separators at the Pan-American, and our record there for clean skimming was in keeping with the award. The official records showed our average for the entire time to be nearly 50 per cent. better than competitors' machines.  
**THE DE LAVAL SEPARATOR CO., 77 YORK ST., TORONTO.**

**PORTLAND CEMENT**  
**Concrete Silo**




BUILT FOR P. CRERAR, MOLESWORTH, HURON CO., ONT.  
 14 feet in diameter and 30 feet high, with  
**"RATHBUN'S STAR" BRAND**  
 MANUFACTURED BY The Canadian Portland Cement Co., LIMITED  
 SOLE SALES AGENTS:  
**THE RATHBUN COMPANY**  
 310 and 312 FRONT STREET WEST, TORONTO, ONTARIO

**JOHN DRYDEN & SON,**  
 BROOKLIN, ONTARIO.  
 BREEDERS OF  
**CRUIKSHANK SHORTHORNS AND CHOICE SHROPSHIRE SHEEP.**  
 Five choice young **CRUIKSHANK** bulls. Straight, smooth, low-down and of show-yard type. Visitors welcome.

**SHORTHORNS and CLYDESDALES.**  
 We have for sale five bull calves, from 8 to 24 months, from imp. sire and dam; also six extra good stallions, from two to six years old.

**JOHN MILLER & SONS,**  
 BROUGHAM, ONT.  
 CLAREMONT STATION, C. P. R.

**SHORTHORNS (IMP.)**  

 Cows and heifers, imp. and home-bred. Bulls, imp. and home-bred—all ages. Representing the fashionable blood of Scotland.  
**EDWARD ROBINSON,**  
 MARKHAM P. O. & STN.

**SHORTHORNS.**  
 THORNHILL HERD, ESTABLISHED 27 YEARS.  
 Imp. Royal Member and Sailor Champion now at head of herd, which are all bred on straight Scotch lines, and are of the up-to-date kind. Present offering: some choice young bulls.

**REDMOND BROS., Millbrook Sta. and P. O.**  
**BONNIE BURN STOCK FARM,**  
 40 rods north of Stouffville station, offers Scotch Shorthorns; choice Shropshires and Berkshires from imported and Canadian-bred sows. All at farmers' prices. Inspection invited.  
**D. H. RUSSELL, STOUFFVILLE, ONT.**

**Spring Grove Stock Farm**  
 Shorthorn Cattle and Lincoln Sheep.  

 HERD prize and sweep-stake at Toronto Industrial Exhibition, three years in succession. Herd headed by the Bruce Mayflower bull, Prince Sunbeam, imp. Present crop of calves sired by Imp. Wanderer's Last, sold for \$2,005. High-class Shorthorns of all ages for sale. Also prize-winning Lincolns. Apply  
**T. E. ROBSON, ILBERTON, ONT.**

Present of **Shorthorns:** Our stock bull, **Heir-at-law** = 34563 =, a grand stock-getter and sire, 3 years old. Also 1 bull, 13 months; heifers and cows. Shropshires, all ages and sex. **BELL BROS., Bradford, Ont.**

**SHORTHORNS.** Lady Fannys and Beautys for sale 5 bulls, from 6 to 14 months old; 7 heifers, from 1 to 3 years old, some of them in calf to Prince Eclipse 33049.  
**James Caskey, Tiverton P.O., Kincardine Sta.**

**Shorthorn Cattle, Lincoln Sheep**  
 Imp. Prime Minister at head of herd. Imp. Clippers, Miss Ramsdens, and other Scotch families. Lincolns won more than half the money and first for flock at the Pan-American; International, Chicago, 1901 and 1902.  
**J. T. GIBSON, on DENFIELD, ONT.**


**ROSE COTTAGE SHORTHORNS.**  
 Royal Prince = 31241 =, by imp. Royal Sailor, at head of herd. For sale—4 bulls, 3 heifers (3 to 9 months old), 3 yearlings, one 2-year-old heifer and 9 cows in calf, Scotch and Scotch-topped.  
**H. K. FAIRBAIN,**  
 on Theford P. O. and Station, G. T. R.

**H. PARKER, RIVER FARM, DURHAM.**  
 Breeder of **SHORTHORN CATTLE.** In service, Verschoyle (imp. in dam) = 36125 =. Stock for sale.

**GRANDVIEW SHORTHORNS**  
 For Sale.—1 bull, by Royal Beau; also a few females. Herd headed by the Marr Missie bull, Marengo = 31055 =.  
**J. H. BLACK & SON,, ALLANFORD P. O. and STATION,**



WHAT THE  
**NATIONAL**  
WILL DO.



It will increase the yield of butter about 1 lb. per week, and about 30 to 60 lbs. per year, and will pay 8¢ on its cost price annually with one cow, and pay for itself in one year with 12 to 15 cows.

It will be placed on trial beside any other Cream Separator and prove to be superior in construction for convenience, easy operating, cleaning, close skimming, quality of cream and butter, style, fine finish and lasting service.

The only Cream Separator having its bowl and all parts made and finished in one shop in Canada under the supervision of the best Cream Separator experts obtainable.

The bowl is not filled with innumerable complicated parts to adjust and wash every time it is used. It has no stable-tainted, enamelled casing into which the milk and cream is discharged, that requires hot water at the barn to wash it every time it is used.

The National is designed for convenience and to overcome every objectionable feature found in other Cream Separators. A sample machine sent for a free trial to prove all that is claimed for the National.

NATIONAL No. 1A.  
Capacity, 450 to 500 lbs. per hour.  
NATIONAL No. 1.  
Capacity, 330 to 350 lbs. per hour.  
NATIONAL B.  
Capacity, 250 lbs. per hour.

Give the National a trial. Send for particulars to any of the following general agencies:

The CREAMERY SUPPLY CO., Guelph, for South-western Ontario.  
The T. C. ROGERS CO., Guelph, for Ontario North and East.  
JOS. A. MERRICK, Winnipeg, Man., for Manitoba and N.-W. T.  
JOHN A. ROBERTSON, 108 Union Avenue, Montreal, Quebec.

**The Raymond Mfg. Co. of Guelph,**  
GUELPH, ONT. LIMITED.

**BEAVER VALLEY SHORTHORNS.**  
Some choice heifers and young cows with calf at foot; also two bulls for sale. Inspection invited.  
E. & C. PARKINSON  
Thornbury P. O. and Station, G. T. R.

**Shorthorns and Shropshires.** Scotch and Scotch-topped families of Shorthorns. Young bulls and heifers for sale. Shropshires, bred direct from imported stock; Mansell and Cooper strains. **BRUCE BROS.**  
Southville Station, G. T. R. o Gormley, Ont.

**Maple Grange Shorthorns**  
CLARETS, LAVINIAS AND BEAUTYS.  
Sired by such Scotch bulls as Commodore 31025 Scottish Bard, Imp. Baron's Heir. 18 heifers, 12 bulls, a number of cows (heavy milkers), to be sold well worth the money.  
R. J. DOYLE,  
Owen Sound P. O. and Station and Port.

**Shorthorns and Berkshires.**  
Shorthorns sired by Arthur Bright, Dunblane and Blue Ribbon (Imp.). Berkshires of the bacon type. Visitors welcome. Correspondence solicited.  
MAC CAMPBELL, o Samson, Ont.

**BELLEVUE SHORTHORNS.**  
Both sexes. Imported and home-bred. All ages. Prizewinners at home and abroad.  
EDWIN BATTYER, Gore Bay P. O. and Port.  
MANTOULIN ISLAND.

**CHOICE SHORTHORNS.**  
We are now offering 12 heifers from 6 months to 2 years of age, and 7 bulls from 6 to 10 months old, some of them extra choice and prizewinners—a low down, thick lot. Also, Yorkshires.  
WM. McDERMOTT,  
Living Springs P. O.,  
Fergus Station

**Imp. Shorthorns and Lincolns**  
A. D. MCGUGAN,  
RODNEY, ONT., P. O. AND STA.,

Imported Aberdeen Hero at the head of the herd, which is composed of the best Scotch families. Ten grand shearing and two-year old ewes for sale, in lamb to a Royal winner. Also ewe lambs from imported Dudding ewes at reasonable prices.

**R. Mitchell & Sons,**  
Nelson, Ont.

Present offering three extra good bulls from 12 to 14 months, two imp. in dams, and one from imp. sire and dam.  
Also a number of Scotch heifers in calf.  
Burlington Jct. Station and Tel. Office.

I GUARANTEE A \$5.00 PACKAGE OF  
**BARREN KOW CURE**  
postpaid, to make any cow under 10 years old breed, or refund money. No trouble, no risk. Given in fee twice a day.  
L. F. SELLICK, Druggist, Morrisburg, Ont.

**A SNAP IN JERSEYS.**  
Three fine young cows, bred, and a good young bull, not akin to cows or progeny. Price, \$225 for the four. Write for particulars.  
W. W. EVERITT, Dun-Edin Park Farm,  
Box 552, o Chatham, Ont.

**Lyndale Holsteins**  
We are now offering a number of young bulls, fit for service, sired by Lady Waldorf's De Kol. Springs calves of both sexes.  
BROWN BROS.,  
Lyn P. O. and Station.

**Spring Brook Holsteins.**  
One cow 4 years old, three 3-year-olds, two 2-year-olds, one yearling heifer, 4 heifer calves, one bull calf: all De Kols. Quality unsurpassed. Tamworths of all ages for sale. Write at once for bargains.  
A. C. HALLMAN, - - BRESLAU, ONT.

**HOLSTEINS, TAMWORTHS, COTSWOLDS.**  
and younger ones. Choice animals. Ram and ewe lambs and two 2-shear rams. Perfect covering.  
R. O. MORROW, Hilton Ont. Brighton Stn.

**2 HOLSTEIN BULLS**  
FOR SALE: From 4 to 7 months old, having sires in their pedigree from such strains as Inks, Netherland, Royal Aggie, and Tritonia Prince, and out of imported females that have proven their worth at the pail. **THOS. B. CARLAW & SON,**  
Warkworth

**Ten Yearling and Two-year-old Heifers**  
sired by Nero of Glen Rouge, and bred to Dentonia's Achievement.  
E. B. HINMAN & SONS, Grafton, Ont.

**Maple Park Farm Holsteins.**  
Home of all the leading strains. Nothing for sale.  
SIDNEY MACKLIN,  
Streetsville P. O. and Station, C. P. R.

**Riverside Holsteins**  
Choice young bulls for sale, from 3 to 7 months old, whose sire and dam are in the Canadian Advanced Record of Merit.  
MATT. RICHARDSON, & SON,  
Haldimand Co. o Caledonia, Ont.

**GOSSIP.**

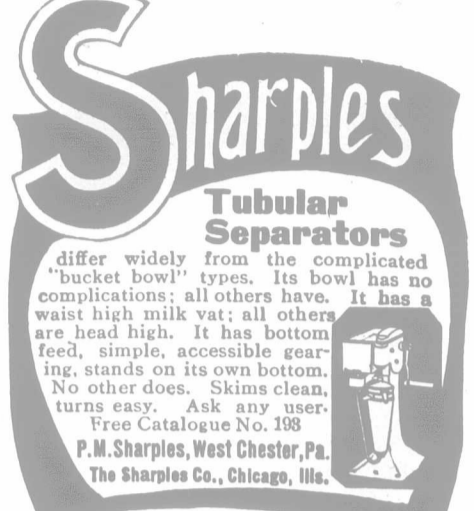
**GOULD, SHAPLEY & MUIR'S BRILLIANT VICTORY.**—With their Canadian Imperial Windmill, the Gould, Shapley & Muir Co., of Brantford, Ont., have achieved the highest possible honors in a world-wide contest held at London, Eng., under the auspices of the Royal Agricultural Society. Twenty-two wind engines were entered in this all-important competitive event, and it is a matter of greatest moment and congratulation that to a Canadian firm was awarded the first prize. We all shine in the reflected glory. Every loyal citizen of the Dominion should feel a new and buoyant pride, for native mechanical science and manufacturing have triumphed decisively. So strongly impressed was Lord Strathcona with the far-reaching possibilities of the victory, that, immediately upon hearing of its attainment, he cabled the successful firm in terms of praise and felicitation.

The winning wind-engine attracts attention at once on account of the great length of stroke (22 inches) of the double-acting syphon pump, which has a four-inch brass cylinder. The full-bore capacity for the double stroke is exactly two gallons. The valves are of vulcanized rubber, each being provided with a spiral spring to insure rapid working. The valve seats are brass and of wheel pattern, carefully faced, and so fitted that they can readily be removed for inspection. The tower is of angle steel. The posts are built in sections of ten feet, and all the ends are butt-jointed, avoiding a shear strain on the bolts. The cross-girts are five feet apart, and the angle irons forming these are drilled to receive the diagonal tie-rods which are passed through them. The corner posts are carried five feet below the ground level, where they are fitted to cast-iron shoe-plates which are bolted to oak foundation timbers, 14 inches wide and 3 inches thick. The wheel is 16 feet in diameter, and has eighteen sails. The outer rim of the wheel passes through the sails, and is riveted to a bracket of stamped steel fitted to each sail. The hub of the wheel is made of great length to enable the arms carrying the sails to be firmly braced. The roller bearings at either end of the shaft are 6½ inches long. The end thrust is taken by a ball-bearing on the inside of the frame. A pinion imparts motion to the mangle-rack head of the connecting rod, and it is the unique design of this which enables the exceptionally long stroke of the pump to be employed. At either side of the pinion cams are provided to throw the rack over at each end of the stroke, to change the direction of the pump-rod from the upward to the downward stroke and vice versa. Four steel rollers are fixed at the top and bottom of the rack, and the cams engage these at either end of the stroke. During the upward and downward motion of the rack the pinion is held in gear by a steel guide-plate or track working on a flanged roller.

The method of government is extremely simple, and differed in one important point from all the other engines on trial. While these were wound out of gear in order to stop them, the engine of the Gould, Shapley & Muir Co. is wound into gear by a striking wire. Consequently, if this breaks the engine stops itself automatically. The turnable ring revolves with the engine on the tower cap when the wind changes direction, and the cone rollers carry the weight of the engine, and turn only when the engine governs itself, or when the machine is pulled in at starting or let out at stopping. When the chain tightens by the pull-in wire, the leverage on that side being greatest, the power of the spring is overcome, and the engine turns into the wind; and from the action of the lever when a strong gust of wind strikes the wheel, it will turn partly out of the wind by overcoming the pull of the string; and when the pressure of the wind relaxes, the spring will pull the wheel back at right angles to the wind, where it will remain full in the wind.

(Continued on page 629)

**Sharples**  
Tubular Separators



differ widely from the complicated "bucket bowl" types. Its bowl has no complications; all others have. It has a waist high milk vat; all others are head high. It has bottom feed, simple, accessible gear, stands on its own bottom. No other does. Skims clean, turns easy. Ask any user. Free Catalogue No. 193  
P. M. Sharples, West Chester, Pa.  
The Sharples Co., Chicago, Ill.

**Brookbank Holsteins**

16 to 25 lbs. of butter in 7 days' official test are the records of this herd of Holstein cows. Heifers of equivalent records. Bulls for sale whose sires and dams are in the Advanced Registry, with large official butter records.

GEO. RICE, Currie's Crossing, Ontario, OXFORD COUNTY.

**HOLSTEINS & TAMWORTHS.**

Two bull calves, 8 and 9 months; 3 yearling heifers, bulls and heifer calves, all double De Kols. In Tamworths we have 3 sows, 5 months old; 25 March boars and sows. Bargains if taken at once. Enquiries promptly answered. Write or call.

**BERTRAM HOSKIN, THE GULLY P. O.**  
Grafton Station, G. T. R.

IF YOU WANT A HOLSTEIN BULL, bred from producers, and that is again capable of siring producers, at a living price, write  
H. BOLLERT,  
Cassel, Ont.

**Ridgedale Farm Holstein-Friesians for Sale.**

2 yearling bulls; also bull and heifer calves; all of choice breeding. Prices always reasonable. Write, or come and see them. R. W. WALKER, Utica P. O. Shipping stations: Port Perry, G. T. R.; Myrtle, C. P. R.

**Jerseys.**  
The Greatest Herd in Canada.

We have just received a shipment of Jerseys direct from England and the Island of Jersey, which brings our herd up to over One Hundred head. For Sale—10 bulls, imported and home-bred cows and heifers all ages, and a few unregistered family cows. We invite you to come and see our herd or write for particulars.  
C. P. R. and G. T. R. Stations  
om B. H. BULL & SON, Brampton.

**Ayrshire Bulls**

of last August, November and March births. Also a few heifers due to calve in fall and early winter.  
W. W. BALLANTYNE,  
Neldpath Farm, o Stratford, Ont.

**SUNNYSIDE AYRSHIRES.**

Our present offering is 10 heifers, from 10 mos. to 2 years of age; 1 bull, 6 mos. old, and 8 young cows—a rare good, straight-lined lot, and will be sold right. o J. W. LOGAN, Allan's Corners P. O., Howick Sta., Que.

**W. F. STEPHEN, Trout River, Que.,** breeder of Ayrshire Cattle. A few choice bulls fit for service, and several bull calves, sired by Klondike of St. Annes 2897, and from deep milkers, with good udder and teats. Carr's Crossing, 1 mile, G. T. R.; Huntingdon, 5 miles, S. L. & A. R. o

**High-class AYRSHIRES,**

FOR SALE! IMPORTED AND HOME-BRED AYRSHIRES, including cows, heifers and young bulls out of our prize and sweepstakes cows. Foundation selected with due regard to quality and productiveness. Come or write.  
WM. WYLIE, - HOWICK, QUEBEC.

**DAVID A. McFARLANE,**  
Breeder of high-class AYRSHIRES.  
KELSO, P. Q.

Young stock for sale from imported and home-bred foundation. Prices reasonable.

**STOCKWOOD AYRSHIRES.**

Our herd now numbers 40 head of all ages, with milk records from 40 lbs. a day up. Stock of both sexes for sale. Bulls a specialty.  
WATT BROS., Allan's Corners P. O. St. Louis Sta., near Howick, Que.

**AYRSHIRES AND YORKSHIRES.**

My Ayrshires are all bred from imported stock; Yorkshires from Mr. D. C. Flatt's imported stock. Choice young animals for sale.  
James McCormick, Sr., Rockton, Ontario.

**Menie Stock Farm AYRSHIRE**

Choice young AYRSHIRE bulls and heifer calves, from 2 to 9 months old. Also cows and heifers all ages. Write WM. STEWART & SON, Menie, Ont.

**Maple Cliff Dairy and Stock Farm**

BREDDERS OF AYRSHIRE CATTLE, BERKSHIRE and TAMWORTH PIGS.  
Special offer this month in young bars of both breeds, fit for service. One young bull, 2nd at Toronto last year as yearling.  
Farm adjoins Central R. REID & CO., Experimental Farm. o Hintonburg, Ont.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.





Accidents will happen

and it pays to have a fence that is accident proof.

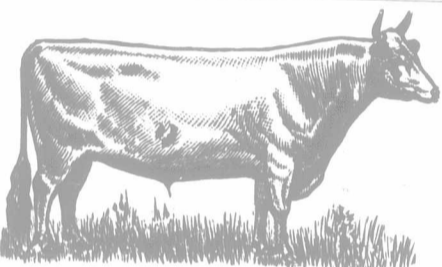
The No. 7 Top Wire in Page Fences is break-proof at 3000 pounds' strain—common wire same size at 1700 pounds.

Page Fence Wire is tempered to stand that strain. Its coil takes up summer slack and gives spring for winter tension, and acts as a cushion to meet accidental strains.

"Page Fences wear best"

PAGE WIRE FENCE CO., Limited Walkerville, Ont. Montreal, P.Q. St. John, N.B.

AYRSHIRES



WATSON OGILVIE, PROPRIETOR.

Ogilvie's Ayrshires won the herd and young herd prizes at Toronto, London and Ottawa in 1900; also at the Pan-American, in 1901, and in 1902 they won all the herd prizes and medals, sweepstakes and diplomas, with one exception. The cows are all imported, and were carefully selected for strength and constitution, style, size of teats, and milk (quantity and quality). The herd is headed by Douglasdale (imp), champion at the Pan-American and at Ottawa, Toronto and London, in 1902, ably assisted by Black Prince (imp.). Stock, imported and home-bred, for sale at all times.

ROBERT HUNTER, Manager.

Near Montreal. One mile from electric cars. Lachine Rapids, P. Q.

SPECIAL OFFERING FOR THIS MONTH

Ayrshire Bulls. Saleigh Prince 13438, fine individual, white, brown spots, aged 3 yrs.; one 10 months, brown and white. Few fine calves. Guernseys. One bull, 8 months; one bull 3 years and 6 months. A fine specimen of the breed. Address, for particulars, etc., ISALEIGH GRANGE FARM, DANVILLE, P. Q.

HIGH-CLASS AYRSHIRE CATTLE FOR SALE: Both sexes; bulls and heifer calves from 2 to 9 months old; cows and heifers all ages. Famous prizewinners bred from this herd, including Tom Brown and White Floss, sweepstakes prizewinners at Chicago. DAVID BENNING & SON, Williamstown, Ont.

Tredinnock Ayrshires.

Imported bulls at head of herd: Glencairn 3rd, Napoleon of Aucherbrain, and Lord Dudley. Forty imported females, selected from leading Scotch herds, and their produce from above-named bulls. Size combined with quality and style, well-formed udders, good-sized teats, and capacity for large milk production. Bull calves for sale; also a few young cows and heifers. For prices and particulars address JAMES BODEN, Mgr., St. Anne de Bellevue, Quebec. Farm close to St. Anne Station, G.T.R. & C.P.R., 20 miles west of Montreal.

NETHERLEA AYRSHIRES.

Present offering: 3 bulls fit for service, prizewinners; also a few young females, sired by Napoleon of Aucherbrain (imp.), whose dam's record was 72 lbs. a day, and all of them out of record cows. T. D. McCAILUM, Danville P. O. and Station, Quebec.

AYRSHIRE BULLS.

From 10 to 16 months old, sired by one of the best stock bulls in Canada, Rosland of St. Annes (8901), and from dams producing 50 to 60 lbs. of milk per day, write quick to D. LEITCH, Cornwall, Ont.

HIGH-CLASS AYRSHIRES.

My present offering is one yearling bull, one 4 years old, and also cows and a choice lot of spring calves, of both sexes. F. W. TAYLOR, Wellman's Corners P.O., Hoard's Sta.

IMPORTED AND HOME-BRED AYRSHIRES FOR SALE.

5 bulls, 1 year old—2 of these imported, the other 3 have such grandams as Alice 2nd of Leansesock, Edith of Leansesock and Mayflower 2nd of Drum-sie. Females all ages.

Robt. Hunter & Sons, Maxville, Ont.

BEST and CHEAPEST IN THE MARKET. Kemp's Instantaneous Sheep-Dipping Fluid. 4-gal. Imperial tin for 75c. STRENGTH EQUAL TO ANY. Instantly kills ticks and parasites on sheep and lambs. Improves and waterproofs the wool. A sure remedy for vermin, mange, etc., on horses, cattle, sheep, and dogs. Ask your druggist for Kemp's Dip. I will express it, prepaid to any part of the Dominion, for \$1. W. W. STEPHEN, Agent, MEAFORD, ONT.

HOMECROFT FARM for dairying and pure-bred stock. Ayrshires, Chester Whites, and Barred Rocks. We have some fine bulls fit for service. Also hogs of all ages. Prices reasonable. Try us. J. F. PARSONS & SONS, Barnston, Que.

Spring Burn Ayrshires and Oxford Downs. Our special offer at present: 10 bulls from 1 to 9 months o'd, 4 two-year-olds, 2 shearlings, and 7 ram lambs; a choice lot. Prices reasonable. H. J. Whitteker & Son, North Williamsburg, Ont.

AYRSHIRE CATTLE SHROPSHIRE SHEEP. B. P. ROCK FOWL and 20 YOUNG LARGE ENGLISH BERKSHIRES FOR SALE. J. YUILL & SONS, Carleton Place, Ont.

GOSSIP.

(Continued from page 28.)

When the tension on the chain is relaxed by letting go the pull-in wire at the base of the tower, the spring pulls the wheel and vane into line with one another, and consequently the wheel remains with its edge to the wind, and stops.

If you are at all interested in the buying of a windmill, do not fail to write Gould, Shapley & Muir, Brantford, Ont.

At the Averill & Gregory Holstein sale at Syracuse, N. Y., June 4th and 5th, the eight-year-old cow, Segis Inka 36617, sold for \$1,600 to Dr. Wm. N. Landon, of Syracuse. The next highest price was \$500, for Netherland Maud 55128, which went to the same buyer. The 159 head sold, 41 males and 118 females, brought a total of \$25,590, or an average of \$161. The long drouth prevailing in New York and some of the Eastern States and the consequent scarcity of feed doubtless adversely affected the sale, which, notwithstanding this, was a very successful one.

At the annual meeting of the American Holstein-Friesian Breeders' Association, held in Syracuse, N. Y., June 3rd, Mr. Henry Stevens, Lacona, N. Y., was elected president, and Mr. F. L. Houghton, Putney, Vt., secretary and editor. The treasurer reported: total receipts, \$33,048.12; disbursements, \$8,851.71; balance on hand, \$24,196.41.

Mr. S. Hoxie, Superintendent of Advanced Registry, reported that during the past year, commencing May 16th, 1902, and closing May 15th, 1903, the records of 640 cows were received to Advanced Registry, 635 on official records and five on private records. Many of these cows made records ranging from 14 to 60 days in length. The period of competition for prizes closed May 5th, at which time 604 records had entered in the lists. During the year, 38 bulls were received to Advanced Registry, 34 of which were qualified by official records of four or more daughters.

The retiring president, Mr. W. J. Gillett, in his annual address said: "The past is the banner year in the existence of this association. Fresh laurels have been won and many records broken. Our method of having the performances of our cows officially supervised by experiment stations establishes the absolute accuracy of every record entered for Advanced Registry. Under such supervision, and calculating butter upon a basis of 80 per cent. fat, a heifer at one year and ten months of age has surpassed any previous record for animals of her age, with a yield of 14 lbs. and 5 ozs. of butter in seven days. A heifer at three years of age has made a world's record for animals of that class, with a production of 27 lbs. and 7 ozs. A heifer at four years of age has reached the enormous yield of 29 lbs. and 4 ozs., and is breved the world's champion for animals of her class. Last, but not least, a mature cow has scaled the summit of the 30-lb. mark, with an officially authenticated record of 30 lbs. and 10 ozs. butter in seven days; and Sadie Vale Concordia has erected for herself a monument that will be as lasting as the beautiful fields at Walworth—her record stands out as a befitting testimonial of the great skill and untiring energy of that now retired firm by whom she was bred."

A PROLIFIC SIRE.

At Keppoch, Cardross, says the Scottish Farmer, Mr. Montague Baird's beautiful Danegelt mare, May, a daughter of Mr. Caird's (of Greenock) famous show mare, Pimpennell, has had twin foals to the Hackney stallion, Heden Sensation. One of the foals died shortly after birth, the other is doing well. Mr. Baird's Goldfiner mare has dropped a neat filly foal, also to Heden Sensation. Mr. Morton, Aikenbar Farm, Dumbarton, has had the misfortune to lose twin foals sired by Heden Sensation. Mr. Lauder, Mill of Kier, Dunblane, had four mares put to Heden Sensation within two hours, and all of them proved in foal.

EUROPEAN ADVERTISEMENTS.

THE RIBY HERD and FLOCK

OF SHORTHORN CATTLE AND LINCOLN LONG WOOL SHEEP HENRY DUDDING, Riby Grove, Great Grimsby, Lincolnshire.

To get Champions in the produce of Champions. These can always be secured from the Riby Grove Herd and Flock, the largest in England, comprising the choicest lines of blood extant. Theirs is a world-wide reputation, and suffice to say that at no period of its history, dating back 150 years, were they stronger in merit or quality. 86 awards were won in 1901, and equally good results secured in 1902, culminating in those great victories at Smithfield Show, where its pen of wethers won the 100-guineas Challenge Cup for the best pen of sheep of any age or breed; and at Chicago Live Stock Show, in December last, where a ram from this flock won the \$400 prize offered for the heaviest sheep in the world. CABLE—Dudding Keeby, England.

HAMPSHIRE DOWN SHEEP

GREAT ENGLISH PEDIGREE SALES, July, August & Sept., 1903

Waters & Rawlence, Salisbury, Eng. will sell by public auction, during the season, upwards of

50,000 PURE-BRED EWES, LAMBS, RAMS.

including both rams and ewes from the best registered prizewinning flocks in the country. Commissions carefully executed. Address—

Waters & Rawlence, SALISBURY, ENGLAND.

W. W. CHAPMAN,

Secretary of the National Sheep Breeders' Association, Secretary of the Kent or Romney Marsh Sheep Breeders' Association, and late Secretary of the Southdown Sheep Society.

Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.

Address: MOWBRAY HOUSE, NORFOLK ST., LONDON, W. C., ENGLAND.

Cables—Sheepcote, London

English Shorthorns.

Booth and Bates Shorthorns, topped with Oriskany shank bulls. Young cows, bulls and heifers always on hand for sale. Eligible for the American Herdbook, Royal and Highland prizewinners included for the last two years. Close on \$400 won in prizes last year and this. WM. BELL, Ratcheugh Farm, Alnwick, Northumberland Eng.

HAMPSHIRE DOWN SHEEP.

"RESERVE" FOR CHAMPION IN THE SHORT-WOOL CLASSES, SMITHFIELD, LONDON, 1901.

Splendid Mutton, Good Wool, Great Weight.

This highly valuable ENGLISH BREED OF SHEEP is unrivalled in its wonderfully early maturity and hardness of constitution, adapted to all climates, whilst in the quality of mutton and large proportion of lean meat it is unsurpassed; and for crossing purposes with any other breed, unequalled. Full information of

JAMES E. RAWLENCE, SECRETARY HAMPSHIRE DOWN SHEEP BREEDERS' ASSOCIATION, SALISBURY, ENGLAND.

FAIRVIEW SHROPSHIRE

A great lot of good young lambs. Home-bred and imported shearing rams. A beautiful lot of home-bred ewes. Whoever wants such, let him write. All 1902 customers fully satisfied, and I am determined to please each and every 1903 customer by furnishing good stock and dealing fair. JOHN CAMPBELL, "Fairview Farm," Woodville, Ontario.

IMP. COTSWOLD SHEEP


Five rams (year-olds), both sires and dams imp.; 10 ewes (year-olds), sire imp. Also this year's lambs, both sexes; Yorkshire and Tamworth hogs. BROOKS & LANGMAID, COURTOISE, ONT.

NO HUMBAG. Three

Swine V. Stock Marker and Calf Dehorner. Stops swine from rooting. Makes different ear marks. Extracts Horns. Price \$1.50. Send \$1 for trial. If results, send balance. Paid May 6, 1902. Hog and Calf Holder only 75c. FARMER BRIGHTON, FAIRFIELD, IOWA.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.



**COOPER SHEEP DIP**  
  
**STANDARD OF THE WORLD** for 60 years. Used on 250 millions annually. If local druggist cannot supply, send \$1.75 for \$2 (100 gal.)  
 Evans & Sons, Montreal and Toronto.

**LITTLE'S PATENT FLUID SHEEP DIP AND CATTLE WASH**  
 THE ORIGINAL Non-Poisonous Fluid Dip  
 Still the favorite dip, as proved by the testimony of our Minister of Agriculture and other large breeders.  
**For sheep.** Kills ticks, maggots; cures scab; heals old sores, wounds, etc., and greatly increases and improves growth of wool.  
**Cattle, horses, pigs, etc.** Cleanses the skin from all insects, and makes the coat beautifully soft and glossy.  
 Prevents the attack of Warble Fly.  
 Heals saddle galls, sore shoulders, ulcers, etc. Keeps animals free from infection.

**No danger, safe, cheap, and effective**  
 Beware of imitations. Sold in large tins at 75 cents. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to breeders, ranch men, and others requiring large quantities.

SOLD BY ALL DRUGGISTS. SEND FOR PAMPHLET.  
**Robert Wightman, Druggist, Owen Sound**  
 Sole agent for the Dominion.

**FOR SALE, AT MAPLE AVENUE STOCK FARM, CHOICE**  
**Lincoln Sheep and Shorthorn Cattle**  
 Bred from best English stock. Bred from Scotch bulls of fashionable families. CAN SUPPLY EITHER IN CARLOAD LOTS.  
 Write us before buying elsewhere. Address: F. H. NEIL, Proprietor, LUAN, ONT. Box 35. Telegraph and Railway Station.

**PRIZEWINNING COTSWOLDS.**  
 Imported and home-bred stock, prizewinners at all the leading fairs. **ELGIN F. PARK**, on Box 21, Burgessville, Ontario, Canada.

**Dorsets and Chesters** Young stock in Dorset Sheep and Chesters White Hogs of good quality for sale, reasonable.  
**R. H. HARDING, THORNDALE, ONT.**  
 "MAPLEVIEW FARM"


**SHROPSHIRE** FOR SALE.—Shearling rams, ram lambs, ewe lambs, also shearling and older ewes, about 50 head all told. All registered or eligible. Low-set, well covered, in fine condition and form. Sires from Campbell and Dryden flocks. **MALCOLM McDOUGALL** Tiverton, Ont.

**LINDEN OXFORDS**  
 at Toronto, 1902, won 1st open pen; 1st and 2nd Canadian pen; 1st and 2nd aged, yearling and ram lambs; 1st, 2nd and 3rd yearling ewes and ewe lambs. All these ewes retained in flock and the best rams.  
**R. J. HINE, Dutton, Ont.**

**American Leicester Breeders' ASSOCIATION.**  
**A. W. Smith, Pres., Maple Lodge, Ont**  
 Pedigrees now being received for Vol. 4. For information, blanks, etc., address:  
**A. J. TEMPLE, Sec., CAMERON, ILL.**  
 U. S. A.

**Dorset Horn Sheep**  
 THE largest flock in America. The most celebrated prizewinners at the Columbian Exhibition and Canadian exhibitions. Contains more Royal winners than any other. Awarded 5 out of 8 first prizes at Toronto, London and Ottawa in 1900. Flock of 300. Stock for sale always on hand.  
**John A. McGillivray, Uxbridge, Ontario.**

**SHEEP BREEDERS' ASSOCIATIONS**  
 American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to MORTIMER LEVERING, Secretary, Lafayette, Indiana.

**LIVE STOCK** are free from insects and skin diseases when **West's Disinfecting Fluid** is used.  
  
 THE WEST CHEMICAL CO., TORONTO.

**GOSSIP.**  
**VALLEY HOME SHORTHORNS.**  
 One mile from Meadowvale, Ont., a station on the Elora and Owen Sound branch, two miles from Streetsville Junction on the C. P. R., and twenty miles west of Toronto, is the beautiful and fertile Valley Home Stock Farm of Messrs. S. J. Pearson, Son & Co., where is maintained a high-class herd of Shorthorn cattle, at the head of which stands the sterling roan yearling bull, Trout Creek Banff =40076=, bred by W. D. Flatt, a sturdy, robust and symmetrical son of the typical Scotch-bred bull, Imp. Lord Banff =36053=, winner in 1901 of first prize at Toronto, first and champion at New York State Fair and first at the Pan-American Exposition, and sold at auction in Chicago the same year for \$5,100. His dam, Imp. Proud Amaranth, of the Cruickshank Azalea family, a cow of great scale and a deep milker, was bred by Mr. Wm. Duthie, Collynie, Aberdeenshire, and sired by the noted Highland champion bull, Pride of Morning, of the Cruickshank Clipper tribe, which gives Trout Creek Banff a combination of the best blood of the breed, and, together with his individual excellence, should ensure him a prepotent sire of the right stamp of stock. The female end of the herd embraces representatives of a number of leading Scotch families. Prominent among these is the excellent imported cow, Glosterina 6th, of the favorite Miss Ramsden tribe, added to the herd last year—an \$800 purchase at the Hamilton sale in January last. Her sire, of the Uppermill Bessy family, sold for a long price to go to South America, was got by the Duthie-bred Chieftain, and his dam by the noted William of Orange. Glosterina 6th since her advent at Valley Home has produced a beautiful and promising heifer calf, imported in dam, and sired by Luxury, of the Inverquhomery Rosewood family. Imported Miriam, a red six-year-old cow, of the Bruce Mayflower family, bred at Heatherwick, is an excellent representative of that useful and popular sort, big, broad and breezy looking, and due to calve in October to service of Imp. Greengill Archer, a son of the Orange Blossom bull, Archer's Heir, who was sired by the \$6,000 bull, Brave Archer, of the Miss Ramsden family. Imported Rosie 3rd =38276=, a red five-year-old cow, bred by Mr. John Young, of Tilbouries, is a worthy representative of the Duke of Richmond's favorite Jilt tribe, whose sire, Lieutenant, was by Armstrong, a son of the well-known sire of prizewinners, Clear the Way (47604), and Rosie 3rd is nursing a capital red bull calf, born in November, sired by Imp. Scotland's Pride, a Cruickshank Clipper, and son of the great Star of Morning, by Pride of Morning. Nonpareil 60th, a roan three-year-old cow of excellent proportions, represents that favorite Sittyton family, and is nursing a nice red heifer calf by Favorite =30955=, by Indian Statesman, by Imp. Indian Chief, of the Cruickshank Victoria tribe. Of the Kinellar Rosebuds there are three good representatives, one of which, Rosebud 5th, just turned two years old, and sired by Favorite, is a handsome red heifer of model type and character, good enough to show in first-class company anywhere. Marchioness 9th =28277=, by Scotsman, by the famous Barmpton Hero, and of the Cruickshank Lovely tribe, traces to the Duthie-bred cow, Imp. Marchioness 4th, by Cayhurst, and she has a capital red cow calf by Imp. Scotland's Fame =26063=, of Mr. Manson's Kilblean Beauty tribe, and got by the Duthie-bred Golden Ray, by Scottish Archer. Lady Margaret, by British Comet, a Nonpareil bull by Imp. British Statesman, is a heifer of handsome type and fine quality, tracing to Imp. Maude, by Gauntlet, with the imported Scotch bulls, Toft Hills and Premier Earl, in her top crosses. Two beautiful roan yearling heifers of the same family, sired by Gladstone, a Cruickshank Cecilia bull, by Bold Britain, are of the most approved pattern, and would grace any first-class herd. These are sample numbers of a select herd being built up on sound lines of breeding, with superior individuality as a prime factor in its development, a herd which is bound to hold a high place among the best in the Dominion.

**Farnham Oxfords and Shorthorns**  
 My present offering—125 one and two year old rams, sired by Bryan's 125, Hampton Hero 4th, Royal Windsor 4th, and Kempford Hero 8th (all imported), 35 of which are flock headers, the balance strong, vigorous ranch rams. Also 50 choice yearling ewes, and the rare, nice ten-months old bull, Royal Arcanum 45133, by Imp. Sittyton Conqueror, and four heifers, from 10 to 20 months old, by 20th Crown Jewel.  
**BENNY ARKELL,**  
 Arkell P. O. and Station, Guelph four miles.

**SAVE 20 CENTS PER SHEEP on every sheep you shear with STEWART'S PATENT SHEEP SHEARING MACHINE**  
 The day of the old fashioned hand shears is past. No owner of 10 sheep or more can afford to shear by hand, even though the work be done for nothing. Don't butcher your sheep shear with this machine and get ONE POUND WOOL EXTRA PER HEAD. It will more than cover the cost of shearing. Send today for valuable book, "Hints on Shearing." It is free and will save you money.  
**CHICAGO FLEXIBLE SHAFT CO., 110 Ontario St., CHICAGO.**

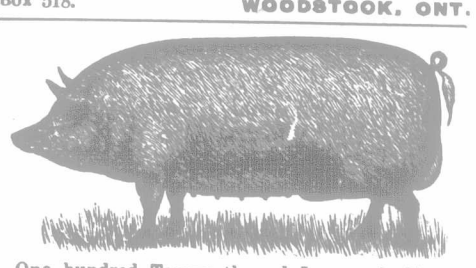
**HILLCREST HERD OF Large English Berkshires**

My brood sows are imported or show animals, and the sires are big, long fellows of the bacon type. For sale: An excellent lot of young pigs, and a few young sows recently bred. Can supply pairs not akin. Enquiries promptly answered. Vine station, G.T.R.—near Barrie. Jno. Lahmer, Vine, Ont.

**W. S. CARPENTER, "MODEL FARM," SIMCOE, ONT.**  
 Importer and breeder of Shropshire sheep. My flock was represented at Toronto, and won first on shearing ram, first and second on aged ewes, and second on the pen. First time exhibiting. If in need of a first-class yearling ram, imported or home-bred, write! Your wants can be supplied, and at prices consistent with quality. Have a choice lot to choose from, and can guarantee satisfaction. Come and see them, or a card will bring them.  
 Station One-half Mile from Farm, Wabash and G. T. E.

**Large English Yorkshires**  
 Imported and Canadian-bred Yorkshires, from stock of the best British herds. A choice lot of boars, ready for service, and a number of sows being bred to imported Dalmeny Long Sam, for sale. Also young pigs, all ages.  
**H. J. DAVIS, Box 518, WOODSTOCK, ONT.**

**"BROAD LEA OXFORDS."**  
 An offering choice ewe and ram lambs, shearing ewes and a few shearing rams for flock headers. Also young Yorkshire pigs of the best bacon types. Teeswater, C. P. R. **W. H. ARKELL, Mildmay, G. T. R., Teeswater, Ont.**



**O. I. Chester Swine** Boars fit for service. Young pigs from one to three months old, of good quality. Registered pedigrees furnished. Write for prices.  
**F. H. REESOR, CEDAR GROVE, ONT.**

One hundred Tamworth and Improved Chester White Spring Pigs of a true bacon type, our herd having won the best prizes offered at the leading exhibitions throughout Ontario and Quebec for the past ten years. Stock for exhibition purposes a specialty. We pay express charges between stations, and guarantee safe arrival of all stock shipped. Pairs furnished not akin. Write for prices.  
**H. GEORGE & SONS, Crampton P. O., Ont.**

**TAM WORTHS.**  
 Young pigs for sale, from medal-winning sow, O. A. C. 110, and other good ones, sired by Imp. Starlight, Pan-American First, and Bold Boy, Toronto winner. **JOHN HORD & SON, Parkhill P. O. and Station.**

**Large English Yorkshires**  
 Sows safe in pig, boars fit for service, sows ready to breed, boars and sows 2 and 4 months old. Satisfaction guaranteed in orders received by mail.  
**JAS. A. RUSSELL, Precious Corners, Ont.**

**Newcastle Herd of Tamworth Swine**  
 Have for a number of years taken a share of the best prizes offered at Toronto Exhibition, but this year has excelled all past records, having taken the sweepstakes for the best herd; also both silver medals for best Tamworth boar and best Tamworth sow, besides many other prizes in the various classes. Our present offerings are: A few choice young sows, 4 to 5 months old; 2 yearling sows, in pig; and we are now booking orders for spring pigs, both sexes. Enquiries promptly answered.  
**COLWILL BROS., NEWCASTLE, ONT.**

**PINE GROVE FARM HERD of LARGE ENGLISH YORKSHIRES.**  
 The oldest-established registered herd in America. We have 12 imported boars and sows and 20 home-bred animals breeding and have a limited number of young boars and sows for sale, suitable for this fall's breeding. Satisfaction guaranteed in all mail orders.  
**Joseph Featherston & Son, Streetsville Station, C. P. R., and P. O. and Telegraph, Clarkson Station, G. T. E.**

**WILLOW LODGE BERKSHIRES**  
 Herd headed by Long-fellow 10th of H. F., assisted by the noted prizewinner, Highlanders Crown 3rd. Sows, the best money will buy, and are winners. Young stock of both sexes and all ages for sale, not akin.  
**W. WILSON, SNELGROVE, ONT.**

**GLENBURN YORKSHIRES** won Gold Medal at Ottawa, 1902. Herd averages 100, headed by the choice boars, Oak Lodge Prior and Pine Grove Squire. Twenty brood sows, 12 six-months sows, due to farrow March and April; 40 sows and boars, four weeks to three months old; pairs not akin.  
**DAVID BARR, JR., Renfrew, Ont.**

**Yorkshires, Poultry and Collies**  
 Choice Yorkshires, 2 to 3 months old, bacon types. Eggs from prizewinning W. Wyandottes and B. P. Rocks, mated for exhibition stock. A litter of fine collie pups, pedigreed. Address:  
**J. A. & A. R. Armstrong, Warkworth, Ont.**

**LANGELIER'S YORKSHIRES.**  
 My importation of Yorkshires has arrived, and is rather better than I expected. Imported boars and sows now for sale at prices consistent with quality. Correspondence cheerfully answered.  
**GUS. LANGELIER, QUEBEC CITY.**

**IMPROVED CHESTER WHITES**  
 Boars fit for service. Sows ready to breed. Young pigs in pairs, not akin.  
**LARGE ENGLISH BERKSHIRES.**—Sows ready to breed, and young pigs in pairs, not akin. Pedigrees registered. For prices write or apply to  
**TILMAN E. BOWMAN, Berlin, Ont.**

**YORKSHIRES AND BERKSHIRES.**  
**FOR SALE:** Some choice young sows and boars, ready to breed; also Banded Rock eggs, \$1 per setting.  
**C. & J. CARRUTHERS, Cobourg, Ont.**

**GLENBURN STOCK FARM**  
 Berkshire Pigs, of good length and quality, from March and April litters. Can supply pairs. Several young boars, ready for use. Choice Shorthorn calves of both sexes.  
**John Racey, Jr., Tennoxville, Ont.**

**FOR SALE: Yorkshires and Holsteins**  
 Best type and quality. Young stock constantly on hand. Prices right.  
**R. HONEY, Brinkley P. O., instead of Warkworth.**

**Maple Grove Herd of Large ENGLISH YORKSHIRES**  
 From imported and home-bred sires. Choice lot of young sows bred to imported bar, Summer Hill Dalmeny Cavalier =10955=, and a number of young stock from prizewinners. Pairs not akin supplied.  
**T. J. COLE, Box 188, BOWMANVILLE, ONT.**

**Weston Herd Large Yorkshires**  
 Choice young stock for sale, from imported and home-bred stock of highest breeding and quality. Prices low. Satisfaction guaranteed. My motto: "Not how cheap, but how good." Telephone, Telegraph and Stations: C. P. R. and G. T. R., Weston, Ont. (electric cars from Toronto). Address:  
**L. ROGERS, EMERY, ONT.**

When placing any advertisement on this page kindly mention THE FARMER'S ADVOCATE.



# Strong Evidence for the Weak

## THE LAST RESORT SHOULD BE THE FIRST

Mr. James Johnston, J.P., Ottawa City Postoffice, wrote me last week as follows:—



"I have to thank you very much for your Electric Belt. This time last year I was not able to do any work on my large farm, now I am able to turn out and guide the men. I was so overcome with heart disease that I could not walk. I am seventy-four on the 28th of this month, and you know at my time of life you cannot make me over again, but your Belt has worked a miracle on me. I had faith in your treatment from the first, and believed all you said to me about my case, and I assure you, sir, I will do my best to make known, with pen and tongue, the good quality of your electrical treatment."

### DR. McLAUGHLIN'S ELECTRIC BELT

will do the same for you. If I fail to convince some people it is because they will not use their own judgment. I don't ask you to take my word only—ask those who have used my Belt. Every man or woman who comes into my office gets a practical illustration of my method of treatment; when they see how the cure is made it appeals to their common sense. There is no mystery about it. I give a free test to all who call. Here is another case—this one of **Mr. M. Haig, 36 Byward Market Square, Ottawa, Ont.** You can read what he writes to me:—

"If anyone has given your Belt a fair trial I have, and I do not regret it. When I got the Belt I could not stoop to tie my shoes, and had to be helped to get my coat on. Now I have not a pain or an ache and feel as well as I ever did. If I feel sore after heavy work I put the Belt on and get up in the morning as limber as ever. I recommend the Belt to every one I see. I was 82 years of age last May."

### Even Unto Old Age You May Be Free From Pain and Defy Your Years.

I will cite you another case, this one of **Mr. Philip McGahey, Riviere aux Pins, Que.** Read what he writes me:—

"I feel now I am a new man. For forty years I have had a bad back, now I can run a race or pick up a pin, I feel so smart; no pain. I am in my seventieth year; never was so well in health as I am now. When I used to be bad, I would be a month that I could not stoop to lace my boots; now I feel no pain in doing so. I am just as smart as any young fellow at present. Sir, no one would be without one of your Belts if they knew the good to be had from them. I have recommended them highly to all my friends, and you will soon have some orders."

The human body is just like an engine. It breaks down when the physical energy is overtaxed—that energy is **ELECTRICITY**. I have here a means of replenishing the electricity of the body, and that is the basis of my treatment.

Decay in old men is similar to general debility in younger ones. Years have nothing to do with it. In every case it is the failure of the stomach to generate sufficient energy to supply the demands made by the vital organs. Here is another case—this one of **Mr. Thomas Dougherty (nurse), London, Ont.** Read his letter:—

"The reason I have not written you earlier is that I wish to do you all the justice in my power. I have been doing this among my friends in this city and elsewhere. Yesterday, when I was in St. Thomas, I think I made known to fifty persons the state I was in when I wrote you about the Belt, and the good results I have received from wearing the same. The Belt has done for me all you said it would. The electric treatment I used some time ago was of so much benefit that I came to the conclusion that if an occasional treatment of twenty minutes did me so much good, a steady flow of electricity into my system for hours would do a thousand times more good, and now, at the end of a few weeks' treatment, I can say, 'Thank God for your Electric Belt.' If I had one year ago it would have saved me hundreds of dollars, and oh, what pain and misery. I don't have to get up every half hour through the night as I used to—no more pain or sediment or disgusting odor. The pains and frightful nervousness are a thing of the past. If it will do all this for an overworked, run-down man of fifty-six, what must it do for a young man?"

An old fellow, a patient of two years previous, came to see me one day and asked me to have his Belt overhauled, as he wanted to put it on again. I reminded him that he had reported himself cured two years ago, strong and sound, "But," said he, "I am 81 years of age and not as well able to stand knocking about as I was in my youth, and I wear the Belt occasionally, not because of present need, but just so that I will have strength to spare in case of demand. If you are riding a bicycle on a level ground and see a hill before you, what do you do? Put on more steam, eh? I am getting older every day and need more steam. That's why I wear the Belt."

I want a test case for my **New Belt**. I will pay \$1,000 in gold for a case of Rheumatism, Pains in the Back, Weak Kidneys, Sciatica, Lumbago, Varicocele, Prostate Trouble, Torpid Liver, Indigestion or Dyspepsia that my belt will not relieve in one month's use according to my directions.

After you have read the above letters write to me explaining your case. I will at once tell you whether I can cure you or not. To prove the confidence I have in the curative power of my Belt, I am willing to take your case and after I have cured you pay me. All I ask is that you give me security for the price of my Belt. I will send it to you with all necessary attachments suitable for your case and you can

## PAY WHEN CURED.

**READ WITH CARE**—Dr. McLaughlin's Electric Belt is positively the only electric appliance sold with which you receive the advice of a practical physician. I give you my advice **Free of Charge**.

**FREE BOOK. CONSULTATION FREE**—I want you to call and examine my Belt. I will talk over your case with you. I will prove to you that electricity, when properly applied, will cure. You can test the Belt. For those who cannot call I have a **Free Book**, which gives many hundreds of letters from men and women whom I have cured. Tells all about the signs of decay in men, how they are caused, how they first appear, the way the vital force is wasted, and how all those troubles are cured by Electricity. It inspires a man to be "a man all over." I will mail it closely sealed, **free**. All correspondence strictly confidential.

**DR. M. S. McLAUGHLIN, 130 Yonge Street, Toronto, Ont.**

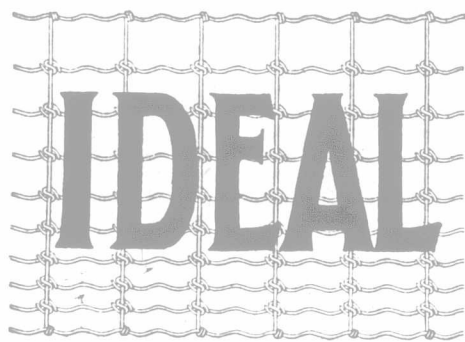


## There Is a Factory at Toronto

Gang Ploughs,  
Riding Ploughs,  
Ditching Ploughs,  
Pick Ploughs,  
Railway Ploughs,  
Road Planers,  
Land Rollers,  
Drag Harrows,  
Disc Harrows,  
Disc Ploughs,  
Turnip Drills,  
Beet Pullers,  
Scufflers,  
Wheelbarrows,  
Rooter Ploughs.

UPON which he who passes may read the proud sign of THE WILKINSON PLOUGH CO., LTD. Here men work faithfully day by day to the end that the Canadian farmer may have perfect implements with which to till his acres. They do not claim to be philanthropists, just sound business folk, with genius enough to know better from good, and best from better. Already in the lead, they rest not with satisfaction, but ever strive to increase their advantages over the nearest rival. Hereinbeside we mention a little list of lines—if you find a suggestion, just write about it frankly to these leaders in their own particular field of thought and action.

**The Wilkinson Plough Co., Toronto, Can.**  
LIMITED.



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### WOVEN WIRE FENCING

Heavy uprights and bars of No. 9 hard spring wire, united by a perfect galvanized lock, make the IDEAL FENCE

**Strong,  
Serviceable,  
Durable.**

Contraction and expansion amply provided for. Write to-day for catalogue.

THE  
**McGregor, Banwell Fence Co.,**  
LIMITED,  
WINDSOR, - - - ONT.

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THE ARNOTT INSTITUTE, BERLIN, CANADA.  
For the treatment of all forms of SPEECH DEFECTS. Dr. W. J. Arnot, Superintendent. We treat the cause, not simply the habit, and therefore produce natural speech.  
Write for particulars.

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**NORDHEIMER PIANO**  
THE REPRESENTATIVE PIANO  
OF CANADA  
INSPECTION SOLICITED  
THE NORDHEIMER PIANO  
and MUSIC CO., LIMITED  
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PATRONIZE  
HOME  
INDUSTRY.

# CARNEFAC STOCK FOOD

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HOME  
INDUSTRY.

MADE IN CANADA

By Canadians and for Canadians.

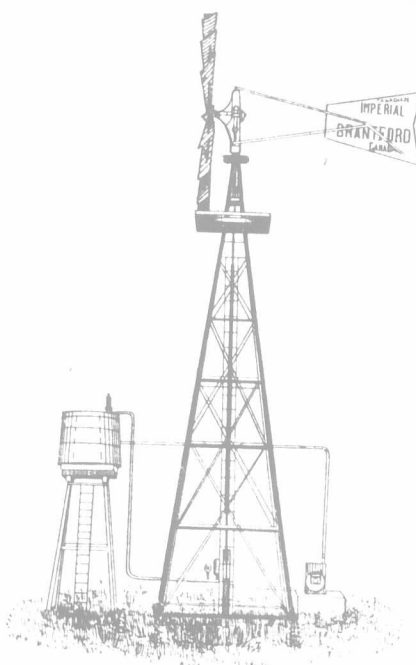
NOT A CENT. OF CUSTOM DUTY TO PAY ON IT.

CARNEFAC has no known equal as a food for calves and young pigs, a tonic for weak or sickly animals, and a never-failing preparation in the proper fitting-out of exhibition stock. It enables animals to get full benefit from the food they consume, thus guaranteeing increased flesh and a glossy coat. The experience and testimony of successful exhibitors at leading fairs in recent years amply confirm this statement, while the observation of experts attests that condition and quality of flesh and hair and handling counts for much in the show-ring. Dry hair and harsh handling has condemned many an otherwise promising candidate for first-class honors.

**Carnefac Stock Food**  
Stimulates the Skin Secretions,

softening the hair and imparting freshness and bloom. For particulars, write:

**The CARNEFAC STOCK FOOD CO.,**  
Try our Carnefac Poultry Food for drooping fowls and birds for early market.  
65 Front St. East,  
TORONTO.



CUT OF

### "IMPERIAL" PUMPING WINDMILL

Outfit which won the CHAMPIONSHIP OF THE WORLD against 21 American, British and Canadian manufacturers, after a two months' thorough trial. Made by  
**GOOLD, SHAPLEY & MUIR CO. Limited,**  
Brantford, Canada.

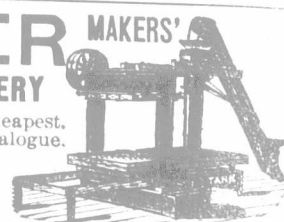
## Salt Sense.

The fame of Windsor Salt grows steadily. It is the highest grade of pure salt. No salt can possibly be purer, whiter, drier or flakier than Windsor Salt.

**Windsor Salt.**

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Best and cheapest. Send for catalogue.  
**BOOMER & BOSCHERT PRESS CO.,**  
368 West Water St.,  
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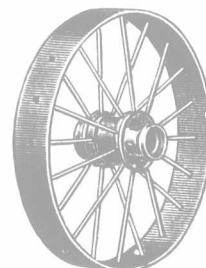
## MELOTTE ...CREAM SEPARATORS

Run so smoothly that we have never yet met with a worn bearing, though we have been selling these machines for years. They are perfect. We gladly send them on free trial.

PRICES.  
**\$65.00**  
AND UPWARDS.

For prompt delivery, please place orders with our local agent at once.  
Write us for Illustrated Booklet.

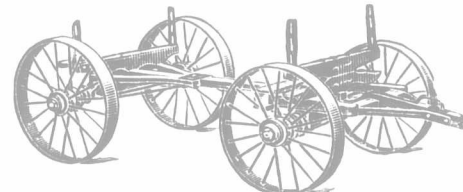
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Wide-Tire Metal Wheels  
FOR WAGONS

Made to fit any axle, of any desired height or width of tire. Are stronger, lighter and cheaper than wooden wheels. Just the thing for the farm. Our

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With metal wheels, is low and convenient for farm and general work. Made by skilled workmen, and of the best material. Guaranteed to carry four to five thousand pounds. Write for catalogue with full description of both Wheels and Wagons.

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Every Farmer Should Have a

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Mild climate, the best dairying country in North America. No blizzards. No cyclones. No droughts. No hot winds. No summer frosts. No cloud-bursts. The heaviest crops per acre in Canada. We make this statement without fear of contradiction. Cool nights and good water. The best price for all kinds of farm produce. **THE CALIFORNIA OF CANADA**, with land at one-tenth the price.

Write for farm pamphlet to

**THE SETTLERS' ASSOCIATION,**  
BOX 540 VANCOUVER, B. C.  
Please refer to this paper.

## WALKERVILLE WAGONS ARE THE BEST

**Walkerville Wagon Co. Limited**  
WALKERVILLE, ONT.  
WRITE FOR CATALOGS.

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