

48
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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

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dec 31, 1909

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Vol. XLIV.

LONDON, ONTARIO, DECEMBER 23, 1909.

No. 900

How the Frost Fence "Gives" and "Takes," Like a Spring

ANY "coilless" Fence is liable to snap in certain weather conditions.

But the Frost is a coil Fence. In Winter, when steel Wire contracts, Frost coils "give" their surplus, instead of snapping like "coilless" Fence.

And in Summer, when the Wire expands, that surplus returns to the Frost coils, instead of sagging and causing the Fence to lose its shape.

And no matter how often contraction or expansion is caused, the Frost Fence always acts the same, like a Spring.

Merely Excuses

Lots of other Wire Fences have a Tension, Curve or Kink, as an excuse for "Give" and "Take." But the number of these "gives" and "takes" is limited. They cannot keep it up. It isn't in the Wire or the method to do so.

Both the Frost Field-Erected and the Frost Woven Fence have extra provisions for "Give" and "Take." But no others have it. You simply cannot find another Fence which will retain its shape like the Frost.

Please remember that!

Make Our Own Wire

We are the only Fence Makers in Canada who Make and Galvanize Wire exclusively for Fence purposes.

Wire, to give satisfactory service in Canada, should be made especially to fight off the peculiar Canadian climate, which simply knocks the very life out of most Fences. But all Wire is not made with Canadian conditions in view.

The Wire formerly used for the Frost Fence was made in the States. But we had it made especially for us. It gave better satisfaction than most Wire, but we wanted far better.

For that reason we decided to Make and Galvanize our own Wire. So we built a Mill for Wire-making, and another for Galvanizing, and installed the most modern Machinery in use.

Then we obtained the services of one of the most Expert Wire-Makers in America. A man with 25 years of Wire-Making experience back of him.

Proper Temper

The new Frost Wire is Annealed so scientifically that it

possesses the proper temper for Canadian conditions.

This Frost Annealing business makes every inch of uniform temper, and stronger than any other No. 9 Wire. You know what that means.

Frost Wire will not snap, regardless of peculiar Canadian weather variations.

Will Not Chip

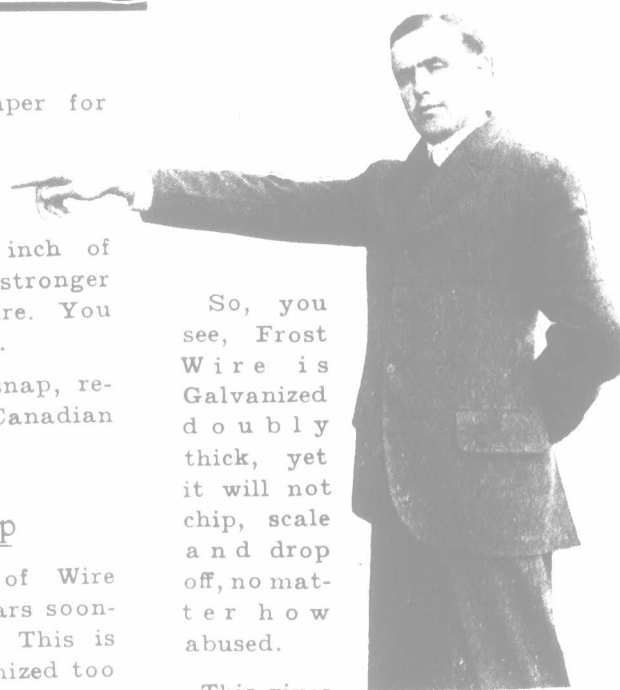
About 75 per cent. of Wire Fences rust 12 or 15 years sooner than they should. This is because they are Galvanized too thinly for Canadian use.

But if most of that Wire were Galvanized thicker it would chip off, wouldn't it?

No Galvanizing will adhere permanently to greasy, scaly Wire. That scale is bound to drop off some time or other, and away goes your Galvanizing.

But to eliminate all this, Frost Wire is put through three of the most thorough cleansings any Wire ever had. After these thorough scourings, not even one spot of grease or scale remains.

When Frost Wire goes through its Double Galvanizing process the Galvanizing not only "coats" it, but goes deep into it, becoming a part of the Wire itself.



So, you see, Frost Wire is Galvanized doubly thick, yet it will not chip, scale and drop off, no matter how abused.

This gives the Frost Fence a life of about 10 to 15 years longer than most other Fences. No peculiar climate can possibly rust the new Frost Fence.

Send For This

We issue a Booklet which tells all about Wire and Wire Fence. And it tells all about the wonderful Frost Locks, and why they will not slip or become loose.

This Booklet is worth much to anyone interested in Fence. We'll send it free, with samples of Frost Fence and Frost Locks, postpaid, if you'll just drop us a card.

The Frost Wire Fence Co.,
Hamilton, Limited, Ontario

Agents
Wanted
in Open
Districts.

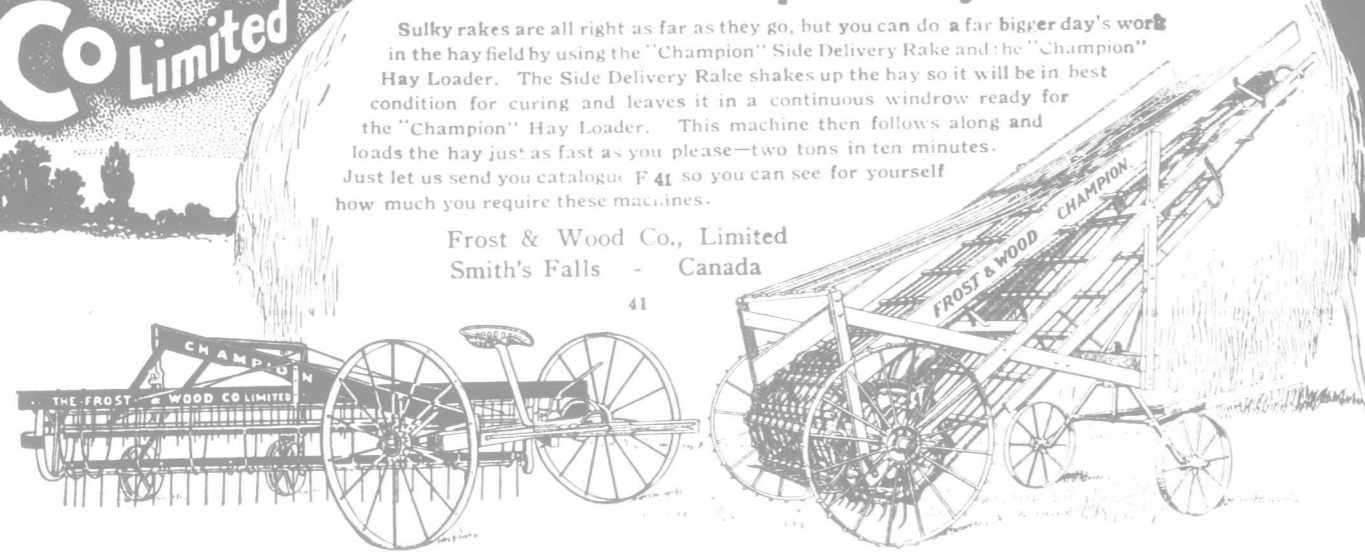
"Frost" Fence

Frost & Wood Co Limited

Do A Bigger Day's Work With Champion Side Delivery Rake and Champion Hay Loader

Sulky rakes are all right as far as they go, but you can do a far bigger day's work in the hay field by using the "Champion" Side Delivery Rake and the "Champion" Hay Loader. The Side Delivery Rake shakes up the hay so it will be in best condition for curing and leaves it in a continuous windrow ready for the "Champion" Hay Loader. This machine then follows along and loads the hay just as fast as you please—two tons in ten minutes. Just let us send you catalogue P 41 so you can see for yourself how much you require these machines.

Frost & Wood Co., Limited
Smith's Falls - Canada




Synopsis of Canadian North-west Land Regulations.

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

Duties—Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres, solely owned and occupied by him, or by his father, mother, son, daughter, brother or sister.

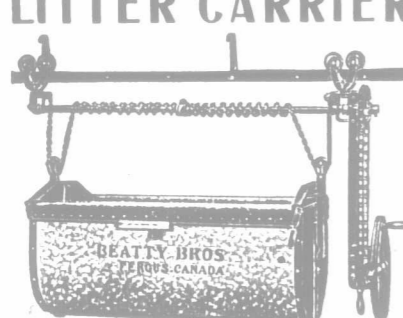
In certain districts a homesteader in good standing, may pre-empt a quarter-section alongside his homestead. Price, \$3.00 per acre. Duties—Must reside six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate fifty acres extra.

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

W. W. COOKE,
Deputy of the Minister of the Interior.

N. B.—Unauthorized publication of this advertisement will not be paid for.

THE "BT" LITTER CARRIER



BEATTY BROS. FERGUSON, ONT.

Note the double purchase in lifting and the simplicity in construction.

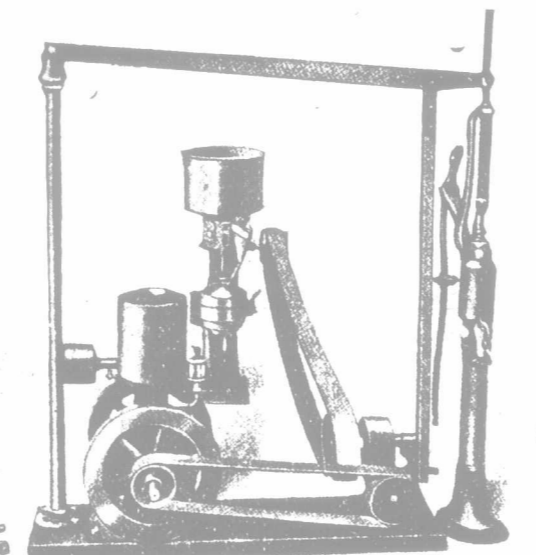
No machine on the farm is used as many days in the year, or saves as much hard, disagreeable work as a Litter Carrier. A boy can fill, wind up and push out in a "BT" LITTER CARRIER four barrows of manure with ease, no matter how much mud or snow there is in the yard. The manure can then be dumped into a wagon or sleigh, and put directly on the land, with very little if any more labor and time than is required to pile it in the yard with the old method, where the greater part of the fertilizing value of the manure is wasted.

Write for free catalogue showing best method of erecting Litter Carriers, and telling why you should buy a "BT" LITTER CARRIER.

BEATTY BROS. FERGUSON, ONT.
We also build Steel Stalls and Stanchions and Hay Carrier Goods.

IDEAL GASOLINE ENGINES

1/2 TO 40 HORSE-POWER.



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

Send for catalogue.

GOOLD, SHAPLEY & MUIR CO., LIMITED.
Brantford, Canada.



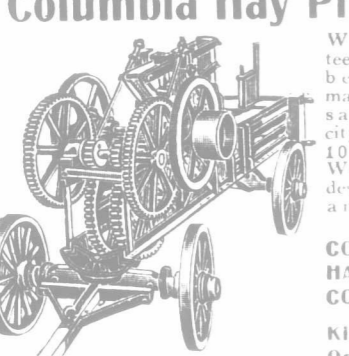
HOT AIR

OR COLD AIR IS ALL THE SAME TO THE
Canadian Airmotor

At your service all the year. Works like a nigger. Let the wind pump your water. DOES MORE HARD WORK in a year than any other farm tool. Full line of PUMPS, Steel and Wood TANKS, DRILLING MACHINES, WATERING BASINS and TROUGHES. Get our Catalogue, No. 21; very useful.

ONTARIO WIND ENGINE & PUMP CO., LTD., TORONTO, ONT.

100 MEN WANTED TO SELL THE Columbia Hay Press




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

COLUMBIA HAY PRESS COMPANY,
Kingsville, Ontario.

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

We take pleasure in offering to the public a saw manufactured of the finest quality of steel, and a temper which toughens and refines the steel, gives a keener cutting edge, and holds it longer than by any process known. A saw to cut fast "must hold a keen cutting edge." This secret process of temper is known and used only by ourselves. These saws are elliptic-ground thin back, requiring less set than saws now made perfect taper from tooth to back. Now we ask you, when you go to buy a saw to ask for the Maple Leaf Razor Steel, Secret Temper Saw, and if you are told that some other saw is as good, ask your merchant to let you take them both home, and try them, and keep the one you like best. Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand. It does not pay to buy a saw for one dollar less, and lose 25 cents per day in labor. Your saw must hold a keen edge to do a large day's work. Thousands of these saws are shipped to the United States and sold at a higher price than the best American saws. Manufactured only by

SHURLY & DIETRICH, GALT, ONT.



THE RACER
SHURLY & DIETRICH
RAZOR STEEL
REGISTERED TRADE-MARK
REGISTERED SECRET TEMPER

RUSH'S U-BAR STEEL STANCHIONS



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

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

Build Concrete Silos



Any size with the London Adjustable Silo Curbs. Send for Catalogue. We manufacture a complete line of Concrete Machinery. Full size and requirements.

London Concrete Machinery Co., Ltd., 19 Marmora Street, London, Ontario.
Largest manufacturers of concrete silo machinery in Canada.

Boys for Farm Help

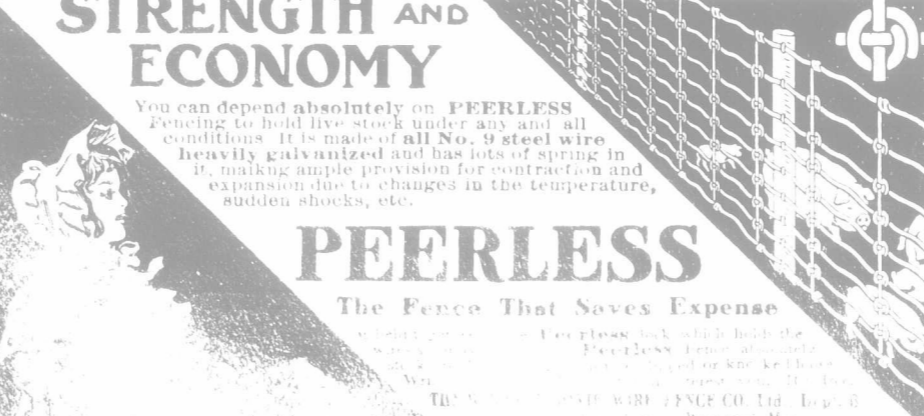
The managers of Dr. Barnardo's Homes invite applications from farmers or others for the boys who are arriving periodically from England to be placed in this country. The training grants are mostly between 11 and 14 years of age; all will have passed through a period of training in Dr. Barnardo's English Institutions, and will have been carefully selected with a view to their being of special suitability for Canadian life. For full particulars and the terms and conditions of the grant, which may be obtained on application to the Hon. B. O'Connell, Agent for Dr. Barnardo's Homes, 110 St. James Street, Toronto, or to the Canadian Farmers' Advocate.

STRENGTH AND ECONOMY

You can depend absolutely on **PEERLESS** fencing to hold live stock under any and all conditions. It is made of all No. 9 steel wire heavily galvanized and has lots of spring in it, making ample provision for contraction and expansion due to changes in the temperature, sudden shocks, etc.

PEERLESS

The Fence That Saves Expense



The Peerless Fence Co., Ltd., Dept. B, 110 St. James Street, Toronto, Ont.

WHEN YOU WANT A FARM

write us. We have farms at all prices for sale. State location, kind and size of farm desired. We offer only good value. Years of experience with Ontario land values enables us to do this. Address:

THE UNION TRUST COMPANY, LIMITED.
Real Estate Dept.,
174-176 Bay St., Toronto, Ont.

FURS

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

JOHN HALLAM, TORONTO

INVENTIONS

Thoroughly patented in all countries. **EGERTON R. CASE**, Registered U. S. Patent Attorney, Temple Building, Toronto. Booklet and drawing sheet free.

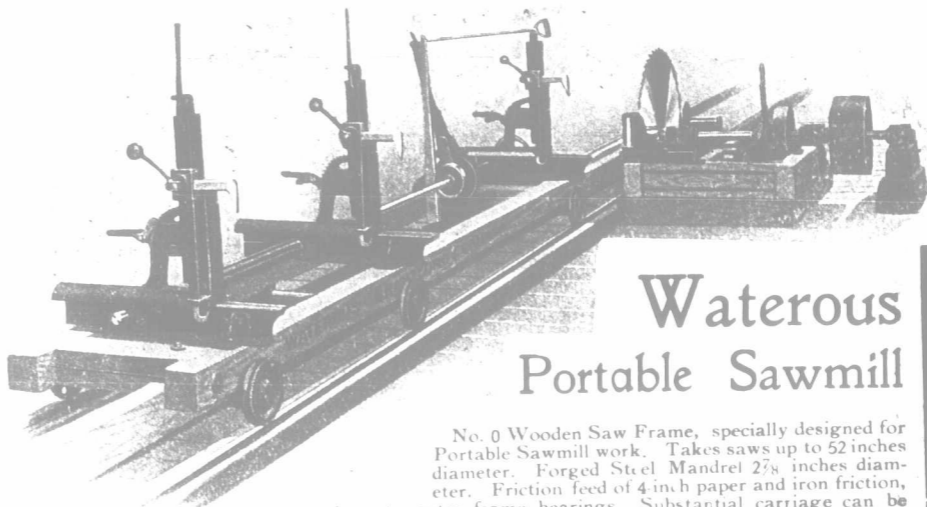
Savings

How much of your salary are you leaving at our Savings Department each pay day? Couldn't you easily spend less and leave a dollar or two, perhaps five or more?

Remember, your future success depends on what you save—not on the amount you earn. We pay 3 per cent. on deposits and 4 per cent. on Debentures of \$100 or more.

Assets over \$11,000,000
Incorporated 1864

Huron & Erie Loan and Savings Co.
LONDON, CANADA



Waterous Portable Sawmill

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

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

TO EARN THAT BIG SALARY, LEARN RAILROADING.

GET OUT YOUR LEAD PENCIL AND DO A LITTLE FIGURING.

Whatever your present monthly salary may be, multiply it by 12, and find your yearly income. Will it amount to \$1,000.00, the salary shown above? Do you earn one-half that amount? If not, why not?

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

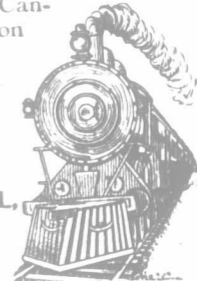
With the rapid progress of railway building in Canada it takes only from two to three years to be advanced to engineer or conductor, whose salaries are from \$90 to \$185 per month.

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

THE DOMINION RAILWAY SCHOOL,
Dept. F
Winnipeg, Canada.

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

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



Agents Wanted!

ACTIVE SUBSCRIPTION AGENTS FOR!

THE FARMER'S ADVOCATE AND HOME MAGAZINE
WANTED IN EVERY LOCALITY.

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

The Farmer's Advocate, London, Ont.

HORSE - POWER SPRAMOTOR

High pressure 100 to 200 lbs. for 1 or 2 horses. Over 500 in use. Automatic regulator and safety valve nozzle protector. 12-gal. air tank, largest capacity. Can be hand operated. Nozzle controlled automatically as to height, width and force.

Also for orchard, melons, potatoes, etc. The largest line of spraying machines in the world guaranteed against all defects for one year. Particulars free NOW.

This ad will not appear again in this paper.

Spramotor, Ltd.,
1361 King St., London Ont.



The Central Nurseries

(30th Year)

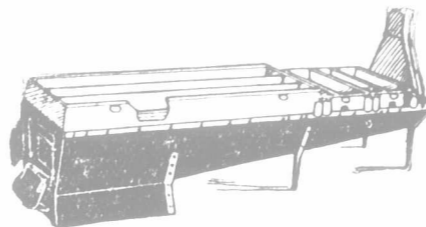
Our new catalogue will tell you honest verities and prices of **Fruit, Ornamental and Shade Trees, Evergreens, Shrubs, Roses, The Hills of Snow Hydrangea** (new) beautiful Red Herbert Raspberry, California Privet, etc. Get our prices before placing your order. Better, place order early this season.

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



CHAMPION EVAPORATORS

MAKE BETTER SYRUP



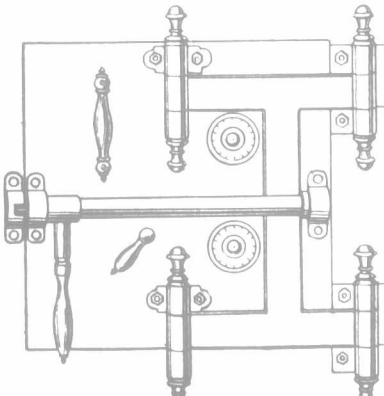
Don't rave at your luck if the other fellow gets more out of his maple grove than you do. Every day you try to make syrup without a "Champion" Evaporator you are losing money. The Champion has a corrugated bottom, which doubles the heating surface. This means that the Champ will do more work for its size than any other form of evaporator. It finishes the syrup without reheating. FREE—Our booklet of useful information for syrup-makers.

THE GRIMM MFG. CO., 58 WELLINGTON ST., MONTREAL

Don't keep your savings at home. You cannot tell what may happen to it.

Money deposited with this company is absolutely safe, and it earns 3½ per cent. interest, compounded semi-annually.

Temporary address: 434 Richmond St., London, Ontario, Canada.



The Ontario Loan and Debenture Co.
A. M. SMART, MGR.
DUNDAS ST. & MARKET LANE

Bagpipes

We're the largest Bagpipe dealers in North America.


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

FREE CATALOGUE

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

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

Repairs promptly done. Write for catalogue to-day.



ORME
Ottawa, Ontario.

This Cylinder Shows Why The "EUREKA" Root Cutter


is the best on the market. See how it is designed. Grooved knives, with the grooves on one blade opposite the teeth on the next. Instead of slicing or pulping, the "Eureka" turns out roots in shreds—thin narrow strips—suitable for any kind of feeding.

The "Eureka" shreds from one to two bushels a minute, and turns so easily that a child can operate it.

In the "Eureka" the feed is kept free from dirt, the feeder bottom being made with iron rods, thus allowing all dirt to drop out before it can reach the shredding cylinder.

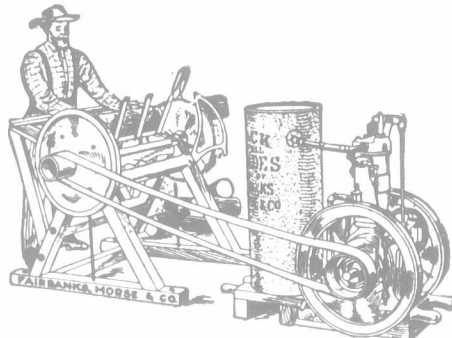
The sloping form of the cylinder makes the machine a self-cleaner. Write for catalogue which explains fully.

The Eureka Plaster Co.
LAWRENCE
Woodstock, Ont.



FARMERS!

POWER FOR YOUR FARM



IT DOES THE BUSINESS

BUY A **FAIRBANKS-MORSE GASOLINE ENGINE**

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

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

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

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

Name.....
Address.....

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

The Cows on a Thousand Hills

Get full credit when the

De Laval Cream Separator

SKIMS THEIR MILK

Free Book



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

Saves 5 Cents a Day Per Horse EARNS ITS COST IN FOUR MONTHS

Stops all the waste and muss of feeding hay from the floor or ordinary manger. Goes on saving you 5 cents a day for every horse you feed. Horses are healthier fed from this rack, because they get only CLEAN hay.

WARREN AUTOMATIC MANGER
FEED RACK & MANGER

Puts a stop to cribbing—keeps rats and mice away—can't get out of manger—won't wear out because made of steel and wire. Biggest horse-manger in the world. Supplied from our nearest Branch.

SEND FOR BOOKLET

The PAGE WIRE FENCE CO., LIMITED
ADDN. ST. CATHERINE, ONT. TORONTO MONTREAL ST. JOHN WINNIPEG

I Cured My Rupture

I Will Show You How To Cure Yours FREE!

I was helpless and bed-ridden for years from a double rupture. No truss could hold. Doctors said I would die if not operated on. I fooled them all and cured myself by a simple discovery. I will send the cure free by mail if you write for it. It cured me and has since cured thousands. It will cure you.

Fill out the coupon below and mail it to me today

Free Rupture-Cure Coupon

CAPT. W. A. COLLINGS,
Box 30, Watertown, N. Y.

Dear Sir:—Please send me free of cost your New Discovery for the Cure of Rupture.

Name.....
Address.....

Cowan's Maple Buds

(NAME AND DESIGN REGISTERED)

are different from and better than any other chocolate confection you ever tasted. Maple Buds are not made by any other concern, as the name and design is fully patented. Look for the name on every Bud.

The Cowan Co. Limited,
Toronto.

ELECTRIC BEANS

ARE A BRACING BLOOD & NERVE TONIC.

They are unequalled for Biliousness, Sick Headache, Constipation, Heart Palpitation, Indigestion, Anaemia. Write for sample and booklet of testimonials. 50c. a box at all dealers, or THE ELECTRIC BEAN CHEMICAL CO. LIMITED, Ottawa

CENTRAL Business College

STRATFORD, ONT.

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

ELLIOTT & McLACHLAN, PRINCIPALS.

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

THE NORTHERN Business College,
OWEN SOUND, ONTARIO.

Students admitted any time. Information free.
C. A. FLEMING, PRINCIPAL.

7% GUARANTEED

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

ROBERT E. KEMFRER,
Confederation Life Building, Toronto, Ont.

Don't Throw it Away Does Your Granite, Tin, Brass, Copper, Earthenware, Hot Water Bag Leak?

USE **MENDETS** PATENT PATCH

They mend all leaks in all utensils—tin, brass, copper, earthenware, hot water bags, etc. No solder, cement or rivet. Anyone can use them: fit any surface, two million in use. Send for sample pkg., Inc. COMPLETE PACKAGE AS-SORTED SIZES, 25c. POSTPAID. Agents wanted, Collette Mfg Co., Dept. K, Collingwood, Ont.

Please Mention Farmer's Advocate.

The Farmer's Advocate

and Home Magazine

"Persevere and Succeed."

Established
1866.

Vol. XLIV.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1975.
LONDON, ONTARIO, DECEMBER 23, 1909

No. 900

EDITORIAL.

Don't miss the series of articles on breeds of live stock now running through our columns. To many it alone will be worth the yearly subscription price of the paper.

From Nova Scotia, Amherst echoes Guelph's experience: More room provided for the Winter Fair, but still more needed. What lusty youngsters these two young institutions do be! The Winter Fair idea has a great future before it.

The United States is trying to check the movement of her farmers to Canada's fertile, undeveloped lands, but Canadian opportunity is a magnet that will continue to draw, automatically sitting the immigrants, attracting only the hardest and best.

It is a trite saying that the possibilities of an acre are yet unknown. How to make them better known, or measurably realized, is the object of the smaller-farms essay competition. We are seeking knowledge from the men who know—those who have done things. What can you contribute?

Three Provincial Fruit-growers' conventions, two Winter Fairs, and sundry other events, made claim upon our space and reportorial resources last week. Many of the reports necessarily came to hand at the last minute, involving much planning, excision and condensation to even make note of all. And yet there are those who think editing must be a snap! The majority of people little realize, when reading a regular, not to mention a special issue, how much thought, labor and expenditure it represents.

Straws indicate how the wind blows. The Ontario Winter Fair is one of those worthy institutions which draw chiefly the better class of farmers. At the one just held, a subscription solicitor, working in the interests of "The Farmer's Advocate," kept track for a few hours one forenoon of the proportion of people met who were already getting the paper. Out of 174 men approached, 168 stated that they were already receiving it, and of the remaining six, five were induced to subscribe. What a magnificent uplift would be given to Canadian agriculture if every farmer were a regular and careful reader of "The Farmer's Advocate"!

Speaking at Guelph, Dr. Rutherford again reminded his hearers that breeders of pure-bred stock, the class of men who ought to be most interested in the fight against bovine tuberculosis, were the ones from whom most troublesome opposition was encountered. This is deplorable. While much faddism and extremeness has been given play in connection with tuberculosis and the tuberculin test, still tuberculin is the best means of diagnosis we have, and should be resorted to, in conjunction with healthful conditions and wise breeding, with a view to eradicating the dread disease from our herds and keeping it out. Every stockman can and should do this voluntarily in his own interest, apart, altogether, from anything the law may compel. It is not good business to breed tuberculosis, and neither patriotic nor honorable to knowingly or carelessly disseminate it throughout the country by purebred breeding stock.

Administration of Drainage Laws.

Recent correspondence received by "The Farmer's Advocate" has voiced very prevalent dissatisfaction with the administration of the drainage laws in the Province of Ontario, both the Ditches and Watercourses and the Municipal Drainage Acts. If the laws themselves are imperfect, it is not for want of repeated consideration and amendment, because no session of the Provincial Legislature passes without a grist of bills to amend these statutes. The principal trouble seems to be with the unsatisfactory character of the awards made by so many of the engineers when called in under one or the other of these Acts, particularly the former.

The difficulty lies in the fact that extremely few engineers are experts on drainage. The School of Science, Toronto; the School of Mines, Kingston; the Royal Military College, Kingston, and the Department of Engineering at McGill University, have courses in engineering, but not one of these, we believe, give any instruction on the subject of drainage, although graduates of these institutions are the very men called upon to administer the drainage laws of Ontario, making surveys and awards involving interests amounting to thousands of dollars. It is no particular discredit to these colleges that they do not give a course in drainage, because, while the drainage-award business looms large from the agricultural point of view, it is insignificant from the engineering side; hence there has been practically no demand for the subject in the engineering course. When it is borne in mind that drainage is an intricate science, on which a trained man might specialize for many years without fear of exhausting the subject, there is small room for wonder at the unsatisfactory nature of the awards made by so many engineers, who, for instance, have often been known to direct the excavation of inconvenient, unsightly and expensive open ditches where covered drains would be far better.

What, then, is to be done about it? The Department of Physics at the Ontario Agricultural College has for the past five years been making and mapping out free drainage surveys for farmers in all parts of the Province. The work has given great satisfaction, and has grown enormously. The experience thus gained, together with the study of drainage problems and laws, has made Wm. H. Day, Professor in charge of this Department, probably the best land-drainage expert in Canada. Why should his knowledge and the staff and resources of his Department not be utilized in settling disputes and problems under the Ditches and Watercourses Act, as well as the Municipal Drainage Act? Such a plan would insure competent and uniform administration all over the Province. Then, again, the making of awards and allotments of costs is sometimes a very delicate matter for a local engineer, resident in the locality, whereas the impartiality of an outsider would be less likely to be questioned.

Even as the law now stands, the Department of Physics could, if necessary, act as official referee of all drains constructed under the Ditches and Watercourses Act, because the employment of a licensed engineer or land surveyor is not obligatory, anyone "capable of doing the work" being a qualified engineer under that Act. Under the Municipal Drainage Act, however, the law, as it now stands, requires the employment of an engineer or land-surveyor, so that if the work outlined above were ever put in charge of Prof. Day's staff, one of two things would have to be done. Either the Act would need to be amended, or a qualified engineer or land-surveyor attached to the Department of Physics. There would be many difficulties to

work out, but it does seem that, before the drainage laws of Ontario are properly administered, some such central supervision and expert administration must be secured.

O. A. C. Drainage Surveyors.

While on the subject of drainage, it may be well to explain the status and qualifications of the men sent out by the Department of Physics, at Guelph, to do drainage-survey work. There is a more or less current impression that these men are engineers, and on a few occasions, when some of them have corrected the people they were with, there has been a perceptible loss of prestige. It is often so: the man possessing a handle to his name very frequently gets taken for more than he is worth, while the plain, unassuming "Mr." is set down as a common sort of fellow, whose opinion need not command any especial respect.

Fact of the matter is that, while the drainage surveyors are not qualified engineers, they are far more competent for the particular work in which they are engaged than most of the engineers would be, for the latter, as explained in the foregoing article, are not trained in drainage, except in an incidental way. On the other hand, the O. A. C. students get two courses in drainage, one in their second year, and one in their fourth. The men who go out as drainage advisors are chosen almost exclusively from the outgoing second-year class. Before being put in the field, however, they are given another course, even superior to that given in the fourth year. They are required to go out and make surveys on their own responsibility, under supervision of the Physics Department, and subject to its checking before being asked to make surveys for the public. Thus, it will be seen that the College men have both the theory and practice of draining well in hand before they are sent out, while, of course, they accumulate further experience with practice. It is not surprising, therefore, that their services have proven so valuable, and have been in such increasing request.

Sensible Care of Stock.

A coddled beast is about as much to be desired as a mollicoddle man. A certain amount of rigor habitually endured toughens both moral and physical fibre, developing that hardness or resisting power which guarantees ability to withstand adverses. Continual protection from severe temperatures enervates the system, lowering its resisting power and preparing the way for mounds of debility and disease, if not in the first generation, then in the second, third or fourth.

Prof. H. H. Dean talked some sound sense in his lecture at the Winter Fair, Guelph, when advising against too close housing of dairy cattle. Fresh air, sunlight and outdoor exercise are three boons which every animal should enjoy. Continuous confinement from autumn to spring is unwise. Cattle are the better for exercise, and should have it almost every day. In this connection he asserted a belief that it is a mistake to have water in the stable constantly before the stock. Better turn them out twice a day to drink cold (though preferably not ice-cold) water in a sheltered spot. One function of water, he explained, is to relieve a feverish condition of the system produced by high-feeding and activity of the vital organs. Cool water, he argued, is better to relieve this condition than warm water; besides which, on being turned out, stock have a chance for regular exercise.

While not certain that Prof. Dean is right in his surmise that cold water is more palatable to the cow than water approaching a tepid temperature, we do think it is better policy to water out-

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

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doors, in a bright, comfortable, wind-protected shed, than to water indoors, for various reasons, among which are the exercise afforded, the greater purity of the water, and the fact that cows accustomed to cold water are less liable to be injuriously affected by drinking it on those severe days or nights when even stable-basin water is chilled to freezing point. More important than these, however, is the fact that having water in the stable, unless provision is made for shutting it off when desired, is a constant temptation to keep the stable too warm, which means that the air is close and stinky. A freely ventilated stable, even though the temperature run down towards zero at times, is more comfortable and far more healthful for the stock than a high temperature accompanied by a foul atmosphere. With such stable conditions, cattle turned outdoors will not feel like a Southerner in a Northern winter; indeed, any except suck or freshly calved cows will enjoy a brief run outdoors, especially if some incentive to exercise is supplied, such as a feed of hay in a rack, a straw stack to rub around, or something else that will serve the same purpose.

The great point we would seek to enforce is that a moderate degree of rigor habitually endured is the best safeguard against those extremes of temperature and conditions which the most carefully protected artificial conditions cannot wholly obviate. The man who huddles all winter in a warm house, waited on attentively, with his food served in furs, has had warmed with a water bottle, and all the rest of it, is not in the best condition for a winter season on a cold day. In fact, he is so well protected under that a slight draft of wind or a drop of snow by spine, cattle are perhaps more readily excited than men, and even the most sensitive horse could be kept by a horseman who is a good rider, that is, a man who is not afraid of a horse.

Let me say to you, however, that a horse is a creature of habit, and that a horse who is used to a warm house, and who is used to a warm house, will not be able to stand a cold day, and a horse who is used to a warm house, and who is used to a warm house, will not be able to stand a cold day.

regimen makes for profit, vigor and thrift. Codding may seem to pay for a week, a month, or a year, but it seldom produces as gratifying results the second winter as the first, while in the long run it tends to delicacy, constitutional degeneracy and disease.

Dry Farming.

The possibility of working the land in such a way that moisture is conserved, so that in the semi-arid regions of the American West, and of Southern Alberta, goodly crops can be grown, has ceased to be merely the dream of enthusiasts, but has been demonstrated again and again. The Dry-farming Congress of America, held at Billings, Montana, October 26th to 28th, was a gathering of experts and officials interested in thus making the desert to blossom as the rose, for mutual encouragement and instruction, and for the dissemination of the knowledge on the subject already attained.

No less a person than James J. Hill was present at the Congress, and delivered an address. He was much more optimistic than on former occasions, predicting that the introduction of the dry-farming system into the country lying between the Rockies and the coast range of mountains, as well as that width of arid country east of the Rockies, and not accessible to irrigation, would soon develop it into one of the most productive wheat-growing areas south of the Canadian prairies.

The main tillage operations employed in dry-farming, so as to conserve soil moisture, are: First, fall-plowing of land intended for crop the next year; second, firming the lower soil immediately after plowing with the sub-surface packer; and third, pulverizing the surface, and keeping it fine and loose. In other words, having a dust mulch. This is good practice anywhere.

In a paper read by George Harcourt, B. S. A., Deputy Minister of Agriculture for Alberta, he stated that he had heard Alberta farmers say that farming was no longer an uncertainty in the extreme south of the Province, provided proper attention was paid to securing a store of moisture in the soil. This passing from an uncertainty to a certainty means that, with its pleasant climate, Southern Alberta will be a land of homes, instead of a stopping place for settlers to make a little money, and then move on. Under an indifferent application of dry-farming principles, Alberta farmers have had no trouble, so it is alleged, in obtaining forty and fifty bushels of wheat per acre, in favorable seasons, and even over sixty bushels have been obtained.

HORSES.

Eighty-five years ago it was reckoned that there were between 10,000 and 12,000 ponies in the Shetland Isles. At home they were principally used for carrying peat, but the export trade, even then great, was the principal source of remuneration. During the first twenty years of the nineteenth century, says the English Live-stock Journal, stallions were imported from Norway by various owners who sought to improve the breed, but as the ponies ran half wild on the hills, improvement could only be carried out by those who could isolate mares. Mr. Moutat, of Garth, had a good Norwegian stallion and several pretty breeding mares in the Island of Unst in 1808, but his stock suffered from the lack of fences on the island, the foals suckling when the dam was about to give birth to another foal.

Training Colts.

SECOND-PRIZE ARTICLE IN THE COLT TRAINING ESSAY COMPETITION.

In order that the colt may be a valuable horse after it is trained, it is of the utmost importance that the sire and dam should have good conformation, gentle disposition, with true action. The sire should be pure-bred, always. If a harness horse is desired, the sire, at least, should be a naturally high actor; if a saddle horse is expected, either the sire or dam should be a Thoroughbred.

There are three things absolutely necessary to be a successful horseman: Gentleness, patience, and firmness, particularly the first. A few colts require very firm treatment, but my experience has been the pupil is as anxious to learn as the teacher is to teach. When the foal is a few days old, I would put on a leather halter (a foal's halter) in all probability it must be held the first time this is done. If the trainer can remember the first day he was at school (if his feelings were like mine), he was afraid, and an unkind word or action from his teacher made him very nervous. Just so with the foal; so be gentle. After the halter is on (no shank on it now), hold it with one hand, then pet and stroke the frightened little creature with the other, all of this to be done in the box stall, beside its mother. Leave the halter on for several days, and every time it is convenient take hold of the halter, pet and lead around beside the dam.

If the trainer is a horseman (some men will be), the little foal will now come to be petted every time his teacher enters the stall. Foals love to be stroked under the jaw, and usually hold out their heads to be rubbed there.

It should now be tied. First to the dam to the manger, then tie the foal alongside of its mother. Be sure the halter and shank are strong enough that they cannot be broken. Remain beside the foal until it has tried to break loose, for I never saw one that did not try with all its



In Winter Garb.

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strength. After pulling back for some time, it will more than likely fall or throw itself down, so there should be abundance of bedding. Unless it gets a foot over the halter shank, or gets tangled up somehow, do not touch it or speak to it; it may sulk, and remain down for an hour. Then it gets up, and isis nothing has hurt it. A most important lesson has been learned. I would not leave a foal long tied at a time, unless I could be near, for, like babies, they have not much patience. With halter and shank, lead it about in the box stall quite frequently. It should now be led out of doors. I would lead the mare with one hand, and the foal with the other. With some perseverance and considerable patience, it will soon lead anywhere beside its mother; then lead it alone.

Remember, and never forget, the moment a colt rears, slacken the rope, loosen his head; then there is little danger of his throwing himself. Many a colt has been injured for life by rearing and going over backwards. Occasionally lead, tie, brush all over, and lift its feet, till three past, or three and a half years old.

In the meantime, if it be possible, during the grazing season, pasture in a field close to railroad, or alongside a road where there are electric cars and automobiles. Those are fearsome things to a young horse the first time he sees them, so, if accustomed to them more or less from birth, he will take little or no notice later on, when ridden or driven on the roads, where they are often met.

The colt is now three and a half years old, has been well fed, so it is old enough and strong enough to be further educated. I like my colt to be in a large box stall, with a high ceiling, plenty of room to walk about, as considerable of the educating is done in the stable. Put on an open bridle, with large bit, and no reins. I like the bit rather thick; they play more with it, and it makes a better mouth. The bridle may be left on several hours at a time; also, a wide surcingle (or girth), with crupper—a crupper there must be to keep the surcingle far enough back. The surcingle should have three "D's" or buckles on the front of it, and one at the back, for the crupper; the front one in the center, for check-rein, and one on each side, about twelve inches down, for side lines. Till this time, no reins or check have been attached to the bit. The bridle should have loops, same as driving bridle, for side-checks, because a side-check is to be used. Put on the side-check, passing through the loops, and fasten to center buckle on surcingle, the head not pulled any higher than if no check were on. Also put a rein on each side, cross those on top of withers, and fasten into lower buckles on surcingle, by crossing on top, they remain better in place. This is the first time the colt's head has not been free, so do not take away much, if any, of the freedom the first day. An hour is long enough to leave the tackle on the first time, but it should be put on at least once a day; better twice. After the colt gets accustomed to the check and side lines, gradually shorten them (very little at a time) till the head and neck are in the desired position. On no account leave the head and neck long in this cramped position, because the pain would soon become intense.

The colt should be led out of doors with the tackle on and exercised. It is a common practice, when exercising the colt at this stage of his education, to attach a long rope to the bridle and make the pupil walk or trot round in a circle. I believe many a colt, from that method of exercising, has got into the habit of throwing out one or both front feet. How can a colt have straight action, going in a circle with bent neck?

So far, this method of training is suitable for any colt of any breed. Of course, draft colts might be trained at two and a half years old. From now on I will only refer to carriage and saddle horses. It has always been my method to ride the colt before teaching him to go in harness. I put the riding saddle on in place of the surcingle. My saddle has "D's" same as surcingle, so buckle the check and side rein to saddle, having an extra pair of reins for my hands to guide the colt. No bit to be used, except a plain snaffle. The easier the bit, the better the mouth.

Leave saddle on some time in box stall, till the colt gets accustomed to it, and finds out it will not hurt him. I then lengthen the rear side strap, putting my foot in it, and bearing some weight, all this being done gradually, petting and talking to the colt as a horseman knows how. In a few minutes I can usually be sitting on the colt's back, and the colt does not appear to think anything very unusual has taken place. Do this several times a day for several days, in the box stall, then lead him out of doors, and do some thing there. After I get on his back, out of doors, do not in a hurry to start him walking slowly, faster afterwards, and let him walk, walk, to trot, and I permit him to stop, and to throw in his feet. If the colt is inclined to throw in his feet, I run on a stick, or a pole, and fasten it to a nose band, and let him walk to it, then I stand there, and let him stop, and to throw in his feet. The colt is now old enough to be de-

several miles, but only taught to walk until he can do that well; he should walk smartly. Gradually loosen the side lines, depending on the reins in the hands to make his mouth. There should be a give-and-take movement with the hands, gently tightening and loosening the reins. This teaches the colt to yield to the bit. After the colt can walk well, I urge him to trot, then part trotting and part walking, care being taken not to make him tired, which might cause him to brush (interfere) behind. If the colt should have the least inclination to brush, I would put on boots (it is a safe thing to put them on as a preventive). I have found no boot so good as thick horse blanketing, doubled over a strap all



Broken to Drive.

the way round the fetlock. Seeing it is all the way round, it must always be in place, and does not require to be any tighter that to keep it above the fetlock.

If the colt is not suitable for a saddle horse, would not ride him much more. There is considerable demand for combination horses; that is, a ride and drive horse. If the colt being trained is a combination horse, this much riding is necessary in his education; but unless he is to be used as a saddler only, would never teach him to canter; harness horses should not know there is such a gait as cantering. If the colt promises to be a saddle horse, he must be taught to canter (that easy-looking, slow gallop). The colt must be taught to canter very slowly; the slower,



A Well-trained Saddler.

the better, and he should be taught to lead with either foot, at the will of the rider. If I wish him to lead with the off leg (right), I pull his head round to the rear (left) shoulder, then touch him smartly with whip or heel on right side. This will almost compel him to start with right foot first, and vice versa. If the colt has not been shod, it should be done before he is driven much on hard roads. Shoe with plates, so the frog will be on ground, where it is intended to be. I prefer to shod a colt in double harness first, with a good shod horse. A strong, fairly

high two-wheeled cart is the best rig to drive a colt in to begin with. I put on a strong kicking strap, but it is rarely required. I like to drive the colt a little every day, and am careful never to drive quite as fast as the pupil could trot; driving a little too fast is very likely to start hitching (or hopping) behind, and that is hard to stop.

When the colt is quite gentle in harness, then encourage him by speaking or whip, if necessary, to do his best, to make as good a show as possible; but only do this once a day, and a very short time then. Feed well, so colt will keep strong, and have plenty of life or courage.

To make the colt a finished product, either for saddle or harness, requires experience and time. It is nearly, if not quite, a science, but you must be gentle, patient, and firm. W. F. KYDD, Norfolk Co., Ont.

LIVE STOCK.

Details of the Maritime Winter Fair.

Supplementing last week's abbreviated report of the Maritime Winter Fair, at Amherst, N. S., we give below the complete review of the general classes submitted by our representative at the Fair.

CATTLE.

In the beef classes, Shorthorns had a class for themselves, with 44 entries. In the section for females, C. A. Archibald, Truro, N. S., won all the firsts, special for best female any age, and sweepstakes for best animal any age. In steer sections, Edwin Forrest, Amherst Point, N. S.; Hazen Etter, Westmoreland Point, N. B.; Harold Etter, of the same place; and Cecil T. Coates, Nappan, N. S., were the winners of first honors. The class was considered a better average than in bygone years. Several young men are working well to the front, which is a pleasing feature of the Shorthorn show.

Herefords, Aberdeen Angus, Galloways and Devons were massed into one class, but only White-faces put in an appearance, and W. W. Black, of Amherst, N. S., had the class all to himself. Yet, most creditable were his entries, and superior would be the herd which would wrest the honors from him.

Grades of any breed were the next in order, and a mixed lot were sent into the ring at each call. A few were fairly good, but the large majority would look better in a back field, a mile or two away from a fair. W. W. Black; Hazen Etter; C. W. Pugsley, Barronsfield, N. S.; Albert Anderson and Lawrie M. Anderson, both of Sackville, N. B., with Amos Fowler, Amherst Point, N. S., won the firsts and seconds.

W. W. Black won the special for best steer any age, and Amos Fowler for best female any age; and the latter, with his excellent heifer, won the championship in class, a silver cup, donated by Hon. Wm. Pugsley, Minister of Public Works.

Consolation prizes, of which there were several good ones offered to animals failing to win money in the regular classes, brought into the ring "critters" of which the less said, the better.

The grand championship of the show was won by W. W. Black's thick-fleshed, low-set and most typical Hereford steer. But he had a very worthy competitor for the laurels in Amos Fowler's champion grade heifer, which was a well-meat and smooth, even-fleshed individual.

DAIRY CATTLE.

About eighty, in all, were entered, and five breeds—Shorthorns, Holsteins, Ayrshires, Guernseys and Jerseys—and grades, made up the show.

Only one Shorthorn was entered. Ayrshires made a capital section, with McIntyre Bros., Sussex, N. B., and C. A. Archibald, Truro, N. S., the leading winners.

Holsteins were out in full force, with Logan Bros., A. E. Dickie, R. L. Hicks and S. Dickie the contestants, who divided honors. The class was uniformly good.

Guernseys were few in numbers, and Roper Bros., Charlottetown, P. E. I., with one exception, made up the fair class.

Jerseys had J. E. Baker & Son, H. S. Pipes & Son, and J. R. Semple, all of Nova Scotia, to champion the breed. Each had a share of the winnings.

Grades made a strong class of good useful-looking individuals. W. W. Black won one first and one special first, while F. S. Black got two firsts in class and a special first; with Amos Fowler winning one special first. Logan Bros., Amherst Point, N. S., won the silver-cup championship.

WINNINGS IN DAIRY CATTLE.

Section 1, Shorthorn cow, 4 years and over.—1, Geo. M. Holmes, Amherst, N. S.

Ayrshires.—Sec. 1, cow, 4 years old and upwards.—1 and 2, McIntyre Bros., Sussex, N. B.; 3, F. S. Black, Amherst, N. S., and McIntyre Bros. Sec. 2, cow 3 years old—1, C. A. Archibald, Truro, N. S.; 2, 3 and 4, McIntyre Bros. Sec. 3, heifer, 2 years old—1, Fred S. Black; 2, 3 and 4, McIntyre Bros.

Holsteins.—Sec. 1, Holstein cow, 4 years old and upwards.—1 and 4, Logan Bros., Amherst Point, N. S.; 2, R. L. Hicks, Dalhousie Junction, N. B.; 3, Samuel Dickie, Central Onslow, N. S.; 5, Arthur E. Dickie, Central Onslow, N. S. Sec. 2, cow, 3 years old.—1, Arthur E. Dickie; 2, Logan Bros.; 3, Samuel Dickie. Sec. 3, heifer, 2 years old.—1, A. E. Dickie; 2, S. Dickie; 3 and 4, Logan Bros.

Guernseys.—Sec. 1, Guernsey cow, 4 years and upwards.—1, 3 and 4, Roper Bros., Charlottetown, P. E. I.; 2, Arthur W. Roper, East Royalty, P. E. I.

Jerseys.—Cow, 4 years old and upwards.—1 and 2, J. E. Baker & Son, Barronsfield, N. S.; 3, 4 and 5, H. S. Pipes & Sons, Amherst, N. S. Cow, 3 years old—1, 2 and 3, H. S. Pipes & Sons. Heifer, 2 years old—1, J. R. Semple, Brule, N. S.; 2, J. E. Baker & Sons; 3, H. S. Pipes & Sons.

Class 19, Grades.—Cow, 4 years old and upwards—1, W. W. Black, Amherst, N. S.; 2, J. R. Semple; 3, W. N. Boomer, Amherst Point, N. S.; 4, T. W. Keilor, Amherst Point, N. S.; 5, Roper Bros.; 6, A. W. Roper. Cow, 3 years old—1, F. S. Black; 2, McIntyre Bros.; 3, J. R. Semple. Heifer, 2 years old—1, F. S. Black; 2, J. R. Semple; 3, L. M. Anderson, Sackville, N. B.; 4, T. W. Keilor; 5, T. W. Keilor; 6, Roper Bros.

Grade Specials.—Cow, 4 years old and upwards—1, W. W. Black; 2, J. R. Semple. Cow, 3 years old—1, F. S. Black; 2, McIntyre Bros. Heifer, 2 years old—1, Amos Fowler; 2, J. R. Semple.

Special donated by T. Eaton & Co., Ltd., Toronto, for best herd of milk cows, to include one aged cow, one three-year-old cow, and one two-year-old heifer.—1, Arthur Dickie, Central Onslow; 2, Arthur W. Roper, East Royalty.

Grand Championship.—Silver cup, for the highest-scoring cow in the dairy test, of any breed or grade—Logan Bros., Amherst Point.

SHEEP.

Sheep were out in large numbers, with few standard specimens, many excellent individuals, and, all told, the average was on a high level. Leicesters were shown by Albert Boswall and C. Lane, of Pownal, P. E. I., the former win-

ning the most of the money with good and well-fitted sheep and lambs.

H. B. Parlee, Sussex, N. B., was the only exhibitor of Cotswolds. They were of good type and form.

Cheviots, also, had but one supporter, in Chas. Symes, of Minudie, N. S., whose flock was fair in its different sections.

Southdowns had three breeders to maintain their reputation: Jas. E. Baker & Son, Barronsfield, N. S.; Caphas Nunn, Winslow Road, P. E. I., and Oliver C. Saunders, Trilby, P. E. I., who divided the honors.

Shropshires, as usual, were the leaders in numbers and excellence. Logan Bros. led in the winnings, and won for best flock of short-wooled sheep, and the grand championship silver cup. Jas. I. Stewart, Amherst Point, N. S.; George Boswall, French Port, P. E. I., and Cephas Nunn, P. E. I., were each successful in winning a share of the many offerings.

Oxfords were exhibited by Jas. E. Baker & Son, Barronsfield, N. S.; Burder Goodwin, Baie Verte, N. B., and A. H. Boswall, Jr., Marchfield, P. E. I. Baker & Son won the majority of the honors. Had there been a championship, a very fine ewe in their exhibit would have won.

Hampshires, brought out by Cephas Nunn, were fair, in comparison with the other breeds.

Suffolks were in the hands of Albert Boswall, Jr., P. E. I. There is room for improvement in the flock.

Grades and crosses were out in full force, and an excellent class throughout. Jas. I. Stewart led in the winnings.

The sheep section of the Fair was very creditable to the Maritime Provinces. The exhibition of two-year-old ewes and over, was discussed with exhibitors, and generally disapproved of. They are out of place at a fat-stock show. Better by far to discard them; and the shearing ewes should also be, in the near future, left out of the offerings. John Campbell, Woodville, Ont., placed the ribbons.

SWINE.

The swine classes were for Yorkshires, Berkshires, Tamworths, other pure breeds, and grades and crosses. There were fewer entries, but better and more uniform quality, compared with last year. Nova Scotia breeders were outclassed by those from P. E. I.

In Yorkshires, Alex. MacBeath and Roper Bros., both from the Island, won out.

In the Berkshire class, Peter Brodie, P. E. I., won chief honors.

Tamworths, shown by Roper Bros. and Wm. J. Gibson, P. E. I., were of excellent quality.

In grades and crosses, Fowler, Forrest, Brodie and Roper Bros. brought out some extra good ones, and divided the money.

Grand championship was awarded to Peter Brodie, Little York, P. E. I., which is his second victory for the silver cup, to be won three times in order to become a permanent holding. Roper Bros. won the cup in 1908 with a pen of Yorkshires. C. M. McRae, of Ottawa, made the awards.

POULTRY EXHIBIT.

As usual, the poultry show in connection with the Maritime Winter Fair was a decided success. About 1,000 birds were in coops, and better qual-

ity has never been shown here. The recent additions and improvements to the building allowed more room and better light. A number of new coops have also been added, doing away with any crowding. The show is divided into open and utility. Mr. Smith, of Waltham, Mass., placed the awards in the open class, and F. C. Elford, of Macdonald College, in the utility, as also in the dressed. In the open class, the keenest competition was in Barred Rocks and White Wyandottes, both very large classes. The utility classes were very strong, particularly in White Wyandottes, Bull Orpingtons and Barred Rocks. Nowhere are better birds of the utility type shown than here. The dressed poultry was of good quality, having some exceptionally good birds. All the exhibit was purchased by Henry Gatehouse, Montreal.

The Ladies' Judging Contest, which is the placing of three birds each of chickens, ducks, geese and turkeys, was very interesting, over fifty ladies taking part. The silver tea service, given to members of the Ladies' Aid, was won by Mrs. Alex. Christie. Among the non-members, Miss Atkinson took first, Mrs. Shipley second, and Mrs. Atkinson third place.

DRESSED CARCASSES.

As was anticipated by several, the champion grade heifer furnished the first-prize carcass. There was a large percentage of lean to fat, beautifully marbled. It was ideal in firmness and quality. The grand champion steer's carcass, placed second, was too fat, and so soft as not to stand firm after cutting. It was wasty, because of overplus of fat, while the winner had little or no waste.

Southdown in shearlings, and Shropshire in lambs, were the winners. Baker & Son owned the former, and Jas. I. Stewart the latter. The lamb's carcass was exceptionally fine. It would be difficult to imagine how a better could be found. Duncan Anderson and John Campbell were the judges.

In swine, Yorkshires won. They were third on foot. Some eighty were hung up in different competitions. The winning pair in open class were uniform, with good quality, and heavier than Guelph winners have been in past years. As a whole, the class would not compare well with Ontario's show of bacon-hog carcasses. C. M. McRae awarded the prizes.

The people of the Eastern Provinces are very loyal to their Winter Fair. They also are very mindful of the far-from-home strangers who spent some days among them. There is an ever-increasing interest in the way of improvement of live stock, and to the writer it is quite evident that the future possible welfare of the Maritime Provinces depends largely on how decided a stand will be taken regarding the use of good sires, and a more liberal supply of succulent winter feed.

Accepting a cordial invitation of R. Robertson's to visit the Dominion Maritime Branch Experimental Farm at Nappan, N. S., one of the most interesting lots of cattle seen in years were looked over in the stables. Sixty-six two and three-year-old feeding steers, in rows of eight, and two box stalls, with their eights, of wonderful uniformity and general good quality, was an object-lesson not to be soon forgotten. Were six culled out, the writer cannot recall ever seeing so many real good, smooth, promising feeding cattle in any one stable in Canada. We could not but wish it was possible to have the young farmers of the seaside Provinces inspect the cattle now, and again in April, in order to learn how to distinguish between the good cattle and the inferior, which latter are, unfortunately, far too numerous for profit or pleasure. Such examinations of high-class feeders would be a revelation to many. Even though part were freighted all the way from Toronto, and the others very carefully selected in those Eastern sections, with prices paid in keeping with their class, still there is every prospect of the investment yielding most profitable returns. Ten thousand bushels of the finest possible swede turnips, a supply of silage and hay for roughage, with the necessary meal, will undoubtedly make a combination which will so finish the choice lot of bullocks as to command the top prices in the market. It requires knowledge, tact and determination, with the best of management, to secure and bring together such promising factors, which, in coming results, surely means success. 'Tis another proof of the possibilities of Eastern Canada.

Valuable Reward for Pleasant Work

Your Austrian china tea set was received in excellent condition, and I assure you I am more than pleased with them; in fact, I cannot see how you can give such an excellent premium for so few subscribers. My friends tell me that the premium itself is worth the price of the subscriptions. It is pleasant work canvassing for "The Farmer's Advocate," as everyone appreciates a good thing when he sees it. We have taken your journal for several years, and find it an invaluable paper for information. The Home Magazine in an excellent department for instructions. Wish you the very best compliments for the season, and thanking you for the premium.

Best regards, GRACE HALL.



First-prize senior yearling heifer, bred by Logan Bros., Amherst, N. S., and shown at Chicago, 1909.

There nearly the way profitable until Their cattle of fattening a similar Systemati by the M Tally, of Tully, of plenty of In 1815, pounds; a weighed 2 first meet first prize bred by M breeder's bull. Lord the Hayw high sale W. W. Wy for a he calves, £ little over 'Tomkins' of breeding Herefor and stron hair and Hereford the detrin that any strong ch flesh they that com well-fed J lean and by any not equal are great when othe this latte weeks ere raised on Chicago f live weigh so necessa foddere No breed food cons not belie cows of profitable of Herefo the time by the pr the great have won to turn i so in Car fairs, and almost e creasing ent. Here beef breed recent the Herd other one was awar which sol ada, dur slight inc shown by ing 1907, 791; an recorded. Hereford ing is int ber of He over 1,000 nd's suu ing the l prize mon live stock been won Chicago awards w ing mo ever S or fo tment, tated. ds are on Her for et the brood

Hereford Cattle.

By H. Dallas Smith.

There are records of Herefords dating back nearly three hundred years, but little was done in the way of systematic breeding of these useful and profitable cattle, so noted for their grazing qualities, until early last century.

Their origin was from a selection of aboriginal cattle of England and Wales, noted for their easy fattening qualities, mixed with some selections of a similar type of cattle imported from Holland. Systematic breeding and improvement was begun by the Messrs. Tomkins, Galliers, of Wynton; Tally, of Huntingdon; Skyrine, of Stretton; J. Tully, of Haywood. That early Herefords had plenty of size, may be judged by the following: In 1815, the bull, Wellington, weighed 2,915 pounds; the cow, Silk, in 1820, weighed 2,200 pounds; and a noted three-year-old steer, Handet, weighed 2,800 pounds, girth 10 ft. 6 in. At the first meeting of the Smithfield Club, in 1799, the first prize for bull was awarded to a Hereford bred by Mr. Tully. It was from this well-known breeder's herd that came the sire of the noted bull, Lord Wilton, used in Mr. Tudge's herd. From the Haywood strain we get records of the first high sale prices for Herefords, in 1808, when Sir W. W. Wynn paid £225 for a cow and calf; also, for a heifer and calf, £122, and for three bull calves, £169. The average at the sale was a little over £65 for cows. Again, in 1819, Benj. Tomkins' herd was sold at auction, and 29 head of breeding animals made an average of £149.

Herefords are remarkable for their uniformity and strong outward characteristics. Red, curly hair and white faces mark their trail wherever Hereford blood has been introduced, this often to the detriment of the breed, as many people think that anything with a white face is a Hereford. A strong characteristic of Herefords is the wealth of flesh they produce on those portions of a carcass that command the highest market prices. On a well-fed Hereford carcass, the fine mixing of the lean and fat is especially noted, and not surpassed by any other breed. As grazers, Herefords are not equalled by any other breed of cattle. They are great "rustlers," and will fatten on grass when other cattle will not. As an example of this latter claim for Herefords, only a couple of weeks ere this was penned, a straight-grass steer, raised on a South Dakota range, was sold in Chicago for \$153, bringing \$7.50 for 100 pounds live weight. They have that strong constitution so necessary in kindly feeders to turn over ranch fodders and coarse grains into the most profit. No breed of cattle will give as good returns for food consumed as the Herefords; and if you do not believe it, try it. From the large-framed cows of Ontario, no better quality, nor more profitable feeders, can be produced than by the use of Hereford bulls of the right type. And that the time is opportune to try this, may be judged by the prospective outlook for choice beef. With the great feeders of the Western States, Herefords have won their merited popularity by their ability to turn feed products into cash profits. Why not so in Canada? Attend any of the chief Western fairs, and you will now see Herefords in numbers almost equal to the Shorthorns; and if the increasing rate of popularity continues as at present, Herefords will soon outnumber any of the beef breeds at American shows. In fact, at the recent "American Royal Show," at Kansas City, the Hereford exhibit outnumbered that of any other breed. The championship for earload lot was awarded to Hereford two-year-old steers, which sold for \$10.25 per 100 pounds. In Canada, during the past few years, there has been a slight increase in the breeding of Herefords, as shown by the Canadian Hereford Records. During 1907, 683 Herefords were recorded; in 1908, 791; and this year, to October, 808 have been recorded. In order to appreciate the growth of Hereford breeding in the United States, the following is interesting: In the last 25 years the number of Hereford breeders has increased from 80 to over 4,000 to-day. In the showing, the Hereford's success stands out prominently, too. During the last five years, 75 per cent. of all the prize money offered at the principal American live-stock exhibitions for "feeder cattle" has been won by Herefords. In the ear lots, at the Chicago International, 1908, forty-seven ear lot awards were made, 27 of them going to Herefords, more than won by all other breeds. At the Denver Show, January, 1909, 51 per cent. of the prize money for feeder class were Herefords, and this 51 per cent. won 83 per cent. of all the premiums offered. With such records, no wonder that Herefords are popular in the United States, and Canadian Hereford breeders should derive much confidence for the future of their chosen breed. A little of the "Yankee push" would no doubt boost the breed in Canada. Do it now.

Controlling Animal Diseases.

A series of brilliant speeches were delivered at the jubilation meeting, as it might be called, which was held in the Guelph City Hall on the Wednesday evening of the Winter Fair. It is not our purpose, at this time, to speak of the hearty welcome extended to the visitors by the Guelph city officials, nor of the suitable response made by Lt.-Col. McEwen, the President of the Winter Fair, nor even of the throngs that filled every nook and corner of the hall, and the music to which they were treated, though all of these were well worthy of notice. But some things said by

attempts had been made to control the disease through legislative Acts, but experience so far has been that, where legislation has been drastic, it has aroused such opposition as to force a receding from the position taken, generally ending in a total disregard of all precautions. For himself, he had not been saying much, nor doing much, but had been closely watching the effect of measures taken in other countries. He was now in a position to take the public into his confidence. An International Commission, composed of seven Americans and five Canadians, has been established to consider ways and means for securing the control and eradication of

bovine tuberculosis in Canada and the United States. This commission was appointed at the annual meeting of the American Veterinary Association, in Chicago, in September. The first meeting of this body was to be held in Buffalo, beginning December 13th.

Dr. Rutherford assured his hearers that any action taken in Canada would be sound, conservative and progressive. There was no thought of going violently against the wishes of stockmen on this question. Nothing would be done without first consulting them, and extreme or objectionable measures would not be taken; but a grave condition of things faced

them, and there must be no unnecessary delay.



Hereford Bull: Noted English Prizewinner.

Dr. J. G. Rutherford, Dominion Veterinary Director-General and Live-stock Commissioner, in the business end of his speech, are of special and practical interest. After referring to the removal, lately, of the U. S. embargo on Canadian sheep, he spoke of the checking of hog cholera, a disease which at one period threatened to be disastrous. Energetic and sustained efforts to stamp it out were put forth by the Department of Agriculture, with very satisfactory results.

The Pictou cattle disease, which at first was thought to be contagious, was, on examination, found to be caused by the eating of a poisonous weed.

Five years ago there was a serious outbreak of glanders, that dreaded fatal disease which attacks both horses and human beings. It prevailed not so much in Ontario as in the Provinces to the West, and prompt measures were taken for its suppression. To show the progress that had been made in stamping out this disease, Dr. Ruth-

THE FARM.

A Hundred-bushel Corn Crop.

Editor "The Farmer's Advocate":

Being a constant reader of your valuable journal, I see where Professor C. M. Evans says that 104½ bushels of corn per acre can be grown; also, where you ask for reports from some of our Canadian corn specialists who have grown 100 bushels or over per acre in this or previous years, with particulars as to how it was done. Now, Mr. Editor, I have grown 100 bushels of ear corn to the acre this season, and will describe how it was done. I had four acres in corn, the ground being chiefly heavy clay. Barley was grown on it in the season of 1908, and in October, 1908, it was plowed about four inches deep, and set up with a good shoulder. It stayed in this state until the spring seeding of 1909 was all completed. About the 23rd of May it was harrowed crosswise, two strokes in a place; then it was cultivated with a three-horse cultivator about three inches deep, both ways, harrowed crosswise again, twice in a place; then it was marked out in 18-yard lands with the plow. The manure was then hauled from the barnyard, about 23 loads per acre, three rows in each land. It was spread evenly, and the ground rolled with a field roller, then plowed about five inches deep, and rolled again, the roller following the plow in about two hours. It was then harrowed cross-



Typical Hereford Cow: A Royal Show Champion.

wise of the plowing, two strokes in a place, marked out with a marker, 3 ft. 10 in. space, and planted on the 11th and 12th of June.

Note the planting: Three men and three boys did the work. Each man had a hoe, and each boy a vessel of corn. The man made the hole with his hoe on each cross-mark, about an inch deep. The boy dropped four kernels of corn per hill, and each man covered the four kernels about an inch deep, and stepped with his foot on each hill after covering it. The seed corn had been soaked in lukewarm water for forty-eight hours, the water being changed three times; then it was drained, and dried in plaster before planting. In five days after planting, the corn was up, so that

one could almost follow the rows clear through. The fifth or sixth day after planting, it was harrowed with a three-horse team, two strokes in a place. Two men followed the harrows with crotch sticks, so that if any manure or litter hung to the harrow teeth, the harrow was lifted and let down easily, so as not to pull or injure the corn; and I must state here, candidly, that I don't think we injured a half-dozen hills by horses or harrows in the four acres. Two days afterwards, the rows could be seen distinctly from end to end. The ordinary field, three-horse cultivator was adapted for a pair of horses, the three center teeth being removed. A man got on the seat, and cultivated this corn twice in a place each way close to the corn, care being taken not to cover any of it. The reason it was cultivated twice in a place was that, by removing the three-center teeth, a wide space was left in the center. In going one way you could keep close to two rows of corn, and coming back you would keep close to one row, and a complete job done. The dirt was then loosened around the hill with the hoe, and weeds removed. The field was cultivated twice a week in this way, till it was so big I could not use the team and cultivator. Then it was cultivated once a week each way until the corn was tasselling out, with a one-horse cultivator and 16-inch whiffletree.

Two acres of this corn was of the King Philip variety, one acre the old yellow Indian corn, and one acre Compton's Early. On the sixth of September the King Philip was fit to cut. The ears were pulled from the stalks, and four rows thrown in one. The corn was then cut, tied and shocked, and the ears drawn to the barn, and husked; then measured in a bushel basket, and stored in a corn loft over my driving shed. We had 200 baskets of King Philip, which, if weighed, would overrun. The acre of yellow Indian corn was just ten days behind the King Philip in ripening. It was handled in the same way, and we had 100 bushels on the acre, and 15 baskets of soft corn, so it beat the King Philip 15 bushels per acre. The Compton's Early was a week later still in maturing. I was afraid of frost, and it was cut, the ears left on the stalks, and only some of it has been husked. There is some soft corn that has not matured. I am confident there are over 100 bushels of ears on it, and stalks 10 feet high.

You will please note, Mr. Editor, that this corn, as it might be said, was encouraged to grow, by harrowing and cultivating, from the day it was planted till the day it stood in tassel. I told a man in July, who was passing by, that it was hard to beat, and he stated to me, emphatically, that it could not be beat in America.

It will be noted that the manure applied was of the very best, as it came from a bunch of fat cattle. Also, that, in making the holes with the hoe, the corner of the hoe was used, so that the four kernels almost rolled together. My object in doing this was to have the corn in straight lines both ways. The greatest care was taken in covering the corn to put moist earth on it, free from lumps. The reason it was planted 3 ft. 10 in. each way was that, at this width, it came exactly right for the two-horse cultivator.

Northumberland Co., Ont. W. H. O'BRIEN.

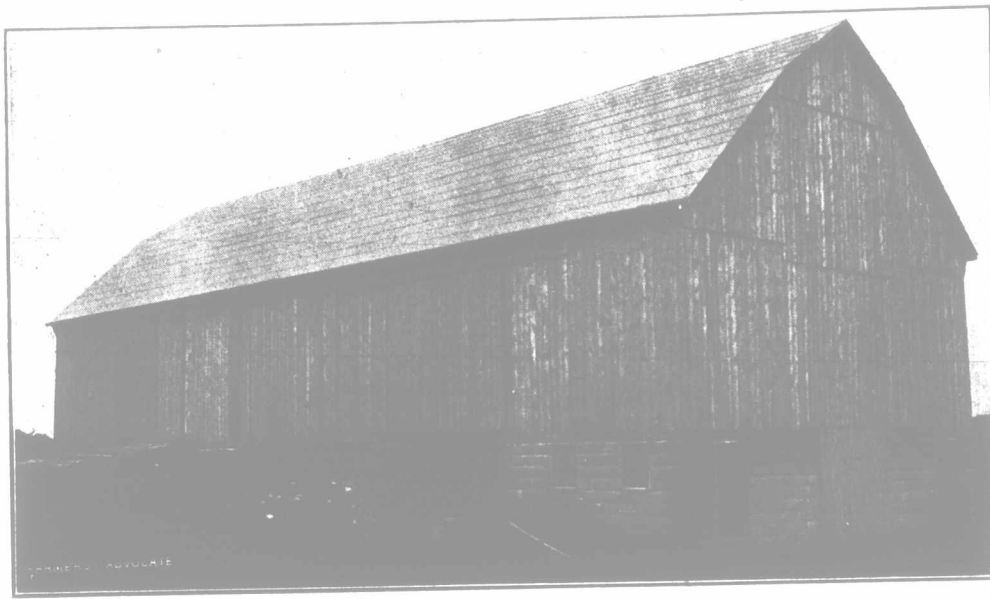
A Round-roofed Barn.

The accompanying engraving affords an excellent illustration of a barn completed during the past season. The circular roof is the special feature, of which the owner, Warren Barton, Middlesex Co. (East), Ont., thinks most highly. He adopted the plan after considerable inquiry and observation of other barns similarly constructed. He likes it for strength and roominess, the cost being figured at about the same as the square or hip-roof style of roof, there being a saving of puline plates, posts, and braces. Separating the mows, there are cross-beams, supported by posts, and uniting from side to side the main plates (10 x 10 in.), into which the rafters are mortised. The main side posts are 16 feet high. Once the main circle was designed and constructed, in position where it was to be raised, the builder, Robt. Hart, found no difficulty in satisfactorily and expeditiously making the roof, though the style was new in his experience. A temporary scaffolding was erected over the beams, on which the circles were made. Two or four and blocks were used in raising them.

The main barn remains from north to south is 44 x 100 feet, and there is an 11 x 28 x 20 feet outward for a dressing shed, and along the south side of the latter a smaller lean-to, 25 x 16 feet. The main basement walls are hollow bricks, on a cement concrete base, and the floor is of flooring cement concrete. Floor plates to posts, the roof makes a complete building 22 feet high in the center, from the plate down. There are 120 rafters, circles, and girders, 2 x 8 inch, spaced 10 feet apart, and 1 x 8 inch boards, 11 x 12 feet, and 1 x 8 inch boards, 11 x 12 feet, spaced 10 feet apart, in making the main roof, and 1 x 8 inch boards, 11 x 12 feet, spaced 10 feet apart, in making the dressing shed roof. The rafters are bolted together, and the circles are bolted to the rafters.

when released from stays holding them in position. In thickness, seven boards made the rafters. The boards should be of sized lumber. Outside the circles, the sheeting consists of 19 strips, 4 feet apart, made of 3 x 5-inch stuff, sized at ends to two inches. As an improvement, Mr. Hair would suggest putting these strips (scantlings) 2 feet apart, being better for laying the metal sheets on subsequently.

The center section of the roof, from end to end, is made more rigid between the circles, with 3 x 4-inch braces, put on in St. Andrew's-cross (X) fashion; and the sections on each side above the plates are similarly braced with 2 in. x 4 in. x 14 ft. pieces (bolted where they cross) between each pair of rafters. The ends of the barn are well supported with cross-beams, posts and collarties. The galvanized sheets, each 8 ft. x 30 in., were given the proper curve in the works of the metallic roofing company before being shipped out, and were easily put on, being lapped two corrugations. The roof presents a very attractive appearance.



1909 Barn Built by Peter H. Lawson, Middlesex Co., Ont. Roofed with galvanized steel shingles, cement-block foundation.

The timber posts of the former barn frame were used in this structure, but Mr. Hair states that posts might very well be made of boards spiked together from the sill or top of basement wall, and continue right on into the circle; and, instead of cross beams of timber through the building, round iron-rod braces could be used with decided advantage. Having them in sections united by a swivel, they could be tightened as desired. This fine equipment of stabling, used mainly for the housing of dairy cows, young stock and horses, includes a large round silo at the south end of the barn, which does not appear in the photo engraving.

True Agricultural Economy.

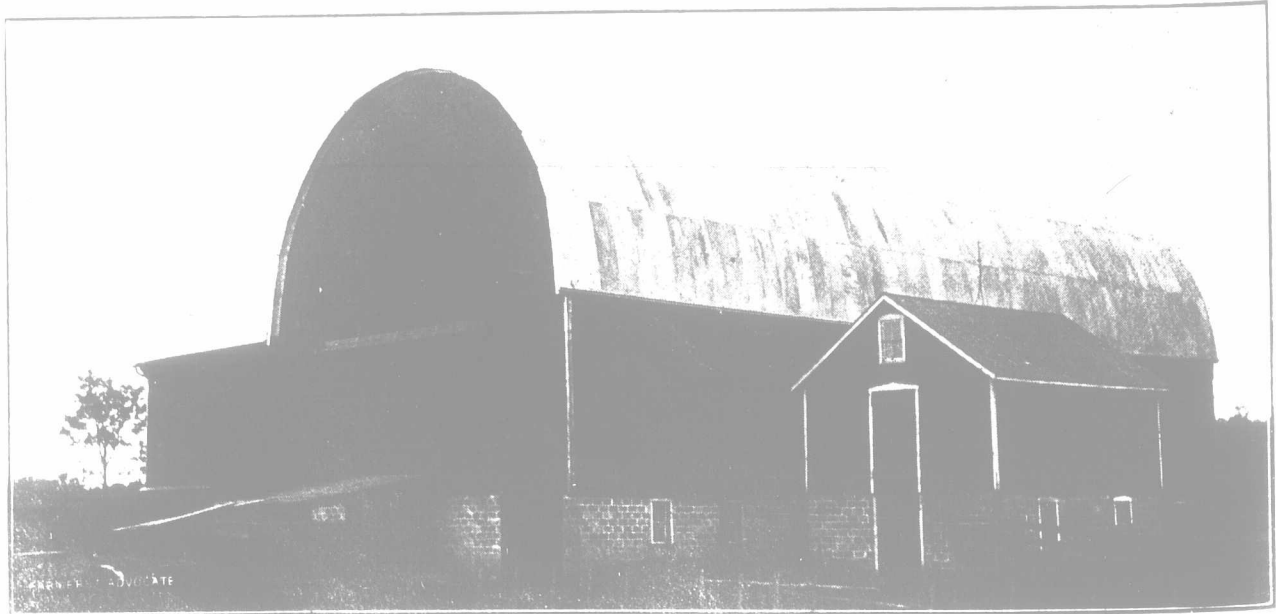
I was talking with a gentleman recently, a life-long resident of the town, who is already well started down the sunset side of life. In the course of our conversation, he threw out some ideas that I thought might be very profitably pondered by a great many farmers. He said that if he was a young farmer, as *Lusus Naturae* is, trying to make a start in the business of agriculture, he would try to so arrange and plan his work, and his land, that every part of his business would be complementary, if possible, to every other part. For instance, he would try to cover any land, unprofitable for cultivation, with trees, in which nut

trees would form a very considerable part, so that land which now might be lying waste, would be producing a revenue as soon as those nut trees began to produce nuts; and not only so, but would be increasing in value as the trees increased in age and neared a marketable size. Besides all this, the fuel question would be solved for him, and he would, at least, be helping to conserve and equalize the rainfall throughout the country.

This old gentleman keeps bees: *Lusus Naturae*, likewise, the same. If he were a young farmer, keeping bees—and what more profitable and enjoyable kind of "stock" can be kept—he would plant basswood trees among the others; would grow considerable alsike clover, and would try to induce his neighbors to do the same, and thus would be growing a profitable forage and hay and seed crop, as well as producing pasturage for his bees.

His remarks have been in my mind no little since that conversation. It has been one of my ambitions, for a considerable time, to run my business along the lines of his suggestions, but "Rome was not built in a day." A young farmer, without capital, can't do everything he would like just when he would like, but I hope the time will come in the not-distant future, when some of the waste corners of my farm may be covered with revenue-producing trees, when other waste places may be covered with sweet clover (wrongly called a weed), when a large percentage of my forage and hay crops may consist of alsike, and perhaps sainfoin, for the benefit of my bees, as well as for their feed value.

I am afraid a great many farmers don't employ enough brains in the pursuit of their calling. Because their fathers before them, and their neighbors around them, have farmed and are farming in a certain way, they must needs do the same, without a thought as to whether or no that particular line of agriculture may be best suited to their particular inclinations and abilities and circumstances, and they peg along, year in and year out, in the same old rut, scraping a bare living from their farms, and apparently content that it should be so, without making any appreciable effort to better their circumstances or live a more enjoyable or useful life. They sow wheat, and allow their few scrawny, ill-fed, profitless hens to scratch up a half-acre near the barn, when it would pay them a hundredfold to keep their hens in some yard and feed them, where they might know where they are, and what they are doing for them; where they might be able to get what eggs they may lay without hunting all around the buildings for them. They will sow corn, and allow their pigs to trample down and destroy a goodly proportion of it, as well as to pester their neighbors. They will pile the manure from their stables in their open barnyards, exposed to the wasting influences of the sun and rain and atmosphere. They will allow it to heat, and the valuable ammonia to escape into the air beyond the reach of their crops that stand in sore need of it. The rain will dissolve and wash out and down into their already overfertilized hollows, or away to join some creek, and so be carried in solution to the sea—a great



Round-roofed Barn on Farm of Warren Barton, Middlesex Co., Ont.



deal of that we should where ing crop pockets for the But will or and ex will dr basket, consid own ap expoun his ow cordin

Link

One with howe of mo barn i the ol partly summe down course ment, date, do are there straight witho the of money the ra known instru other, the ac Highla age st long over a logs 3 eight are th cayo went barn, Huest Bourr Ar since made cut, and y mains about with the o ing-k and y to us show had Barn he di ada his u Ont, mov as hi could no sh grain as lo often



Links of the Present With the Past.

Making Shingles by Hand: (a) splitting block; (b) shaving shingle.

deal of the valuable mineral elements of plant food that was originally contained in that manure, and should be transferred thence to their arable land, where it is needed, to be taken up by their growing crops, and thence transferred in cash to their pockets, or converted into necessities or luxuries for the sustenance and enjoyment of life.

But why need we multiply illustrations? We will only trespass unduly on the editor's space, and exhaust his patience by so doing, so that he will drop this whole effusion into the waste-paper basket, a disaster to be avoided, if necessary, at considerable cost. Every farmer can make his own application of the principles enunciated and expounded, and illustrated in this article to suit his own particular case, and govern himself accordingly.

LUSUS NATURÆ.

Links of the Present with the Past.

One by one the links connecting the present with the past are being snapped. Here and there, however, they still remain, recalling reminiscences of more primitive and arduous days. The old barn in the picture, believed by the owner to be the oldest log barn in Middlesex County, Ont., partly collapsed after it was photographed, in the summer of 1909, and the following day was torn down completely. In place of it there is, of course, a much better building, with cement basement, twenty-foot sides, and everything up-to-date. But no memories cling around it as they do around the old one. What a wealth of timber there was in those early days! No such long, straight logs, of even thickness top and butt, and without a knot the whole length, as are seen in the old log structure, could be got for love or money nowadays. And what a time there was at the raising! In certain sections of the country known to the writer, the Highland Scotch would instructively range themselves on one side of the building, and the Lowland Scotchmen on the other. Whiskey was free and abundant, and to the accompaniment of the whoops and yells of the Highlanders, and the less noisy but no less savage shouts and grunts of the Lowlanders, the age-long battle between Celt and Saxon was fought over again. Look at the old building. Twenty logs high when first erected, only seventeen or eighteen can be counted in the picture now. Where are the others? They have slowly sunk and decayed in mother earth. That part of the link went quietly year by year, without a snap. The barn, 30 x 45 feet, was erected in 1816 by Samuel Hueston, on the farm now owned by Septimus Bourne, Rebecca, Ont.

And what a change has come over the scene since the time when all the shingles used were made by hand, in the manner shown in the other cut. Note the comfortable house, the picket fence, and the wide, cultivated fields. Little now remains to remind us of the dense, enclosing forest about the stump-fields and the chinked log houses, with capacious fireplaces, of the early days. But the old man with the splitting frow and the drawing-knife does. He looks good for many years yet, and we all hope that his hardy vigor may preserve to us for long the memory of other days. As shown in the picture he is eighty years old, and had just completed the making of 8,000 shingles. Barn March 30th, 1829, in Wigtonshire, Scotland, he did not come, but rather was brought to Canada in June of the same year, and settled with his mother and father (his mother first) near Galt, Ont. After residing there fourteen years, they moved to Bright, Oxford County, where Mr. Bond, as his name is, still lives. In his palmy days, he could make 1,800 shingles per day. There are no shingles like the split shingles. Being straight-grained and quarter-split, they would last double as long as the sawed, cross-grained, slab-cut, and often sap wood sort!

How to Retain Fertility.

A thirty-bushel crop of wheat will remove from the ground forty-eight pounds of nitrogen, nine pounds of potash, and twenty pounds of phosphoric acid. Sixty bushels of corn will remove fifty-six pounds of nitrogen, thirteen pounds of potash, and twenty pounds of phosphoric acid. This quantity of fertility may not seem to be large, and where great stores of these elements are present in the ground, it would appear as if fertility would remain for a very long time, even when great drafts are made every year. Many prairie soils contain in the surface foot a few thousand pounds of nitrogen per acre, perhaps about the same amount of phosphoric acid, and a large proportion of potash. With these quantities present, it is obvious that there is enough fertility to produce a few hundred crops; and, this being admitted, it is not surprising to hear the argument advanced that there is no necessity to conserve the fertility of the land for the benefit of unborn generations.

Although it is true that many of our lands may be able to produce a vast number of crops, even if the grain is annually marketed at the elevator, yet this cannot be done without the crops growing less every year. Plot experiments in wheat-growing in England—an old country—show that, during fifty years, the average annual yield has been reduced from between thirty and forty bushels per acre to nine bushels per acre. In this case, no fertilizer has been added to the soil in the entire period. Analyses indicate that there remains in the earth a fair supply of ash constituents, and that the unproductiveness is the result of the great reduction of vegetable matter, the absence of which—or insufficiency—prevents the liberation of the ash constituents. It appears that the decay of vegetable matter produces acids that liberate the ash elements, and unless these acids are present there can be little liberation.

The average prairie soil contains a large supply of vegetable matter, in addition to ash constituents, and, on account of the presence of both, the soils are productive. The exhaustion of the decaying vegetable matter (humus) has the effect of decreasing the production, even when an abundant supply of ash constituents is present.

The only way by which the productiveness can be maintained is by feeding some part of the crops to the animals on the farm, and returning the manure to the land. The actual proportion

of the crops that ought to be fed on the farm must, of course, vary in different circumstances. The legumes may be used in providing nitrogen, but straw and other stalks must be employed to keep up the supply of humus. It should be remembered that these growths contain considerable mineral matter, so that, when they are returned to the ground, something more than humus is added. For example, the straw from a thirty-bushel-per-acre wheat crop contains twenty pounds of potash and fifteen pounds of nitrogen; the stalks from a sixty-bushel corn crop contain about sixty pounds of potash and thirty pounds of nitrogen.

When grain crops are fed to animals, only a small part of the fertilizing elements is removed from the farm, this being taken away in the tissues of the animals. There is no doubt that land may be cultivated indefinitely, provided that the grain is fed to animals on the farm, the manure used on the soil, and legumes given a prominent place in the crop rotation. Such a system of agriculture may be carried on for a great many years—probably hundreds of years—on some farms, without necessitating the introduction of any kind of commercial fertilization.

New York State. LAWRENCE IRWELL.

A Canadian Plank Barn-frame.

Editor "The Farmer's Advocate":

During the past year I have designed many plank-frames for readers of "The Farmer's Advocate." Nearly all of these have been after the cantilever-truss design, which, while strong, cheap, and well adapted to hay barns, etc., is not so easily designed to meet the demands of a stable, built on the level of the ground, as the inclining purline posts are in the way. For this reason, I set to work, and, after much thought and study, have invented a frame entirely adapted to any and all styles of barns.

The amount of timber used is no greater than that required for the American cantilever frame. Besides, it is all of ordinary marketable lengths, and can be procured in any lumber yard.

The design is also so very simple that any carpenter can prepare drawings, bills of material, and erect the frame, after once getting the idea.

A limited number of men can erect the frame, or a great many can find employment on it for a short time, from the fact that a saw, square and hammer are about all the tools required. The time required in building is 50 per cent. less than to build a timber frame of the same dimensions. Following is a description of the structure, and the course followed in building it.

Upon the foundation a layer of cement mortar is spread, and on this is laid the sill, composed of one 2 x 8 plank, and one thickness of 1 x 8 board nailed on top of 2 x 8, joints broken; on the outside of this a 2 x 6 is spiked, flat side against edge of sill, thus allowing a 3-inch ledge to project above the top of the sill, to form a shoulder, which keeps the posts secure.

Next, the position of the bents are marked on the sills, and the posts are made of two planks 2 x 8, with 2-in. space between; then the main cross-beam is built of three planks 2 x 10, having the center piece extend out, tenon-like, at each end, 8 inches. This slides into the posts at the desired height of the stable ceiling, and is bolted and spiked.

Braces made of three planks 2 x 6 are inserted, with a run of 3 feet, into post and beam. The center piece extending as a tenon gives double shoulder to brace, and, being spiked in both ends, resists compression and extension.

An aperture 2 x 8 inches is left at the point where the purline post sits on the beam. The



Links of the Present With the Past.

An old log barn in Middlesex Co., Ont. Erected 63 years ago, by Samuel Hueston.

method employed to find this point, and at the same time have a strong and attractive roof, is as follows: Erect a perpendicular from a point on the beam, previously determined by spacing the span off into five equal parts, this point being the nearest to the side or first space. Next draw a line, which will be the incline of the roof, at an angle of 56 degrees with the horizontal, this line to start at the top outside edge of the plate, and extend upward and inward until it intersects the perpendicular. The perpendicular gives the length of the purline post, and the diagonal line gives the pitch and length of the first rafters on a gambrel roof.

The three center spaces of the span are the span of the upper roof on this style of barn, and it has an angle of 34 degrees with the horizontal.

The length of the purline post being determined, we proceed to make it of two thicknesses of 2 x 8, with 2-inch space between. A tongue 4 feet long is spiked between these, having 8 inches protruding as a tenon, and is let into the 2 x 8 mortise on the beam, where it is spiked. A tie made of one 2 x 8 plank extends across from the top of the side post to the purline post, it extends clear through each, and is bolted in place. Another brace or tie, 2 x 6, rises from between the planks of the side post at the top, and reaching upward and inward, enters the purline post 8 to 10 feet above the tie, and is bolted and spiked.

The side plate is built of one thickness of 2 x 8 spiked to the outside of the post, and having the upper edge level with the top of the post, and over the top of both the post and the edge of the 2 x 8 plank a 2 x 10 is securely spiked, thus forming a sort of angle beam to resist movement each way.

The purline plate is made in precisely the same way, and has 2 x 4 braces, 4 feet long, at each post, those at the ends being 2 x 6, and 6 to 8 feet long, to stiffen ends.

The side bracing of the frame is done as follows: An upright of 2 x 6 plank is erected from sill to plate, in the center of the span, between each bent, and from the bottom of the immediate post on each side of it a diagonal brace rises and fits snugly under the plate at each side of the upright. The braces are 2 x 6 plank, and they, as well as the upright, have the edge turned out toward the outside of the building.

The span across the end has braces inserted in the same way, and these, with the side ones, are more than sufficient to withstand any windstorm that is likely to arise.

The girths, or nailers, are 2 x 6, and are spiked flat to outside of posts, uprights and braces, thus knitting the whole structure, lattice-like, together.

If the span is extremely wide, a purline beam may be stretched across the center, and another set of purlines built on top to carry up the top roof.

In the center of the end, a perpendicular post, made of three 2 x 8 planks, extends from the cross-beam to the peak of the top roof, and to this and the purline posts the 2 x 6 nailers are spiked in the gable.

The purline posts of each end bent may extend from sill to plate, the cross-beam being, in this case, made of two planks 2 x 10, one spiked inside and one outside of the posts, the same method being carried out at the side posts.

If the reader has given attention to the assembling of the frame, he will, no doubt, see that the shape is somewhat after the braced frame construction, while the individual timbers are built according to the American plank frame method, and may also notice that it has the advantages of both, without the disadvantages of either, name-

ly, the enormous amount of timber required and costly labor of the former, or the long planks and accurate drawings necessary to construct the latter.

The case with which a bill of material may be prepared, the simple method of framing, and the small amount of timber required, should cause many of our Canadian farmers to build modern, down-to-date barns, that may have been fabled dreams of many a winter evening.

With the permission of the Editor, I propose, in the near future, to publish plans and sample bill of material for a modern barn, built on this principle, and will be pleased to answer any inquiries which may be sent through "The Farmer's Advocate."

ALF. A. GILMORE.

Huntingdon, Que.

"Gassing" Flour Mills.

Millers, like people in other occupations, have their troubles, and insect troubles are not the least of these. Formerly, they had to contend with grain weevils and flour beetles, which they thought very troublesome, but in recent years these pests have sunk into insignificance, compared with the Mediterranean flour moth. It is now less than twenty years since this insect first invaded the United States, but now it has spread until it infests mills in nearly all parts of the country, and is the main source of complaint from millers. When a mill becomes badly infested, it is necessary to clean up and fumigate at longer or shorter intervals. These operations are in themselves expensive, and the loss is greatly augmented by necessary stoppage of the mill.

Among the insecticides employed against this pest, sulphur and bisulphide of carbon have been most prominent, but danger of fire is an objectionable feature with both; besides, fumigation with these has never been wholly effective. Hydrocyanic acid gas was proposed ten years ago, and some tests were made that did not prove entirely satisfactory. Recently, however, this deadly gas has been more fully and carefully tested, with most promising success.

The United States Department of Agriculture has just issued a circular (Entomology, 112) fully describing and illustrating the materials and methods to be employed. The chief danger of using this gas is its deadly character, and it must, therefore, be used with the greatest caution. But, on account of its comparative cheapness and effectiveness, "gassing" will probably take the place of other methods in dealing with the Mediterranean flour moth.

Corn-growing in Essex.

Editor "The Farmer's Advocate":

The growing of big crops of corn is a topic of ever-increasing interest, especially in the corn lands of Essex County. In the north-west quarter of Gosfield South, 100 to 125 bushels per acre is only the ordinary crop, even this year. In fact, a number of farmers have, in spite of the unfavorable season, the largest crop ever grown on their land. Chas. Coghill has a 1,000-bushel crib of most uniform type, the crop of 8 acres, grown from his brother's strain of ten-years-selected White-cap. In other years there has been as high as 150 bushels per acre in this neighborhood.

The bumper crop of a few years ago is the ordinary yield of to-day, while the prospect is that what is to-day a dream, impossible of accomplishment to the majority of practical men, will be a fact of the not-far-distant future. Experience is the best of teachers, and since the last few years have shown such an advance, it is reason-

able to expect that further improvement will result. The same land which a few years ago gave 75 bushels per acre, yielded 100 to 125 bushels per acre this year.

We can only conclude that the increased yield is due to improvement in drainage, manuring, cultivation, or seed, all of which are receiving attention, and may each be responsible for part of the increase.

Drainage comes first, for, without good drainage, corn-growing is but a lottery. Therefore, under-drain, and, if necessary, top-drain, but get rid of the surplus water. This is the chief cause of the increased yield.

Essex farmers believe in feeding the crop which feeds them. Consequently, we find fall and winter manuring of corn ground growing in favor. The earlier-applied manure gives the better crop, its strength being washed into the ground, where the corn roots feed upon it, instead of being put beyond their reach while the plant is small.

Corn land is usually plowed in the spring, and pulverized with disk, roller and harrow. Heavy land, or land which has been hardened by standing water, or working while wet, is greatly benefited by fall plowing, as the action of the frost makes it mellow. Essex farmers generally plow about six inches deep, but the nature and depth of sub-soil must govern.

The corn is planted in hills 3 ft. 6 in. to 3 ft. 8 in. apart in rows both ways. The horse planter is quite generally used. Three stalks in each hill is the usual aim. Corn seldom gets harrowed after planting. Some farmers believe it to be beneficial, while others see little advantage. The chief advantage seems to be to prevent the formation of a crust, thus making the first cultivation easier. All are agreed that the cultivator should start as soon as the corn is big enough, and be kept going. The rule is from four to six cultivations, but the aim is not to allow the soil to set, but to keep a loose top. Beginning with hillers set to cut the earth away from the corn, and cultivating as deep as convenient, we gradually stir shallower and throw the earth to the corn, but only ridge slightly. A man and team with a sulky cultivator will do four to five acres at first, and six to eight acres a day when the corn is larger; while, with single cultivation, a day's work will be half the amount. The smaller acreage is that most generally cultivated in a day. If no crust has been allowed to form, a cultivation while corn is filling will sometimes increase the yield by one-fourth.

Selection of seed is also a cause of improvement, not only the selection of a better type, but increased vitality, insuring a better stand, as a consequence of the better care given the seed.

It is along this line that we may expect the greatest increase. By greater care in planting, and seed of strong vitality, we may expect to come near to a three-stalk-in-a-hill stand. By following approved methods of seed-growing, we may hope almost to eliminate the barren stalk. Were this carried to perfection, 100 to 125 bushels of shelled corn per acre would be as common as the same yield of ears is to-day. In fact, 100 bushels represents only a small crop of corn of 4,800 good ears per acre, or 1,600 hills with three stalks bearing an ear each; 125 bushels would require 2,900 such hills. If every hill had three stalks bearing fairly good ears, there would be 3,384 hills, or 10,152 stalks and ears. There are 48 good ears in a bushel, by actual measurement, and 5 bushels of the same corn shells 3 bushels by measure, and overruns in weight. This means 214 bushels of ears, or 126.9 bushels of shelled corn per acre. While this may not be possible of accomplishment, it shows that there is much room for improvement.

There is a great variety of kinds of corn grown, each of which has its champions. The different strains of a variety are also as different as though they were different breeds of corn. There is very little difference in time required to ripen the early-maturing strains of the large-eared varieties and the so-called early varieties, all things being equal. The varieties most favored have been the White-cap, Leaming, King of the West, and Pride of the North. The Early Butler and Bailey are favorites of a few, but, on the whole, it seems to be a case of personal preference than of virtue of a variety. In the main, it seems that the White-cap has received more attention than any other. Consequently, seed of a selected strain will give a more uniform type. The fodder is also preferred to that of other varieties, and is certainly as good as the best.

To anyone who doubts the foregoing statements, proof can be furnished, and if he can come and see, Essex is the home of Canadian corn, and claims to be able to show the highest record.

Essex Co., Ont. GOLDON I. RISSELL.

Useful and Constant Remembrance

The ideal Christmas present possesses two virtues. It is useful, and of a nature that makes it a constant remembrance, bringing the giver remembrance to the recipient's mind. It is not too late to give your friend a Christmas or New Year's present in a year's subscription to "The Farmer's Advocate" and Home Magazine."



A Group of Holstein Friesian Calves

Property of J. W. Richardson, 4120 10th St., Wm., Ont. (See page 18, December 30, 1910, issue of this Magazine.)

Cream

We give in the discussion in Guelph, report of the Western Ontario

First of formal discussion at Cream

Instructor's discussion, claim to be practical, gathering of the grading haulers, who their present if cream were for the good tempted to at a uniform of butter.

Mr. Fors believed the prove the presence of the sweet cream cream. He years, and patrons were well pleased

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Mr. Malo fat for sweet out all right 27 per cent G. G. Pe tario, though the improvs ports sent showed out quality.

CREAM

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THE DAIRY.

Creamery Problems Discussed.

We give below some of the points brought out in the discussion at the creamerymen's meeting in Guelph, referred to in our last issue. For report of the season's creamery-instruction work in Western Ontario, see last week's paper.

First of the several subjects suggested for informal discussion was, "Is Grading Cream Practical at Cream-collecting Creameries?"

Instructor Roberston, St. Mary's, led the discussion, claiming that he did not think it would be practical, on account of the present system of gathering cream, especially in the north, where the grading would have to be done by the cream-haulers, who too often are not capable of doing their present duties right; he also thought that, if cream were graded, and different prices paid for the good and bad, many makers would be tempted to mix them together and sell the butter at a uniform price, rather than sell two grades of butter.

Mr. Forster, of the Pure Milk Co., Hamilton, believed the grading of cream the only way to improve the quality of the butter; he made a difference of from 1c. to 2. per pound fat for rich and sweet cream more than he gave for thin and sour cream. He had been doing this for the past three years, and now seldom gets any poor cream. His patrons were putting in ice every winter, and were well pleased with the results.

Mr. Newman, of Lorneville, thought it would be difficult to hold patrons if one received a higher price than his neighbor; he would either go to another creamery or keep his cream at home and make his own butter. He thought a better way would be to give prizes to those who sent the best cream.

Mr. McFeeters, Owen Sound, found out by experience that it does not pay to make many changes, as the patrons think it is all to the benefit of the creamery owner.

Mr. Aldrich, Selkirk, said it would not be practical, but a good thing to drive patrons from the creamery.

Mr. Malcolm, Sheffield, gave 1c. more per pound fat for sweet cream, and found that it worked out all right, while his average test was about 27 per cent. fat.

G. G. Publow, Chief Instructor for Eastern Ontario, thought it time to do something towards the improvement in the quality of cream, as reports sent in from Eastern Ontario creameries showed only about 12 per cent. being first-class quality.

CREAM COLLECTORS AND COLLECTION.

The second subject was "Instructing and Equipping the Cream Haulers; Sampling Cream by Haulers; Individual Cans for Collecting Cream."

Mr. Hems thought the greatest trouble was in getting an accurate sample, with the equipment most of the haulers used, and carelessness on the part of the haulers.

Mr. Stratton, of the Dairy School staff, showed a box for putting sample bottles in, the dipper and scales used. He said the drawers preferred the spring balance to the beam scales for weighing, and it gave good results.

Mr. Newman used the jacketed cans, and was well pleased with them; inexperienced and poor haulers lost him a lot of money.

Mr. Forster preferred the individual can. Before using these he was losing money and patrons, where cream was weighed and sampled by the haulers; as soon as he started the individual can, the majority of his troubles ceased.

At this stage, a representative of the McClary Mfg. Co., London, exhibited a can that had been used by the Silverdale Creamery Company during the past season, and given good results.

J. B. Smith, Alton, started to use the individual cans this summer, but found they had their weak points, as well as good. The first cost was considerable with a large number of patrons; a small creamery of 100 to 150 patrons would give better satisfaction than where branch wagons were employed, and having over 200 or 300 patrons.

Instructor F. Dean was in favor of the individual cans. Where these were used in the southern creameries, the average cream test was from 27 to 30 per cent. fat, the maker saw every lot of cream delivered, knew who was sending the poor, and who the good. Where sampling and weighing was left to the haulers, unless they were competent, it caused the creamery-owners and buttermakers endless trouble. With the individual can, the patrons always had a proper vessel in which to keep the cream, and took better care of it than when they knew that all cream would be lumped in together, whether good or bad, into large cans or the tanks.

Mr. McFeeters found that some of the spring-balance scales got out of repair very quickly, and had good results by using the rule with some levers.

MAKING BABCOCK TESTS.

The third subject was, "The chief sources of difficulty and possible error in making Babcock tests under average creamery conditions. The scales and pipette for taking the sample."

Mr. Hems believed that the first step should be in procuring correct glassware, and that a more uniform system should be practiced in the methods of testing, whether using the scales or pipette. Mr. Publow found some of the makers leaving the sample bottles uncorked, giving too high a reading, while a good many did not take proper care of the samples, which should be heated and well stirred before taking a sample for the test. The scales had given the best results, and he thought it the only way to buy or sell cream.

Mr. Jackson, Forest, had always used the pipette, and this fall sent the cream from his creamery to Port Huron. He weighed and sampled the cream at the creamery, and when the returns came from Port Huron, at the end of the month, they received \$97 more than they had figured on from the pipette, the Port Huron people using the scales for weighing the samples for testing.

Mr. Gracey, Dorchester, found by experiment that the scales gave better satisfaction, especially with cream testing over 25 per cent.

W. Harris, Brussels, has been using the scales for the past three seasons; when using the pipette, about 25 per cent. of his patrons were kickers; since using the scales, he got them down to about 2 per cent., and has a uniform overrun of about 16 per cent.

F. Durdle, of Brussels, said he could test with the use of the scales just as quickly as with the pipette, and more accurately; gave better satisfaction to the patrons, and he would not go back to the pipette.

Mr. Newman used the 17.6 pipette, got a large overrun, and paid a big price for fat to compete with neighboring creameries, but intended to turn over a new leaf this next season and used the scales.

Mr. Hems then moved that legislation be asked for, with the object of having all dairy glassware

others did well. An association was strongly talked of for next year.

Mr. Hems stated that he thought the makers and proprietors could spend their time more profitably getting the patrons to have more and better cows, producing more cream in their own territory, than trying to take the patrons from another creamery. Mr. Brill, Teeswater, sent word to all his patrons that he would test the milk from individual cows all season free of charge. He tested quite a number next season. He, as well as the patrons, found it profitable. Mr. Paget, Canboro, gave a brief outline of the work done by the Dominion Government along this line, and thought that it should be taken advantage of by every cow-owner. Mr. Publow realized that the makers did not take enough interest in this line of work, and if they went at it in the right way, it would mean a lot of money in their pockets.

Sixth subject, "Improving of the Quality of Our Butter; Pasteurization; Preventing Mottles; Controlling Moisture Content; Caring for the Churn, The Best Kind of Paint for Churn, Cream, Vats, etc." Prof. Dean found, in their experiments, that the loss of fat was heavier in the buttermilk when churning cream which had been pasteurized with high acid, and that the proportion of fat lost increased as the percentage of acid increased in the cream at the time of pasteurizing. The cost of pasteurizing cream for buttermaking is estimated to be one-tenth of a cent a pound of butter. This, he thought, would mean an extra value of half a cent to a cent a pound for butter from pasteurized, as compared with that from unpasteurized cream.

Mr. Robertson showed that, where makers were going over the limit in moisture content, it was by the methods practiced in washing or churning at too high a temperature. F. Dean thought that the reason that more makers did not make a success of pasteurizing was carelessness on the part of the maker in not keeping the temperature even (about 175 to 185 degrees gave best results), and not cleaning the pasteurizer and pipes thoroughly every time they were used. Mr. Reesor, of Locust Hill, said that when they quit pasteurizing, customers began to complain about the flavor of the butter. They received high prices for their butter the year round. Send all cream back home that comes in sour, and collect three times per week, some of it every day. They clean their pipes with a wire brush every day.

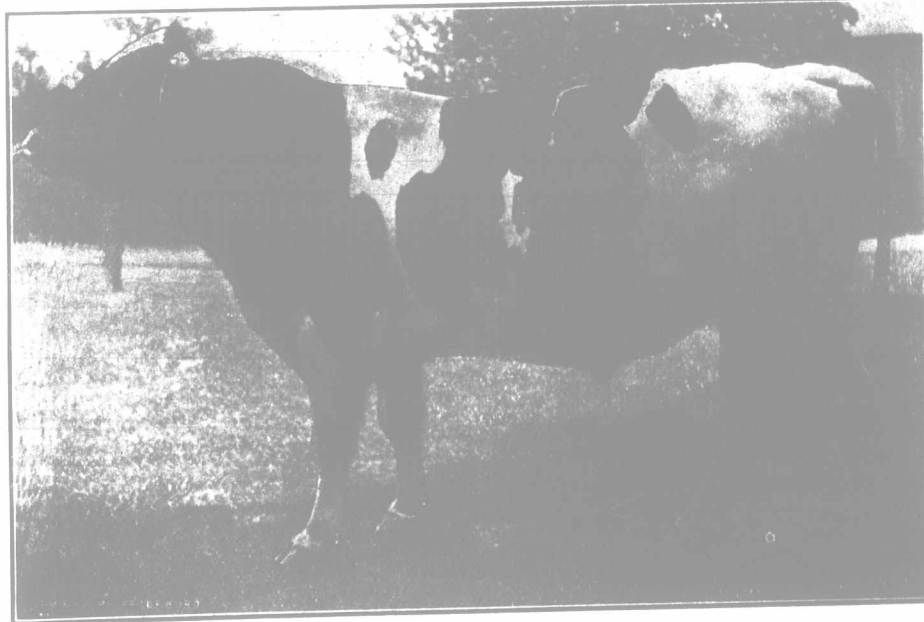
A. T. Bell, Tavistock, used lime-water for sweetening his churn. Mr. Newman advised not using too hot water at first when rinsing out the churn; it opened up the pores of the wood, allowing the butter to get in and make the churn smell. Too much washing-soda was used, making the churn yellow; a smaller amount gave better results. He liked varnish better than paint for a churn. Mr. Logie, Paisley, uses lime-water once per week, and steams occasionally, rinses out with lukewarm water, then washes with boiling water. F. Richardson, St. Mary's, now uses shellac and varnish on the churns, with oxide and oil on the ironwork; this is giving better satisfaction than the paint.

The seventh and eighth subjects were hurriedly discussed, as time would not allow for full discussion: "Creamery Refrigerators; Creamery Ventilation," and "Creamery Competition; Weak Points in Our Creamery Work."

Mr. Hems and Instructors reported some of the refrigerators in poor condition, affecting the quality of the butter, and producing mold, while a large number were in excellent condition. Mr. Newman washes off old whitewash every spring, and then gives his refrigerator a new coat of whitewash. He finds it better to work up his own territory, and leave the other man alone.

Instructors find that a great weakness in the creamery work is the lack of interest shown by some makers and patrons, and carelessness in doing their respective duties.

Readers are reminded of the forty-third annual convention of the Dairywomen's Association of Western Ontario, to be held in St. Thomas on Wednesday and Thursday, January 12th and 13th, 1909.



Prince De Kol Posch.

Holstein bull, in Riverside sale of J. W. Richardson, Caledonia, Ont., December 30th. Only living son of Lady Aaggie De Kol.

guaranteed. This was seconded by Mr. Publow, and carried.

The subject, "Improving the Cream Supply, Visiting Patrons (a) by the Buttermaker, (b) by the Instructor."

F. Keyes, Bluevale, always made it a habit to visit every patron he could. He went out in the spring, before he got busy in the creamery, and found out he did a great deal of good by suggesting improvements, and talking intelligently to the patrons who were sending poor cream. In three years he had raised the average test from 17 per cent. to 26 per cent. fat. He had found that patrons were willing to improve if approached in the right way.

Mr. Newman said that the only way to get a better quality of cream was to show the patrons the importance of cooling the cream and keeping it cooled until the hauler called for it. He made a practice of going over the route with the hauler whenever he could find it convenient to do so. F. Dean found it very necessary to visit the patrons as often as possible, and see where and how the patrons kept their separators and cream. The buttermakers could profitably spend a lot of time among the patrons, getting them acquainted, and making them more interested in the care of cream at seasons of the year when they were not busy in the creamery.

"Increasing the Individual and Total Production of Cows in Creamery Districts—Cow-testing Association," was the fifth subject. Mr. Keyes had been testing cows owned by some of his patrons, and had aroused a great deal of interest. Some were not paying for the feed they ate;

Conditions for Milk Production.

It is not so easy as it looks to determine the cost of producing milk, said Prof. Dean in an address at the Ontario Winter Fair, on "Lessening the Cost of Milk Production." It is a hopeful sign, however, that dairymen are wanting to know the answer to this difficult question. This much may be stated without any hesitation, that the cost has increased from 25 to 50 per cent. At this time, the feed cost of 100 pounds of milk is not less than 60 to 75 cents, or, by the quart, 1 1/4 to 1 1/2 cents. Adding to this the cost of attendance and other expenses, the total cost of a quart of milk will be, at present, 2 to 2 1/2 cents.

The factors in lessening cost of producing milk, or, in other words, of increased profits in dairying, may be summed up in six words: Man, Cow, Feed, Stable, Water, Exercise.

The man must be one who observes and studies. No idler or mere dreamer will succeed. Moreover, he must have a liking for the animals he tends.

The cow must be one that produces. Many fantastic schemes for increasing milk flow were referred to, such as a bonus for extra milkers, and having music played to please the cows while being milked. These might be dismissed without hesitation. Sane methods were the only ones worth considering. There has been, of late, an abandonment of the practice of milking right through to freshening, so much recommended at one time. It has been re-discovered that a cow will give more milk in a year if she has a dry period of six to ten weeks.

The stable should be well ventilated, clean, light and comfortable. Fresh air never killed anybody.

We have been following the no-exercise theory too far; it has been carried to extremes. A reasonable amount of exercise is necessary to health. Health means production. We want to get milk economically, and in a cleanly manner.

"When I want a drink of water in the winter time, I don't want it half-warm." One function of water is to relieve a feverish condition, and he doubted whether it was wise to have water constantly in front of the cows. He would prefer having them drink when let out for exercise, which, in ordinary weather, should be every day. We have been keeping cows too close. Fresh air, sunlight, exercise, are valuable for both man and beast.

In answer to a question, Prof. Dean said he would certainly not give cold water to a freshly-calved cow. For a day or two, great care should be taken, in such a case, to avoid giving a chill.

Feeding cows twice a day is as good as oftener. The cow has a capacious stomach, and is quite able to take all she wants in a day at twice. When pushing a cow heavily in winter, roots are excellent to add to the ration, as they tend to lessen the fever which heavy feeding is liable to produce. Silage is excellent, also, but will not altogether take the place of roots. Fed in conjunction, they give much better results than when fed separately. A great deal has, with reason, been said and written about the necessity of a proper nutritive ratio, but when plenty of succulent food is given, the balancing of the ration is perhaps not so important as has been thought.

How He Won the School Teacher.

A young farmer in one section was making a specialty of dairying, sending milk to an adjacent factory. Near-by, a comely young lady was teaching the rural school. As frequently happens, he succumbed to her charms, and proposed that they should wed. Having an eye to business, as well as love, she took an inquiring look at how he was conducting his farm, and the prospects of the returns in which she would share. As she was getting \$500 a year, she finally told the young man that he would have to spruce up and do better, for, in the meantime, she proposed to stick to teaching. It woke him up, and put him on his mettle. He began testing his cows, weeded out the poor ones, fed the others better, took pride in his work, which naturally began to pay larger dividends, and, in the end, won the teacher.

How Americans View the Cream Trade.

Judging from recent expression of opinion in the New York Produce Review, American dairymen, and those creamerymen other than the ones along the border, who are profiting by the importation and manufacture of Canadian cream, are many of them opposed to the reduction of the duty on this article, letting the bars down, as it does, to Canadian competition. While it is held by some that scarcity of butter on the other side of the boundary had virtually compelled reduction of the tariff in the interest of consumers, still, on the other hand, the dairymen are naturally inclined to look at it differently, arguing that, since the United States is a high-tariff country, it is only fair that the dairymen should receive their share of the general protection when a case arises where this is possible. The whole experience indicates the retroactive principle of tariffs, which set up a general interrelated system of reboun-

Peter to pay Paul, and then robbing Paul to repay Peter.

At the recent annual meeting of the Maine Creamerymen's Association, the following resolutions were passed:

"Whereas the duty on butter at six cents per pound seems to the subscribers to be a fair and reasonable rate; and that, whereas the duty on cream at five cents per gallon is utterly inconsistent with the duty on butter, for the reason that four to five pounds of butter may be manufactured from each gallon of cream, thereby practically reducing the duty on butter to one cent or one and one-fourth cents per pound,

"Be it resolved that the tariff on cream should be immediately revised, making it consistent with the present duty on butter;

"Resolved that the Maine Dairymen's Association be requested to act in co-operation with the Maine Creamerymen's Association in an attempt to secure such revision of the tariff on cream as will make it consistent with the present tariff on butter."

To Our Club-raisers.

There are thousands of farmers who do not know what they are losing every year through not being subscribers to "The Farmer's Advocate and Home Magazine." Therefore, we want all readers of "The Farmer's Advocate" to act as club-raisers this year, and send us large lists of new subscribers.

If you send us two new names, and \$3.00 to cover same (each new subscriber paying \$1.50), we will mark date on your paper forward one year as remuneration to you; or, for each single NEW NAME, accompanied by \$1.50, we will advance the date of your address label six months. Cash commissions or premiums, as preferred, for larger lists of new names.

In clubs of FOUR RENEWALS OR OVER, we will accept \$1.25 each.

Premiums not included in club offers. Start raising your club immediately. Get "The Farmer's Advocate and Home Magazine" into every household in your locality.

APIARY.

Bees in the Orchard.

Herewith I am sending you a photograph taken in the orchard of Chris. Ebert, Fisherville, Ont. This photograph was taken shortly after I placed the bees in Mr. Ebert's orchard. The day was bright and warm, the bees flying. In the hands of Mr. and Mrs. Ebert, and in that of five children, the youngest seven years of age, seen in



Handling Bees Without Gloves.

front of Mr. Ebert, on the left, are combs with honey, brood and bees. There is also in the photo a lady from Waterloo, and the operator of the hive and his daughter. There are perhaps not many children who had no experience in such work who could be induced to take part in such a demonstration. However, no one was stung. I suppose, if anyone had become alarmed, and had struck at flying bees, thus attacking the little workers, the ending might have been quite different. When the above photograph was taken there were over 100 colonies in this apiary.

Grant Co., Ont. R. F. HOLTERRMANN.

Western Beekeepers.

The Chicago North-western Beekeepers' Association held their thirtieth annual convention last week at Chicago. This Association covers the North-western part of the United States, and the meeting was pronounced to be the best convention held this year in the United States.

WAX PRODUCTION.

A question which received a good deal of attention was the production of beeswax. Some argued that the kind of honey from which the wax was produced had its effect on the wax. As an instance, it was stated that feeders of stock were

very careful as to what they fed stock. If white flesh and skin was desired in poultry, then the feeder was careful not to feed yellow corn; it all so had an effect in milk.

Mr. Trickie stated he knew that when the bees worked on dandelion then the wax they produced was yellow. Another member felt sure that the white wax was produced from alfalfa and linden, or white honeys. The more amber would produce more-highly-colored wax, while buckwheat, heather and other dark honeys would produce dark wax.

Mr. Holtermann stated that he was not prepared to say to what extent wax was affected by the honey which the bees consumed in its production. That the cream was affected by the color of the food more than the remaining portion of the milk, was well known. That in the production of the meat the fat was more affected in color than the lean, he also believed was pretty well established. Wax being a fat, we might expect the color to be influenced by the food, but he knew that the color of the wax did not correspond to the color of the honey, for buckwheat made beautiful white combs.

Doctor Miller doubted if wax was originally anything but white. He thought pollen and other matter might color the wax. He had taken virgin comb and melted it into a cake, and it was perfectly white.

FOUL BROOD.

It would appear that foul brood, American and European, was giving the beekeepers of the United States, as well as Canada, considerable anxiety. It appears that Illinois has not yet a law which empowers an inspector to examine bees, if the owner refuses permission, and there is no law to enable an inspector to destroy diseased colonies, no matter how great the menace to the health of other bees. There was a unanimous request for legislation such as is now in force in Ontario.

THE DEPTH OF HONEY CELLS.

A discussion arose as to the depth of honey cells. It appeared that some spaced the combs so far apart that the cells for honey were about twice the normal depth, and that, instead of trimming them down to normal when uncapping the honey for extracting, they were left. It was thought by several that, while it might not be injurious to have the cell deeper than that of the natural comb for brood-rearing, yet, if much beyond the natural depth, then it was more difficult for the bees to store the honey, and it could not be ripened as well by the bees in the deep cell.

INTENSIVE VS. EXTENSIVE BEEKEEPING.

W. Z. Hutchinson, in giving an address on the above subject, thought the general impression was that, when a person kept more bees, they must neglect them. He had not seen this result, but in his travels had found that those who increased their colonies and specialized were the ones who looked after them best.

LARGE OR SMALL HIVES?

This question is a live one at almost every convention, and it shows that the question has taken a deep hold on the beekeepers of this continent. Five present expressed themselves in favor of an eight-frame Langstroth hive, fifteen in favor of a ten-frame hive, and five were in favor of a hive still larger.

Mr. Cavanaugh threw out this thought: If those present had two piles of extracting supers, consisting of ten eight-frame supers, and another pile of eight ten-frame supers, which pile would they take? Both had the same comb capacity. He would take the eight tens, and make two trips less; besides, he objected to carrying in four more sides of lumber, which he would have to do if he took the eight-frame supers.

ALFALFA HONEY.

Several testified that alfalfa honey was being secured in Illinois and Iowa. The convention was reminded that some years ago it had been stated that alfalfa honey would never be secured east of the Mississippi River.

In view of the extensive irrigation plans which are going on in Alberta, and the alfalfa fields which are being seeded, and which are sure to produce very extensively, the subject of alfalfa in relation to bees is sure to be an important one in Canada in the very near future.

Mr. Trickie, living on the border between Illinois and Iowa, stated that soil, conditions of soil, and weather, had much to do with honey production. He had noticed his bees work well on one field of alfalfa, they giving him a surplus, and across the road a field of alfalfa was not visited by the bees at all. He could not attribute this to anything but soil condition.

THE CONVENTION ENDORSES ONTARIO.

The convention, without one dissenting voice, endorsed the invitation of the Ontario Beekeepers' Association in the latter's invitation to the National Association to meet in Toronto next year.

A Canadian who attended the convention, and conversed with many between sessions, could not but be impressed with the profound impression that had been made upon the United States by

Western Canada went to Canada, interest, unless should be The United The Canada a great man past, when ly expressed United States prosper she But now su Moreover, the nadians, the United States they have that they c dians can l of the United

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By DIALOGUE

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Western Canada. Judging from the number who went to Canada last year, and the increased interest, unless something unforeseen happens, there should be easily a quarter of a million go from the United States to Western Canada next year. The Canadian referred to stated that he had paid a great many visits to the United States in the past, when the impression was, and had been freely expressed, that Canada would be a part of the United States, and that if she would grow and prosper she would have to join the United States. But now such an opinion had not been offered. Moreover, they appear to believe, as firmly as Canadians, that her growing-time has come, that the United States cannot hinder her progress, and they have more to gain by seeking to make all that they can out of that prosperity, than Canadians can lose out of any attitude on the part of the United States.

Alfalfa and Bees.

Alfalfa-raisers find to their advantage to have a few stands of bees. As the original cost is slight, and the bees provide their own food, go after the raw material for the manufacture of honey, demand but slight attention, and make such bountiful returns, bee culture has come to be a valuable "side line" for the farm. As blooms are to be found in alfalfa districts every day from early May to late October, the bees have a constant opportunity for service.

Alfalfa honey is white and clear, in an extremely delicate color, has a delicious flavor, and an aroma that is delightful. One authentic report from a Western Kansas county is of a single hive that contained nearly 200 pounds, and of another having ninety-six pounds. The owner of these had twenty-five acres of alfalfa which in one year yielded him over one hundred tons of choice hay, besides the honey. The next year he increased his apiary to fifty stands.

While the average yield per hive elsewhere varies from fifteen to thirty pounds, the average in the alfalfa-growing territory is far higher. Thus, the financial returns of alfalfa may be greatly increased, and in some instances doubled, by having, say, two colonies of bees for each acre. Or, if only a part of the alfalfa-raisers in a neighborhood kept bees, this ratio could be doubled or trebled by those who do. Unlike other trespassers on neighbors' fields, the bees do the neighbors a distinct favor, by fertilizing their alfalfa.—[From Coburn's "The Book of Alfalfa."]

POULTRY.

What We Should Hear if Our Hens Could Talk.

By Martin Trehwitt, Carleton Co., Ont.

IALOGUE BETWEEN MRS. W. DOTTE AND MRS. B. DOOR.

Mrs. W. Dotte.—Good-morning, Mrs. B. Door, I hope I see you well and hearty?

Mrs. B. Door.—Well and hearty indeed; it may be easy for a lady like you to talk about being well and hearty, who have three meals a day, but if you were in my place, perhaps you would not speak so cheerfully. Now, for instance, I suppose you had a nice breakfast this morning?

Mrs. W. D.—I should think we did. We had a beautiful little breakfast. It seemed to be all kinds of nice things boiled up and mixed just right, and it was so nicely seasoned too; just the right amount of salt, and something else, but what it was I don't know, only I do know it was tasty, and seemed to warm a body up just nice (ground ginger), and it was served up so nice, too. It was just warm, and served in those nice long boxes master made for us, which I think is ever so much nicer than having it thrown on the ground where everybody scrambles over it, and then you have to eat all kinds of dirt. I will say master is particular about our food.

Mrs. B. D.—I wish my master was, for we never have any regular meals at all; in fact, my master thinks we should not be fed anything at all, unless it is a few scraps thrown out from the table, and then there are so many of us, and we are such a hungry lot, that we never get more than a mouthful. What time did you have breakfast this morning?

Mrs. W. D.—We had our breakfast quite by 7.30.

Mrs. B. D.—7.30! Why, I never have a chance to get out of the house before about 9 a.m., and then, you know, all the early worms are gone. But Mrs. W. Dotte, do you think your master will make money—or, what those human folks call profit—out of you, for I heard my master say one day that you would eat Mr. T., meaning your master, out of house and home with all his fancy feeds?

Mrs. W. D.—Well, Mrs. B. Door, I don't know what your master calls fancy feed. If good home-made grain is fancy feed, well, then, we are fed nice. For instance, we have about four mornings in the week buckwheat, and the other three mornings a mash, made up of all the scraps from the table, and, you know, there is always some

waste where there are children. Then the lady of the house always throws us two or three handfuls of cracked corn, or some other kind of grain, just as a kind of appetizer; then at night we have a good feed of oats about an hour before we go to roost, and we seem to get just the right amount at night to make you nice and peckish in the morning, and ready for breakfast. So I don't see there is anything fancy about that kind of feed; it is wholesome and clean, and, as I said before, the mash is served up clean and tasty, and so we enjoy it, and we are so happy we run about laughing and cackling all day. Then, again, my master feeds us something, I suppose, as he feeds himself and family, always a change of grain, so you can be sure we are quite satisfied with our lot.

Mrs. B. Door.—But where does the profit come in?

Mrs. W. Dotte.—Well, Mrs. B. D., thirty-seven of us were hatched April 17th in an incubator. After we were nicely dried we were placed in a nice, warm, comfortable house, called a brooder, and when we got frightfully hungry the lady of the house gave us some nice food—it seemed as if she knew just what was best for us—and although we didn't get all we could have eaten, yet we soon got some more, and once we were able to peck about a bit and scratch, we found such a lot of nice seeds and cracked grain in the chaff on the brooder floor, that we always seemed to find just enough to keep us going comfortably. When we were a week or so old we got a run out on a nice little bit of grass, and it was so clean and juicy and tender that you may be sure we enjoyed ourselves immensely. Well, when we got big enough master let us out, and we could wander around a big field and enjoy life, and I know we didn't cost master so much then; we picked up such a nice lot of juicy worms and insects. On the 25th of October (Thanksgiving Day I heard it was) I laid master the first egg, and I have been laying ever since—of course, with a day's rest now and again. A few days after I started another of my sisters started, and one after another joined in, until the whole 11 of us are helping pay for our food. I have only one thing to say against master, and that is he is a bit cruel at times, for he killed such a lot of my brothers, and what he calls culls, but he sold them at a good price, and people kept coming for more, and wanted to buy us, as they said we were such a nice, clean-looking lot, they were sure we were an ornament to any place. Here we are at the end of November, having laid seventy eggs, and by what master says eggs are dear now, and what, with the profit from my brothers and from the eggs, he hopes to be well into pocket, especially as there is more demand than supply.

Mrs. B. Door.—Your arguments are much more convincing than my master's, and now I can see the reason why you are so well cared for and tended. Now, our case is different. We were hatched early in April, too, but under a hen, and there were only four of us out of a dozen, and I sometimes wish I had been one of the eight that did not come to town. However, having come, we had to make the best of life, which best was poor enough in all conscience. After we were hatched our mother was allowed to take us just where she pleased, and, oh! she did seem to walk such a way, but she said if we were to exist at all we must hustle and find something to eat, as our master thought he had done all that was required of him when he had given us the chance to exist. Like you, we roamed over the roads and fields, and thought ourselves very lucky if we could find some nice fresh horse droppings, for then, at least, we had a taste of corn or undigested oats; not much, certainly, but still we had to be thankful for small mercies. Of course, as I said before, we had the scraps from the house, but the old hens always chased us away, although our mother fought well for us, and I'm afraid often went hungry herself to feed us. Another thing I am sorry for, and that is we are covered with all these horrid little insects—lice, I think they are called—so that we waste half our time moping about and scratching ourselves. Why is that, and why have you none on you? You always seem cheerful and happy, and I know master is jealous when he sees you and hears you cackling, as he knows you don't cackle for nothing, and I know I am not going to lay an egg for months yet, but perhaps once the warm weather comes again we shall make up for lost time.

Mrs. W. Dotte.—The only reason, Mrs. B. Door, I can give you for being clean and free from those horrid insects is that we had: 1st, a better start in life, by being artificially incubated, for then we had no chance of getting a supply from old mother hen; 2nd, is that our house, perches, dropping boards, etc., are always kept clean, our house is well ventilated, so that we don't get up of a morning with that horrid taste in the mouth we would have if we were all kept huddled together in a dirty, stuffy house; 3rd, we have always a nice box of dry dust, such as ashes, sand, a bit of sulphur and a handful of air-slacked lime as a dust bath; 4th, and last, we have good wholesome food, so that our constitution is not run down for want of proper nourishment. I am

really sorry for you, Mrs. B. Door, and I am sure if your master would only think, and do to you as he would be done by himself, he would soon see where the profit comes in; and, unfortunately, he is not the only one, for by what I can hear it is the general rule with the majority of farmers to let fowls fend for themselves, and if they don't get eggs out of us in winter, when eggs are dear, they at once put the blame on us poor biddies, and say we are the most useless stock on the farm; when, as a matter of fact, we would willingly pay the rent of his farm for him if he would only give us half the attention he gives his other stock. But I must wish you good-morning, Mrs. Barn Door, as I must hurry to contribute my share towards our keep and the egg basket.

Mrs. B. D.—Good-morning, Mrs. Wyandotte, I am sure such as you are an example of what we all should be, but as you know circumstances alter cases, and in my case I must hustle and try to find something to relieve the pangs of hunger brought about by a man who knows no better. His father kept hens just so, and he thinks it right to keep us just so. Till we meet again, good-bye.

Turkey and Water-fowl Club.

The annual meeting of the Turkey and Water-fowl Club of Canada, announced to be held in the City Hall, Guelph, on Thursday forenoon, Dec. 9th, was adjourned until Thursday evening, in order to have more of the members present.

Mr. Scanlan was voted to the chair, the president and vice-president being absent. Minutes of last annual meeting were read and adopted. J. Anderson, of Guelph, was appointed auditor, and found vouchers for all moneys going through the treasurer's hands; a balance on hand of \$21.71, and outstanding accounts to the amount of \$20. Upon motion, his report was adopted.

It was moved by Mr. Douglass, seconded by Mr. Luxton, that in future, special prizes at Winter Fair be given for best collections in each variety, so far as the funds of the Club will permit. The secretary was instructed to procure fifty gold-embossed silk ribbons, and to offer six of them to the Eastern Ontario Poultry Show, six to Winnipeg industrial, six to Calgary Exhibition, and six to Regina Poultry Show, unless the Dominion Exhibition is held at Regina in 1910, in which event the six ribbons to go to the latter. The secretary was instructed to ascertain from members their wishes as to publishing a Club annual, and to use his own judgment as to issuing same. The secretary was further instructed to write to the Winter Fair Board, asking that White Chinese geese be added to the prize list; that the prizes on turkeys, geese and ducks be graded according to entries, the same as on other varieties of poultry, and to ask that William Beattie, of Wilton Grove, be appointed judge of turkeys at next Winter Fair.

The following officers were elected for 1910: President, Jas. Scanlan, Ennotville, Ont.; Vice-President, Alf. C. Crane, Guelph, Ont.; Secretary-Treas., W. J. Bell, Angus, Ont. Executive Committee—Above officers, with C. B. Gould, Glencoe; D. Douglas, Mitchell, and A. G. H. Luxton, Mt. Forest. Auditor, E. S. Baker, Guelph, Ont.

The Club starts off with twenty members for next year, and many of the old breeders yet to hear from.

From a Nova Scotia Poultryman.

Editor "The Farmer's Advocate":

Noticing many articles on winter production of eggs in your columns, I write, giving my experience. I have one hundred hens in winter quarters, they being Rhode Island Reds, mostly utility stock. The house has an open front to the south, covered with muslin curtains, which can be let down on a cold night, and raised on fine, warm days. The floor is made of inch lumber, covered with a fine coat of sawdust and litter composed of oat straw. In one corner is a dust-bath of sifted coal ashes, and about six inches lower than the roosts is the dropping board; the latter is cleaned every morning, and a fine coating of sawdust put on it after cleaning to serve as an absorbent. Along one side of the building is a row of nails, on which are hung pieces of meat, cabbages, turnips and mangels. Gravel, old plaster and ground oyster-shells are kept before the birds at all times, and fresh water and occasionally skim milk is given.

The birds receive a feed of oats and cracked corn in the morning; a mash consisting of boiled potatoes, corn, oats and kitchen scraps at noon, and a feed of hard grain at evening, shortly before going to roost. The grain is buried in the litter, making the birds work to get at it, thereby giving them exercise—a much-needed requirement in a winter-egg-producing flock.

At time of writing, (October 30th), the April pullets have just begun to lay, while the yearling hens, those which have moulted, are laying, also. I have never kept an official account of the record of the flock, but will endeavor to give you some figures next spring. H. HARRY MACPHEE.

Antigonish Co., N. S.

GARDEN & ORCHARD.

Pomological and Fruit-growing Society of the Province of Quebec.

Enthusiasm prevailed throughout in the recent session of the Quebec Pomological and Fruit-growing Society, which met at Macdonald College, Que., on the 9th and 10th inst. The Society was especially favored by the presence of the Hon. Sydney Fisher, Minister of Agriculture for the Dominion; Hon. J. A. Caron, Minister of Agriculture for the Province of Quebec, and Hon. J. L. Decarie, Provincial Secretary, all of whom gave addresses full of inspiration and encouragement. The spacious Assembly Hall of Macdonald College was given over to the two-days' session, and the large exhibit of fine fruit added materially to make the convention one of the best in the history of the society. The Province is making rapid advancement along the line of horticulture generally, especially fruit-growing.

Much regret was felt at the absence of the President, G. Reynaud, of La Trappe, Que., who has recently been stricken with paralysis. It is the hope that a speedy recovery will take place, for the Association can ill-afford to lose men of President Reynaud's type. He has been one of the most ardent advocates of advanced methods in fruit-growing, doing more to encourage horticulture in the Province than any other one man, both through his teaching at La Trappe and other information so cheerfully given through various channels, especially at the Pomological Society meetings. He was able to furnish the Association with an address full of inspiration and encouragement.

He referred to the great assistance rendered by Macdonald College, and the wide field touched by holding the winter meeting at this institution, benefiting the whole Province through the 300 students or so who are given an opportunity of attending the convention.

While in the realm of science many a problem still remained unsolved, and though the field of investigation still remained large enough for numerous workers to toil laboriously in it, it is a pleasure to acknowledge, he said, that in the field of immediate practice remarkable progress has been realized; and that in this respect, Canada, and, in particular, the Province of Quebec, has not stayed behind. A visit during summer through the parks of the town and the orchards of the rural districts, which make the country places so attractive, is sufficient to convince one of the progress of horticulture in the Province.

Reference was made to the recent American Pomological gathering at St. Catharines, which he had the privilege of attending. The trips made to various points of interest, through the kindness of the Provincial Government of Ontario, and the enthusiastic citizens of the section of the Province, gave one an opportunity of studying the possibilities in a peach-growing part of Canada.

While all regretted the absence of the President, his address inspired the hope that he would still continue to render valuable service to the Province.

Hon. Caron, although only lately appointed Minister of Agriculture, is well in touch with the agricultural industries of the Province. Largely interested in farm operations himself, he has an intimate knowledge of the requirements of rural communities. He advocated better and more thorough methods. He expressed pleasure at meeting members of the Association in session, and congratulated the Province on the excellent fruit display. He assured the convention that he would do all he could to advance the horticultural interests of the Province.

The Hon. J. L. Decarie, ex-Minister of Agriculture, in an eloquent and forcible address, expressed his pleasure at being able to attend the convention. His motto was, "To the farm through the school." Education, he said, was necessary. Education was the weapon to use to gain supremacy. Instruction in the schools to do more effective work on the land. His whole effort as Secretary of the Province would be to ward a better school schools to prepare a better class of farmers. He was glad to see the Professors of Macdonald College and those of La Trappe Institute meeting together under the one roof to discuss topics relating to horticulture. We want more of this. We were fortunate in having such institutions, and he trusted the good work they were doing would be fully appreciated.

He promised to render any assistance possible, and would join hands with the Minister of Agriculture in doing what he could to advance the agricultural interests of the Province.

Dr. C. Gordon Hewitt, Entomologist, Dominion Experimental Farm, Ottawa, presented a valuable address on "Fruit Pests," dealing particularly with the codling moth and also mentioning the most general fruit pests of the Province. The presentation of the subject was good, and the proposition of the Association was that Dr. Hewitt was to be a part of it. The address was comprehensive, clear, practical, giving the latest information as to the best ways of controlling these pests, and impressing upon the audience the importance of thoroughness.

Prof. J. M. Swaine, Entomologist of Macdonald College, followed, with an admirable illustrated talk on fruit-tree pests. He mentioned the importance of knowing something of the habits of the insects, in order to combat them successfully.

C. P. Newman, Lachine Locks, Que., gave a valuable paper on small fruits; Father Athanasie, La Trappe, on growing asparagus in the orchard. Both of these addresses brought on an interesting discussion.

Prof. Macoun's paper on plums was one of the most valuable papers of the convention. The status of the plum industry of the Province was clearly set forth. He drew together all the information published on plums by horticultural conventions during the past forty years, the general conclusion being that European plums, generally, were not to be depended upon. Their wood would stand the winter, but the fruit buds would not. Outside of the Mount Royal and Itaynes, both Montreal seedlings of the European plum, he did not think it possible to grow them on a commercial scale, except in the districts along the St. Lawrence, below Quebec. He advised the planting of the Americana plum, which was hardy, and had given profitable crops in the Province.

The morning session was given up largely to business. The following officers were elected: Hon. Patrons, Hon. S. A. Fisher and Hon. J. A. Caron; Hon. President, R. W. Shepherd; Hon. Vice-President, G. Reynaud, La Trappe; President, W. S. Blair; Vice-President, A. D. Verreault, Village des Aulnaies; Sec. Treas., Peter Reid, Chateauguay Basin; Directors—G. B. Edwards, Covey Hill; E. A. Buzzell, Abbotsford, Que.; G. P. Hitchcock, Mississippi; Rev. H. A. Dickson, Rectory Hill; Auguste Dupuis, Village des Aulnaies; C. P. Newman, Lachine Locks; Dr. Wm. Grignon, Ste. Adile; H. W. Thompson, Dudson; N. E. Jack, Chateauguay Basin.

On accepting office, Prof. Blair thanked the members of the convention for the honor conferred upon him. He hoped to be able to give more time to horticultural work in the parts of the Province away from the immediate neighborhood of the college than heretofore.

The secretary's report showed good standing financially, and increase in membership. Following up the secretary's report, the following resolutions were adopted:

That this society shall offer to pay the railway fare of one delegate from each local horticultural society to the annual winter meeting of the society for the year 1910, with a view of inducing a better representation of the fruit-growers' interests of the Province.

That, in the opinion of the Association, it is considered advisable to make an exhibit of fruit from this Province at the Royal Horticultural Show, London, next fall, and that the secretary be delegated to confer with Government regarding same.

W. T. Macoun introduced the subject of the advisability of adopting a uniform system for the judging of apples. The question was discussed at some length, and a committee appointed to take the matter into consideration, with a view of conferring with other similar organizations, and adopting a system considered best suited to meet the requirements.

Resolutions of regret, and hope for his speedy

recovery, were passed, and words of sympathy expressed towards G. Reynaud, Horticulturist, of La Trappe Agricultural Institute.

Thanks were expressed to those who contributed so materially toward the excellent programme.

The address of J. C. Chapais on "Forestry and the Farm" was most exhaustive and practical. "The Value of Co-operation," by Deputy Minister of Agriculture G. A. Gigault, was warmly received. He drew special attention to the advancement made in the Hood River District of Oregon through the co-operative societies. These two addresses will receive more space at a later date.

Alex. McNeill, Chief Fruit Division, Ottawa, though unable to be present through illness, sent a paper of great value, which was read by Prof. Blair. Prof. Lochhead also gave a valuable address on "How Plants Feed." Owing to an overcrowded programme, the address on "Methods of Propagation," and the demonstration in apple-packing, by Prof. Blair, were not given.

J. A. Ruddick, Dominion Live-stock and Dairy Commissioner, gave a fine illustrated address on fruit-growing in different districts of America.

Music was furnished by local talent, and Dr. Robertson added to the value of the convention by timely observations.

Onion-seed Experiment.

Perhaps the most interesting paper read at the Ontario Vegetable-growers' Convention, in Toronto, last month, was that dealing with the seed-onion experiment conducted by the Association.

The almost entire failure of the onion crop three years ago, and the inability to obtain any redress from the merchants who supplied the seed, started the growers upon their new work, to ascertain from what countries the seed is generally imported, and to test the imported seeds along side the home-grown. The following information will, therefore, prove interesting to those who are engaged in this particular line of husbandry. Onion seed was obtained from three sources: California, France, and Ontario, Canada.

No. 1—California-grown seed was supplied by Steele, Briggs Co.

No. 2—Sutton's B; French seed, supplied by Sutton, Eng.

No. 3—Ontario-grown seed, supplied by A. McInnes, London.

No. 4—Sutton's (A); seed supplied by Sutton, Eng.

F. Fuller and F. E. Reeves were appointed to report on the results, and they visited the various plots given below in the growers' names:

F. E. Reeves, Toronto Plots—No. 1 and No. 3 compared very favorably for size. No. 1 was of good globe shape; No. 3 was inclined to be a little flat; No. 2 was not as good a stand, but was a good type; No. 4 were later, and looked as if they would be all scallions. Mr. Reeves wrote F. Fuller, London, since harvesting, reporting that he obtained 20 pounds of good onions and 22 pounds of scallions. While comparing, Mr. Fuller considered that No. 1 was twenty per cent. better than No. 3, which was ten per cent. better than No. 2; No. 4 was not worth growing.

Plots, Thos. Delworth, Weston.—He made two sowings, first May 15th, second June 1st. First sowing, results: Nos. 2 and 3 were very much the same for size; No. 1 was a little larger, and a better type; No. 4 was very much later, and, as at Mr. Reeves', were nearly all thick necks. Second sowing gave same results as earlier one, excepting that the onions of the corner were 25 per cent. smaller.

H. W. Foster, Sec. Treas. Onion-growers' Association, Scotland, while discussing onion-growing there, informed the inspector that they had formed a co-operative association and a stock company, and were building a storehouse, so that they could hold their crop until prices were more favorable. Most of the growers there were raising their own seed.

Plots, Mr. Hart, Woodstock.—Nos. 1, 2 and 3 very much alike, No. 1 being a little superior. No. 4, nearly all thick necks.

Plots, C. Wesley Baker and D. Davis, Middlesex County.—All were of poor quality, owing to blight in July. No. 1 the most vigorous; Nos. 2, 3 and 4, useless.

Plots, J. R. Teople, St. Thomas.—Nos. 1, 2 and 3, fair; No. 4, no good.

Plots, Geo. Meloche, Ojibwa.—Good sample, No. 1, heavy; No. 3, good; No. 2, fair; with another three weeks No. 4 would ripen, but not as good as No. 2.

After the reports were read, G. H. Clark, Seed Commissioner, Ottawa, who was present, said it would be a good idea to test the seed for another year or two, claiming that one could not accept conclusions from one year's experimenting, and it was decided to adopt the suggestion.

It will be seen from this year's tests the California onion seed led, with Ontario close behind. The French seed was a dismal failure in most cases, and the grower will do well in not handling this seed. W. BARLETT, JR.



Prof. W. S. Blair.

President Pomological and Fruit-growing Society of Quebec.

We have Horticultural Toronto in reference sent by the Agricultural Society of Catharines and surmount, unronto, an before loc cold-stora

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Ontario Peaches in Britain.

We have received from P. W. Hodgetts, Director Horticultural Branch, Department of Agriculture, Toronto, copies of some very interesting reports in reference to experimental shipments of peaches sent by his Branch to the Ontario Department of Agriculture, London, England. A shipment consisting of some 25 cases, was packed at St. Catharines, each peach being wrapped in paper, and surrounded by cotton batting. The shipment, unfortunately, missed the express from Toronto, and was held in storage there for a week before leaving for Quebec, where it was placed in cold-storage on the boat.

It was impracticable for such a small shipment to get cold-storage between Toronto and Quebec, and we believe there was no cold-storage from Liverpool to London. There was a further delay of a few days at Liverpool, the fruit getting in there on Friday, while it did not reach the London office until the following Tuesday. Despite these drawbacks, the peaches were still in fair condition on arrival, and were referred to by the press in such terms as the following extract, from the Daily Mail of October 16th:

"The first consignment of peaches ever sent from Ontario to this country has just arrived in London, and the fruit is large, richly-colored, and of exquisite flavor."

While some of the reports from officials and others who had them on exhibition are not very flattering, still they give sufficient encouragement to believe that certain of our varieties of peaches can be landed in Great Britain, and sold at a nice profit to the growers here. "If South Africa can land this fruit in Great Britain in good condition," says Mr. Hodgetts, "I see no reason why our Ontario peaches should not, with a handicap of only half the time en route, arrive in just as good shape."

There is also enclosed a letter from Mr. Fleming, of Grimsby, Ontario, concerning a shipment of peaches sent by him to London. The reports show that his fruit did not arrive in as satisfactory condition as the shipment made by the Horticultural Branch of the Department of Agriculture. We are not in possession of all of the facts in regard to his methods of packing, etc., so cannot make any comparison thereon. The letter from the consignee is, however, of value to our growers, and Mr. Fleming has consented to this being published:

London, W. C., Oct. 19th, 1909.

Mr. R. Hamilton Fleming, The Inchyra Peach Orchards, Grimsby, Ontario:

We received the peaches ex "Sardinia," on Monday last, and at once put them on show. Your brother, Dr. Fleming, also has called twice, and seen the fruit, and we are now enclosing you account sale, and check for the results. They are not the right varieties to sell well here, as we have had a good many trial consignments of the yellow-flush fruit from Canada, and in no case have been able to make satisfactory prices. The only peaches which sell well on our market are the better-colored freestone melting varieties, but we understand that, although you grow them, it is very difficult to get them here in good condition, as they will not stand very long, and must be sent direct from the orchard to us in cool chambers.

When the growers in Cape Colony started peaches for this market, they planted Crawford and similar varieties, which they obtained from California, but they have had to get rid of them all, as they would not sell well here. As they have to go into second-rate shops, we do not anticipate that it would be possible to get much more than we have made, at any time, even if they came in good condition. There is no fruit varies so much in price, according to variety and condition, as the peach. Another thing against them is that they come on our market just at a time when we are inundated with home-grown fruits, as well as large quantities coming from the Continent and elsewhere; so that, on the whole, we cannot advise you to go in for this class of fruit in any quantity for this market.

This lot were tolerably sound on arrival, but went very specky quickly, and were almost useless next day. Some we sold yesterday were rotten this morning, and we had to lower the price in consequence.

Yours faithfully,
GEORGE MONRO

Mr. Hodgetts has also received some correspondence from the agent of the Dominion Express Co. in reference to shipment of peaches for London, in which it is shown that, to get a refrigerator service from Liverpool to London, payment would have to be made on 30 cwt., which is the minimum for refrigerator cars there. In addition, there is the cost of icing, which amounts to about 15 shillings, which has to be borne by the shipper. At the same time, the agent there pointed out that it is hardly necessary to send peaches forward in refrigerator cars in Great Britain at the time of the year when such goods would go forward.

Early Apples Sold Well.

The value of cold-storage for the shipment of early apples is well illustrated by the following statement, published by J. A. Ruddick, Dairy & Cold-storage Commissioner. A Central Ontario apple-exporter shipped 354 barrels of apples in cold-storage by the S. S. Pretorian, which sailed from Montreal to Glasgow on October 9th, last. They were landed in excellent condition. At the sale which followed, No. 1 grade brought the following prices per barrel: McIntosh Red, 23s. 6d.; Alexander, 23s.; Kings, 31s.; Snow, 23s.; Wealthy, 21s.; Baxter, 21s.; Canada Red, 17s. 6d.

The apples in this shipment were all well packed and properly graded. The highest price paid for Kings in ordinary storage in the same steamer was 21s. 6d.; for Wealthies, 14s. 6d.

THE FARM BULLETIN.

South Perth.

Winter is coming on gradually, after one of the finest autumns I ever remember. This fine weather, however, dried up the pastures very badly, resulting in a greatly decreased flow of milk for those who had no supplementary fodder, as roots, rape or alfalfa. And, by the way, the latter is being tried, with considerable success, here now, but lack of drainage is a great drawback. It seems easy enough to get a catch, but pasturing and heaving finishes it. The corn crop is rather slim; so are oats and hay and mangels, but turnips and potatoes and wheat and barley are good. Apples are fair in yield, but few, orchards are properly pruned and sprayed, resulting in many culls from scab, worms, and poor development, though the latter is often due to lack of fertilization by insects and bees during bloom. They sold for \$1 per barrel on trees for all first and seconds, fall and winter varieties, both taken. This, of course, does not mean a fortune for the grower, and methinks this price might easily be doubled by co-operation. According to reports, flax-pulling machines are coming into general use. Three of them were working in the vicinity of St. Mary's this summer, and did the work fairly well. Of course, it won't sort out the weeds and thistles, but this may result in growing cleaner crops of flax. It also won't work on new breaking, where flax is often sown.

The agricultural reports were late in coming this year, reminding us of old times. They give us the information about a year after it happens. But they contain invaluable information, though the Provincial ones could be improved by putting at the top of the page the name of the department or person reporting, as the Dominion one does, instead of continuing the same unending title. His Majesty's printer could also surely be hurried up a little, especially on the Provincial reports.

The Hydro-Electric private telephone line is being erected through here, but so far we hear nothing of the municipalities getting anything for the right of way. They follow the road, and as it is of no benefit to the people along the route, and takes up room which may some time be needed for rural lines, we think the council should be paid for the right-of-way.

Cement tile are being used to some extent. They are made in the neighborhood, and are said to be as cheap as the clay, and, I suppose, better. They should be straighter, anyway. Hollow cement blocks seem to be all right, and make a very substantial-looking wall. They come a little higher than the solid concrete; but if they stand as well, ought to make the difference in the sale of the farm, besides being drier, and likely warmer. As a manufacturer, in his advertisement, says, I would advise anyone contemplating the building of either house or barn to look into these blocks before doing so. J. H. BURNS.

United States Crop Report.

The Crop-reporting Board of the Bureau of Statistics, of the United States Department of Agriculture, estimates, from the reports of the correspondents and agents of the Bureau, that the newly-seeded area of winter wheat is 7.9 per cent. more than the revised estimated area sown in the fall of 1908, equivalent to an increase of 2,449,000 acres, the indicated total area being 33,483,000 acres.

The condition of winter wheat on December 1st was 95.8, against 85.3 and 91.1 on December 1st, 1908 and 1907, respectively, and a ten-year average of 91.5.

The newly-seeded area of rye is estimated as being 1.2 per cent. more than the revised estimated area sown in the fall of 1908, equivalent to an increase of 25,000 acres, the indicated total area being 2,155,000 acres.

The condition of rye on December 1st was 94.1, as compared with 87.6 and 91.1 on December 1st, 1908 and 1907, respectively, and a ten-year average of 92.9.

Details, by States, of the above crops will be published in the December Crop Reporter.

The final estimates of the total acreage, production, and farm values of principal crops for 1909 will be issued on December 15th.

Report of Seed-growers' Meeting.

At a meeting of the members of the Canadian Seed-growers' Association, held in the City Hall, Guelph, during the Winter Fair, the Sec.-Treasurer, L. H. Newman, gave a report of the work in Ontario. Mr. Newman outlined the progress the work was making in the Province. He said the membership was growing, and the members were finding it more profitable every year. The cornmen of Essex and Kent were finding it particularly profitable in corn, in which work they were achieving marked success. Earlier strains were being selected, and the tendency to grow barren stalks was being eliminated. A few men were held up as examples in this pioneer work, such as C. R. Gies, Heidelberg; Duncan Carmichael, West Lorne, and John McCallum, Shakespeare. Great care, he emphasized, should be taken by the members in doing their work, so that their seed would be looked upon with favor wherever it went.

L. D. Hansson, Grovesend, gave some of his experience in corn-breeding on his farm. He said he was a firm believer in the value of selection, and had increased the yield and early maturity in the last five years under the system approved by the C. S. G. A. He had gone from 90 bushels of ear corn per acre to 125 bushels of a ten-acre area. It was a gradual increase. He was operating with the Longfellow variety. He thought it was a suitable variety for any part of the Province, and gave an abundance of ears, many stalks bearing two good ears.

Some "Results Obtained by the Improvement of the Potato" was handled very satisfactorily by Alf. Hutchinson. He was growing Empire State. He thought the proper way to select was from individual plants. He had noticed a marked difference in the product of individual hills. He had got a considerable increase in yield from the selected hills. A diagram was shown giving the variation of yield in pounds from the different rows.

J. W. Clark, of Cainville, led the discussion, and thought that, instead of aiming at a few large potatoes in the hill, we should aim at a large number of medium-sized ones, such as the market required. He selected hills that had eight or nine good-sized potatoes in each.

Chester Nicholson read a paper, "The Choice of Foundation Stock and Its Importance." He laid emphasis on two main laws in plant-breeding, viz., variation and heredity.

T. G. Raynor, of the Seed Branch, discussed the field open to the Ontario farmer for the production of improved seed. He thought the climatic and soil conditions in Ontario were almost ideal for producing first-class farm seeds of all kinds. The prospective markets demanded that more attention be paid to the improvement of seed. The demand along some lines was exceeding the supply. He referred to the many inquiries from farmers and others as to where they could procure certain varieties of seed. He thought the local market was a large one, and could not only be enlarged, but better supplied. Farmers' Clubs were multiplying, and were co-operating in buying clover seed and seed corn in quantities. Seed merchants, too, were looking up individuals who were expert in seed-growing, and were paying good prices for such seed. In peas of the fancy varieties, the demand was exceeding the supply. There was an interprovincial trade, which might be encouraged. The foreign market was not to be despised.

J. C. Cote, of the Seed Branch, led in the discussion, and said that in Quebec they imported thousands of bushels of seed grain, oats chiefly, and large quantities of small seeds, as well. Ontario seemed to have the men to grow good seed, and he saw no reason why a big corn trade could not be worked up in Quebec.

Jas. Hunter, of Wyoming, gave briefly his experience in producing grain and draining his land. He was meeting with encouraging success.

All present voted that it was a profitable session. T. G. R.

Professor Carlyle Goes to Idaho.

Professor W. L. Carlyle, a native of Ontario, a graduate of the Ontario Agricultural College, and formerly Professor of Agriculture and Animal Husbandry at the Wisconsin and Colorado Agricultural Colleges, has recently received the appointment of director at the Experimental Station at Moscow, Idaho. Professor Carlyle is widely known as an enthusiast in his profession, and a first-class judge of live stock. He received an emergency call to undertake the superintendence of the live-stock department of the Alaska-Yukon-Pacific Exposition last summer, and performed the duties of the position to the satisfaction of all concerned. The best wishes of his numerous Canadian friends will follow him in his new position.

Items from Caledon Hills.

Editor "The Farmer's Advocate":

We are now over the busy season, and have got the cattle safely housed for the winter, which is already with us. The season has been a fairly good one, and the farmers in this section are again wearing the genial smile, after the sad faces of last season, which was caused by the hail storm of August, 1908. Many of us lost our grain, and had to buy grain and hay to winter over our cattle; and many a poor, struggling farmer had to sell out cattle because he had nothing to pay his taxes and rent. But, after a storm comes a calm, and once again, with the rise in prices of both beef and hogs, there is a tidal wave of prosperity. A great many farmers around here, owing to the late spring and the land not being drained, put in a great many acres of buckwheat, which turned out very profitable. Fall wheat is not grown in this section greatly, but wherever grown the yield was very good. Rye was also a good crop. Alsike is also grown to a large extent, and yielded well, although prices are not so high this year as in late years; but it is still a good-paying crop. Corn is coming into favor for dairying purposes, being a cheap feed, and also helping to keep the cows up to their milk after the grass is done. Silos are not numerous around here, but several farmers are interesting themselves in this branch, and I think next season will see silos being erected, especially by those who are sending milk to the cheese factory.

Several good sales of Clydesdales have been made at Orangeville Fairs this last season, this being the leading breed in this part, although the general-purpose horse is kept in large numbers by those on rented farms, and bred from almost any kind of sire of the light breeds. I think it would be very profitable for someone to run a good-sized Thoroughbred stallion in these parts, as they are marked by their minority. Sheep are kept in large and small lots, chiefly the Leicesters, and a small breed at that, although the Down breeds are more suitable to this part. There are a few flocks of pure-bred Shropshires kept, but, being rather small sheep, do not find ready sales. The Oxford Down rams are being looked to for crossing with the Leicesters to produce a more salable wool at the mills here. Prices being paid for the wool here do not increase the demand for the smaller Down breeds. Why the difference of price is not paid according to the grades of wool, I cannot say, 12½ cents only being paid by the merchants for long and short wool, unwashed, this last season. In cattle, Shorthorn grades are the leading breed, and most suitable for these hilly parts, although the Polled Angus are coming into favor. There are few Holsteins kept, but no one seems to be interested in the pure-bred Holsteins round here; they are likely to become a back number. In closing, I must say the Christmas "Farmer's Advocate" is a gem.

Peel Co., Ont. OLD COUNTRY JOE.

More Room for Seed Exhibit.

Editor "The Farmer's Advocate":

It seems to me that a word would not be out of place at this time about the Provincial Winter Fair which has just closed. In the first place, let me say I thought the Fair a great success, and the people of Guelph deserve congratulations on the great improvement which has been made in the Fair building.

But we must get down to our subject at once,

which is the seed exhibit. It would be interesting, and, I think, a great awakening, if all the readers of our trade-journal could get together and be questioned about what struck them most in the horse, cattle, sheep and poultry exhibits. I think it would be hard to keep from having more than one speaker at a time, and great enthusiasm would be exhibited. But, if we were questioned about the seed exhibit, I think I am safe in saying that blank astonishment would be clearly portrayed on most of our faces, and yet, if we could compare the value of the grain industry with that of poultry, I think it would stand about 1-7 in favor of grain. And yet we could not help noticing the fine room and splendid uniform fixtures and cages which the poultry exhibitors were supplied with. And they certainly deserve it. There was a splendid exhibit. But what about the seed exhibit? If we had looked closely, we might have found it in a little 2 x 4 corner, piled and jumbled up like an overstocked pawn shop. A lot of the seed grain was shown in bags of all nations, ages, sizes and colors. For the lover of variety, here was a paradise. Then, the corn exhibit—at least, I was told it was corn, as I am under six feet, and the corn was mostly piled away up on a high shelf, I could only see the butts of the ears. However, it was safe; I don't think the rats got any of it. The potatoes were shoved and piled down on a lower shelf, with the ends of the tubers showing.

I believe many of our country fairs have a better seed show. But what are we going to do about it? The other departments are filled up, and we do not want to see them any smaller; we want them as large as possible. So that here is a worthy problem for some of your readers to work out this winter. JUVENILE FARMER.

Brant Co., Ont.

Smithfield Fat-stock Show.

The great annual fat-stock show of the Smithfield Club opened in the Royal Agricultural Hall, Islington, London, on December 6th. The attendance was unusually large on the opening day, when His Majesty the King was present. The quality of the stock was of an exceptionally uniform order. In the cattle classes, it was a crowning day for the "blacks," as, in the final contest for the best beast in the show, there were four exhibits, three of which were Aberdeen-Angus representatives, and the fourth was an Aberdeen-Angus cross. The steers were declared the finest of this section of the breed ever seen at Smithfield. The supreme champion in the competition, open to all breeds, was the two-year-old Aberdeen-Angus steer, Pan of the Burn (whose picture appears in this issue), first in the older steer class, exhibited by Sir Richard Cooper, and bred by Col. McInroy, The Burn, Edzell. His weight at 2 years 11 months, at the show, was 2,022 lbs. In the yearling Aberdeen-Angus steer class, Lord Rosebery was first with his 23-months-old President of Dalmeny, whose weight is given at 1,511 lbs. The reserve champion of the breed was R. W. Hudson's second-prize two-year-old steer, Tachineal Style, whose weight at 2 years 10 months 3 weeks was 1,995 lbs.

The Shorthorns made an excellent showing in all classes. In the two-year-old steer class, the first award went to The Gentleman, a dark roan, bred by J. & A. G. Ross, Milleraig, and shown by M. A. Martinez de Hoz, London, his weight at 2 years 9 months 2 weeks 5 days being 1,792

lbs. In the younger steer class, the Messrs. Ross, Milleraig, were first with a roan yearling, regarded by many as the best Shorthorn ever seen at the Smithfield. His weight was recorded as 1,302 lbs., at 22 months 3 weeks 4 days. The second place was given to the King's light roan, Fearless, very handsome, but not so highly fitted, his weight at 21 months 2 weeks 5 days being 1,386 lbs. The Milleraig yearling was the breed champion, and the King's Fearless reserve.

Herefords made a particularly strong show, and for the first place in the steer class there was a tie between J. J. Crilland's Flashlight, whose weight at 2 years 8 months 1 week 3 days was 2,030 lbs., and the King's Dandy, whose weight at 2 years 7 months 2 weeks was 1,787 lbs. Dandy was finally declared the winner by the referee, and was also breed champion, with Flashlight reserve.

The breed championship in Galloways went to John Cunningham's heifer, Maggie Lauder, which at 2 years 10 months 3 weeks was 1,447 lbs., the reserve being Robert Graham's yearling steer, Spot, whose weight at 22 months was 1,414 lbs.

P. E. Island.

NOTES FOR DECEMBER.

Up to the 10th of the month the weather was exceedingly mild, and the rainfall the heaviest we ever remember. The ground is completely filled with water, and springs are gushing forth where they were never known before. Fall work on the farms is well advanced, and large quantities of produce have been shipped at good prices. For this month, our principal exports are oats, potatoes, beef quarters and carcass pork, all of which, with the exception of potatoes, are bringing very satisfactory prices. Considerable creamery butter is also going forward to Halifax and St. John, at 2½ cents. The milk supply, which was large for November, still keeps up this month. Our egg trade, which has been very large and profitable, is practically over, as far as export is concerned, till next March. It is impossible for us to get a market for winter eggs, on account of the difficulty in getting them to cities on the mainland, and our own Island market is so limited that the price seldom goes above 25 cents in winter. When you get away from the cities and towns a little distance, the price is no higher than in the summer, when they can be produced so much more cheaply.

Since the Farmers' Institutes have been established, there is much more interest taken in stock-improvement, and a very considerable number of pure-bred animals, as a result, have found their way into the herds of the more progressive farmers.

Just this evening I have received the Christmas "Farmer's Advocate," with its wealth of beautiful illustrations and budget of interesting and instructive reading matter from the pens of many of the leaders of thought along agricultural lines, who, through the paper, are helping us to work out the ever-recurring problems, the solution of which tends to make the conditions of life easier and the calling of the farmer more inspiring and profitable.

WALTER SIMPSON.

The Dominion Budget.

The Hon. Mr. Fielding was able to give a much more cheering statement in his recent budget speech than last year. By the end of the fiscal year, it is expected that the revenue will amount to \$97,500,000, or an increase of \$12,000,000 over that of 1908-9. For the current year, the expenditures chargeable to income will not exceed \$81,000,000, a reduction of \$3,000,000. With increased revenue, and reduced expenditure, Mr. Fielding is able to announce a surplus of \$16,500,000. Whereas last year the addition to the public debt amounted to \$15,000,000, this year there will be added \$17,750,000, or over \$2,000,000 less than the appropriation for the Transcontinental Railway. The outlook for the coming year is even brighter.

The bounties on iron and steel expire on Dec. 31st, 1910, and those that remain will be charged against income, instead of, as in the past, to capital account.

No tariff changes are announced. President Taft's address is regarded as an assurance that the friendly trade relations between Canada and the United States will be maintained.

The National Horse Show.

The Canadian National Horse Show Association, whose annual spring show in Toronto, owing to inability to secure suitable quarters, was this year withdrawn, have succeeded in making satisfactory arrangements on the use of the Armories, which to hold the same next spring, the dates not being May 3rd to 7th. The cavalry regiments of Toronto, in cooperation with the Canadian Horse Shows Association, and the event will be not only a military show, but also a military horse show, and the arrangement a joint executive committee has been organized, at the Toronto Garrison, Ontario, by the Horse Shows Association.



Pan of the Burn.

Aberdeen Angus steer. Supreme champion at the Smithfield Fat-stock Show, London, England. Age, 2 years 11 months. Weight, 2,022 lbs.

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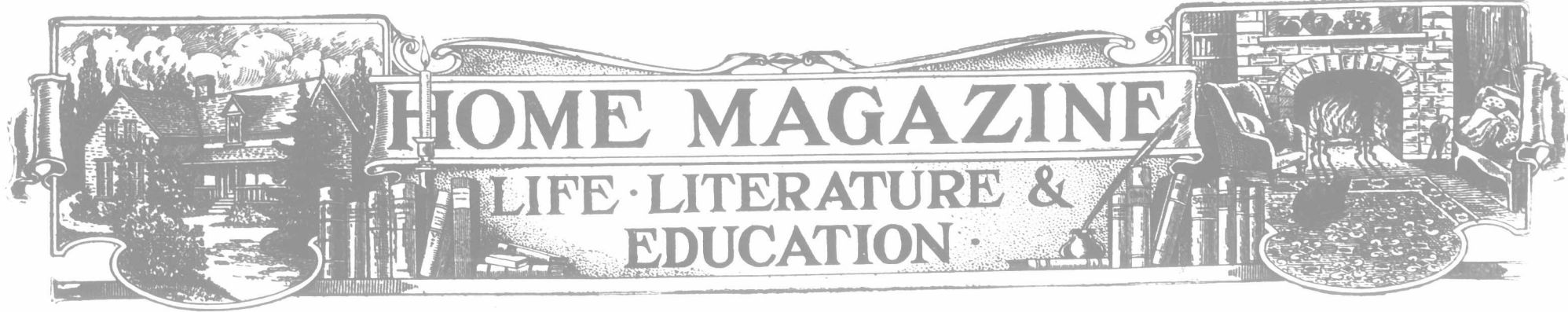
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The budget rejected by the House of Lords; Parliament prorogued, and the promise of the King obtained that before the time voted for its meeting again it shall be dissolved; the country in the meantime minus its supplies (ordinarily voted annually by the Commons), and so dependent for the time upon borrowing to meet its expenses; everywhere such a canvass as has seldom been seen in Britain, looking to the general election, which will probably be held some time during the latter part of January;—this the tumultuous ending of the stormiest political fray that the British House of Parliament has seen in many a decade, a fray which has brought the greatest speakers on both sides to their feet, Lords Morley and Pentland and Loreburn and James, Premier Asquith, ex-Premier Balfour, Lord Balfour of Burleigh, Austin Chamberlain, the Earl of Rosebery, and the Bishop of Hereford. Behind all stand two comparatively quiet figures, the little Welshman, Chancellor of the Exchequer Lloyd-George, and Winston Churchill, President of the Board of Trade, in whose veins, through his American mother, runs a strain of democratic blood, a reason, probably, why he should have been the most ardent collaborator of Chancellor Lloyd-George in the construction of the budget of 1909.

Chancellor Lloyd-George is probably the most loved and most hated man in Great Britain to-day. He presents the somewhat unique figure of a British Chancellor at war with the peers, but cheered by congregations of workmen wherever he is to appear. More and more the commonry of England are recognizing in him their champion against the privileged classes who would tax the food of the poor that their own lands and luxuries might go free. The church, too, has given him some sympathy, the Bishop of Hereford declaring in the House of Lords that he welcomed the budget, because he looked on it as "a social welfare budget, based on sound finance, a provision that the liberties of the people cannot be endangered by a privileged class."

Throughout the canvass it will be persistently held before the country by the Peers, that the course of the Government will have the effect of driving capital from the country and provoking financial disaster, also that the budget measures, in attempting to tax the Lords, practically defy the long-accepted axiom that there should be no taxation without representation; that, in fact, as Lord Rosebery argued in his famous speech, the budget taxes the Lords without their having a word to say, or a vote in the matter. Tariff reform is put forth as the true solution of the nation's difficulties.

The Government, on the other hand, steadily represent that to permit the Lords to interfere in the finances of the country would be to create a most dangerous precedent, which must put the control of the country into the hands of an oligarchy; that, in short, "the action of the Lords in refusing to pass into law the financial provisions made by the lower Chamber for the expenses of the year, was a breach of the Constitution, and an usurpation of the rights of the House of Commons." Taxation of land and luxuries, rather than of necessities, food, is a cry that should appeal strongly to the masses, but the Government will not find altogether clear sailing

As "Nation" notes, "No machinery exists in the British Constitution for taking a popular vote on a single issue clear of all others. . . . If a General Election follows, all the ordinary complication of issues will arise. The whole programme of both parties will be in evidence, and on the democratic side there will be the usual loss of seats by split voting. Out of all this, no direct popular vote on the single question of the Budget will, or possibly can, come." Upon the whole, the fiercest struggle in modern political history is anticipated for January next. If the Lords are successful, it is safe to say that the fray will be but prolonged; if the Commons, the election of 1910

to prompt one to contemplate, not things, but men; not men's buildings and men's wealth, but men's ways. Men: courtesy, and courage! Inseparable are they not, linked by heaven only knows what invisible chains of gold? The twentieth century has great needs, needs more colossal than those of any century that has ever preceded—unless one should except that century in which old Rome began to write Anno Domini—needs everywhere—urgent—immediate; for the day that flits by without its needs well met, is a dragging, burdening day, apt to make its successor travel pede claudo, with haltings by the way. In our own Empire we have needs, which we call reorganization of fleets and armies, readjustment of tariffs, care of

turned two single iron words—"Stand firm!" History has it, too, that Picton was tolerably steadfast at his "standing firm." The episode is not without force as a parable. When bayonets glitter about a mob of strikers, there is a lack of manly fairness, of manly generosity somewhere. When wheat rises to a dollar and forty cents per bushel in twenty-four hours, there is need for a man there!—a man, and not a soulless cash register! When sleek, befringed parliamentarians rise en masse, with scarcely a murmur of remonstrance, and vote themselves a double-session allowance, there is need of men there! When the city council of the largest metropolis of the Dominion is found under the white-light of investigation to be rotten to the core, there is decidedly need for men there! Alas, for the endless list!

Looking at the Old Land, one cannot forget that a million and a half of his fellows there are on the verge of starvation, while their coroneted brothers of a so-called upper strata have wealth enough to feed, not only the poor of England, but, for that matter, every pauper in Europe. Sublime task enough yonder, and worthy of the strongest and manliest and cleverest men of the earth. For it is, apparently, an immutable fact, that your John Hodge, with only a dirty laborer's apron over his stomach, has pretty much the same kind of an appetite as the stomach over which dangles the "Order of the Garter" or the "Order of the Bath."

And troubled Russia! Where is the second younger Pitt for groping, stumbling, mighty Russia? Then, too, Babelonia streets are hardly dry of their ruddy streams. Where is the Spanish heart that beats as did the heart of Hernando Cortes? Amongst our cousins to the south, moreover, are individuals that count their millions by the hundreds. We have not called them men! We need some reassuring before we accord them the title that was George Washington's, and Martin Luther's, and that of Gustavus Adolphus. The only conclusive evidence of a man's sincerity is that he gives himself for principle. Words, money, all things else are comparatively easy to give away; but when a man makes a gift of his daily life and practice, it is plain that the truth, whatever it may be, has taken possession of him!—James Russell Lowell.

So we are not sure! Moreover, the old Latin *vir* meant not only a man, but a strong man with honor, as the cloak of that strength. (How readily this reference to the tongue of old Rome brings to one another picture—a virile, rugged, everlasting theme, indeed—that of the towering Paul and his devoted fellows.) Contrast, if you can, your smooth, moneyed, broad-vested offer of the twentieth century golf-links, with that diligent, untiring, purposeful, old patriarch, and then, with us, perhaps you will cry from the house-tops, not for theories and things, but men—strong men! A thousand times blessed is he who in these days is called eccentric, if his eccentricity have but the strength of a man in it.

Rugged strength, singleness of purpose, power to stand stark alone, the will to turn from the beaten path of men, who are not men, but only herded sheep, following a leader they can scarce name—these are some of the credentials of the modern age.

Not that this Yuletide reverie is a widely far from it. The fellowship, the mighty responsibility, the enlightenment, the responsibilities of this age, have brought forth sublime types, Gordon is not forgotten, nor Lincoln, nor Glad-



"The Most Loved and Most Hated Man in Britain." Chancellor of the Exchequer, Lloyd-George, standing before the cottage in Wales in which he was born.

will no doubt go down in history with the Magna Charta and Reform Bill as a landmark of British progress.

Men: Courtesy, and Courage.

By "The Spartan"

Perhaps the most inspiring and satisfying survey of one's fellow men that it is possible to be accorded, is that which is first of all, met by the quantity, include Yuletide, and one's heart is by the best of all, held in the draw of the Christmas Eve, the stillness of the night, the glow of the fire, the very feeling of fellowship, and the sense of common purpose.

the poor, acquisition of commerce. May one not, in his Yuletide well-meaning, if insouciant desire to see wisely for his fellow, brush away all these names and say, with a decent hope and faith, that we need but one human agency—men!

Men—strong men! Wellington did not need theory, did not need "pink vapor" on the bill of Waterloo. In the heat of that Titanic struggle, Picton gallops up to his coat, face white, blood flowing, albeit with a high head.

"My God, sir," cries he, "the bullets are cut to pieces. They will not hurt us! soon give way!" One can all but hear the voice of the grand old Picton as he

stone, not lyle. T Nevertheless it is well of an in- ance of n- ticism we

To turn turning fr- to its fu- flower ca- if the fl- likely to- courtesy- else is th- first mee- meet him

"Canada that ma- earth." lived two- I use th- meaning, in Vienn- man un- else. In- ronto, h- he is ac- then he p- was slig- ance, ne- able jus- one mee- would p- in Fran- And y- ing in i- is not- us.

"Ther- learned- that, if- must b- welcom- wealth, son.

"I ha- their a- pleased- were i- caress- struck- More- really- gratify- pressed- hurrin- design- eyed t- insepa- Courte- lege of- tive o-

No c- elation- him. haps r- the q- it ble- takes, might, witho-

Perf- Canada- in pa- depor- "east- share- cours- age, self- ness- ous l- maste- we s- merel- (affe- Wh- Day- One- atten- berry- to a- abou- bear- rude- "Thi- one, of b- duet- Ed- and- hone- othe- just- We- cour- and- the- of- ther-

stone, nor Ruskin, nor Goethe, nor Carlyle. They will never be forgotten. Nevertheless, these are days of decision; it is well to contemplate this significance of an Imperial Canada. Into the balance of modern superficiality and agnosticism we must, then, throw men!

To turn from men to courtesy, is like turning from the strong stem of a plant to its full-bloomed flowers. No perfect flower can bloom upon a corrupt stem. If the flowers are beautiful, the stem is likely to be a good one. The flowers of courtesy are on the outward man. What else is there to judge him by when you first meet him, or if you never come to meet him intimately and often?

"Canadian manners, and American for that matter, are the most vulgar on earth," said a friend of the Spartan who lived two years in Europe. "Of course, I use the word 'vulgar' in its original meaning. In London, in Berlin, in Paris, in Vienna, one is treated like a gentleman until he is known to be something else. In New York, in Montreal, in Toronto, he is treated like a sweep until he is advertised as a wealthy man, and then he gets crazy adulation." If the truth was slightly exaggerated in this utterance, nevertheless it contains considerable justice. The etiquette with which one meets in the average New-world city, would provoke a duel every five minutes in France.

And yet the quality of courtesy, springing in its perfected degree from strength, is not hard to cultivate in any one of us.

"There are certain manners which are learned in good society of that force, that, if a person have them, he or she must be considered, and is everywhere welcome, though without beauty, or wealth, or genius."—Ralph Waldo Emerson.

"I have known men grossly injured in their affairs," says Henry Clay, "depart pleased, at least silent, only because they were injured in good language, ruined in caresses, and kissed while they were struck."

Moreover, the use of this art—for it is really an art of arts—re-tones in a most gratifying way the jaded nerves, the depressed spirits, the worn courage of the hurrying! We know no other way to designate the masses of unresting, wide-eyed toilers and strivers, that seem so inseparable from the spirit of the times. Courtesy is not by any means the privilege of a few. It is a duty, and a positive obligation to all.

No one is unconscious of the feeling of elation which polite treatment rouses in him. It is casting roses into paths perhaps more troubled than we know. Like the quality of mercy, it is twice-blessed; it blesses him that gives and him that takes, and is truly mightiest in the mighty. Divinely priceless, it is yet without price.

Perhaps the comparative youth of both Canada and the United States accounts, in part, for this contrast to European deportment—perhaps the differences in "caste" and Government account for a share as well—at any rate there are, of course, pleasing exceptions, and, with age, will come dignity, and with dignity, self-respecting and fellow-respecting politeness; while the "car-hog" and his numerous kin will become as extinct as the mastodon of prehistoric times. Perhaps we should have called this individual, merely "a snouted and grunting cousin" (after the fashion of Coleridge), but—

Why, by the way, not carry Christmas Day manners through the whole year? Day is generally affable and genial, and attentive, in the presence of the cranberry sauce and the fat turkey, browned to a turn, and while the evergreen hangs about the house. A little care ought to bear this admirable state into the vicissitudes of the weeks and months following. "Think of the other fellow!" says someone. It is a pithy receipt for gentility of hearing and refinement of outward conduct.

Easy it is, indeed, to muse on and on, and wander far on these themes, for the honest old Yule-log flickers long, and the other ineffable light is everlasting. But just a parting reflection or two!

We have named "courage" along with courtesy, because it is inseparable to it, and a trait of all men that are worthy of the pathetically maligned title. Thoughts of the great have lingered on this theme—

"I am afraid," the brave man said. When in his strength arrayed To do his duty to the end,— "Afraid to be afraid!"

So sings William J. Lampman. Henry Ward Beecher, too, once reflected that, "Success is not measured by what a man accomplishes, but by the opposition he has encountered, and the courage with which he has maintained the struggle against overwhelming odds."

Listen to another admonition of which Oliver Wendell Holmes is the father—

"Stick to your aim. The mongrel's hold will slip. But only crowbars loose the bull-dog's grip! Small though he looks, the jaw that never yields, Drags down the bellowing monarch of the fields."

In the brief reflection of conclusion, perhaps it were best to reiterate that courage, amidst life's handicaps, and in the face of weaknesses, is the true test of the man and of his mate. Mankind worships courage, with its many appendages, and despises diffidence with its train of blighting accompaniments. Achievement in every department of human endeavor is but an expression of courage, whether it be winning a Battle of Queenston Heights, whether it be starting a fire of National reformation, whether it be the rearing of a Parthenon or a pyramid, or whether it be the giving to the world of the glorious music of a Rossini.

The tasks of this twentieth century are infinite. If you would get in touch with doers, then learn to single out the strong. The spirit of the times is that of ceaseless achievement. The big things will be done by the rugged—perhaps by you, if you use your best self!

Men! courtesy! courage! In closing, we are struck with the unconscious repetition of an error one sees so often in things literary. We have not referred to men's mates, but only to men. Is it inexorable truth that the striving of women is a silent striving in the rush of "the hurrying"? Yet the silent things are often the stronger. The eyes of the world may be fastened on man, but the heart—ah, there!—ask your Luthers, and your Talmages, and your Gladstones!—the heart is "a thing fastened on the name 'woman'—the name 'mother'!"

Thus much in the light of the Yule-log—in the light of that "dawn of dawns!"—"Quo vadis, domine?" asked an apostle of the One Man—amidst the turmoil of years, one question—an infinite question—will be asked of all. "Quo vadis, frater?" This is an answer, then, such as we have to give, albeit insufficient, perhaps. "Brother, I go the way of Men of courtesy, and of courage!"

Hope's Quiet Hour.

When a Bramble is King.

In the ninth chapter of the Book of Judges is a quaint parable which describes the efforts of the trees to find a king to reign over them. The olive tree refused to be promoted over the other trees, the fig and the vine followed suit. Then all the trees appealed to the bramble (in the margin it is the "thistle"), saying, "Come thou, and reign over us." The bramble willingly agreed, calling them to come and put their trust under his shadow, but warning them that fire would probably come out of him and devour the cedars of Lebanon.

Do you know something of the folly of letting the bramble, or thistle rule in your life? Perhaps you have had a quarrel with someone. It may have begun about some trifle, but neither party was willing to take the difficult but splendid step of a move towards a reconciliation. "It was all his fault," I never did anything to vex him." How often these words are spoken by one who often these words are spoken by one who knows, deep down in the sub-consciousness, that there was originally fault on both sides, and that the sin of not trying to be reconciled, belongs to both parties. And so the bramble is invited to rule in the heart though it causes

nothing but unhappiness. It tears and scratches, in true bramble fashion, giving no pleasure to anybody. Nothing is gained by standing aloof from a neighbor, nothing but soreness of heart and a dull pain, which shows the presence of disease.

Once two girls in one of my settlement classes refused to speak to each other. They had been "inseparables," and one neglected to call for the other one evening when going to "night school." It was a small offence to begin with, but hard words soon made it worse. Things came to a climax when the girls refused to speak to each other in a play they were getting up. On examination, it was discovered that both were very unhappy, and would rejoice in a reconciliation—but neither would take the first step, hold out her hand and say the first word. Those of us who know by experience the priceless value of a friendship that began in youth and has glorified the rest of life, can see the sadness of throwing away such a treasure at the bidding of the bramble-king, Pride. Happily, in the case mentioned, the unhappy captives of that haughty, ignoble king, were induced to break loose from his control. The interrupted friendship went on as pleasantly as before. But when people get out of their teens, a quarrel is not so easily mended. Many and many a heart has been tortured for years by the bramble, Pride, a ruler who gives no advantages in return for his stern commands. If he should ever say to you: "Don't stoop to make the first advances!" look in his face and see what a miserable sham his appearance of greatness is. Why, it requires no nobility of soul at all to be proud and obstinate! The most ordinary person can refuse to take the first step towards a reconciliation. It is the grand and heroic soul only that can break through the barriers piled up by Pride, can "stoop to conquer," can destroy an enemy by the splendid plan of changing him into a friend. If you are submitting to be ruled by the bramble, then fire will come out from it and burn up the cedar of Lebanon—the great cedar called Friendship. Are you willing to sacrifice the cedar at the bidding of the malicious, useless thistle?

"One night upon mine ancient enemy
I closed my door,
And, lo, that night came Love in search
of me,
Love I had hungered for,
And, finding my door closed, went on his
way
And came no more.
Pray you take counsel of this penitent
And learn thereof:
Set your door wide, whatever guests be
sent,
Your graciousness to prove,
Better to let in many enemies
Than bar out Love."

If it takes "two" to make a quarrel, "one" can generally end it, if he is resolute and persistent in his efforts.

Then there is another kind of bramble which is often invited to take full control over a life. In Isaiah II, we read that God forsook His people because the land was full of silver and gold, treasures of all kinds, and idols. Soon came a day of great destruction, and these people, who thought themselves so rich and secure, discovered their mistake. Their idols were despised as worthless, and thrown "to the moles and to the bats." (Isa. ii: 20.) If you read the marginal rendering of that verse, you will see it is "the idols of his silver, and the idols of his gold." Anyone who makes idols of his silver and his gold, exalting them to the most important place in his daily thoughts, will find one day that he is serving a bramble—a kind not only powerless to help in the real crisis of life, but one that is cold and heartless at the best of times. An African explorer describes a strange custom of one of the tribes of the Upper Congo. He says that the brass rods, which are the favorite currency, are made into great rings which are welded securely round the necks of the married women. The richer they are, the heavier the load which must be carried. Some poor "rich" women are doomed to struggle miserably through life under thirty pounds of brass. At first, the neck is rubbed into sores, but it gets callous in time. Sometimes, when the women in-

crease in size after the rings are fastened on, they are nearly strangled by their riches. And yet they are proud of the heavy, useless burden that crushes them, and bow willingly to be under its rule.

Now, I am not foolish enough to deny the value of money—we all know that it is worth having, and that it can be converted into real power. But it is one thing for you to have money, and quite another thing to allow money to have you. To submit to be ruled by an idol of silver or an idol of gold, is to place the glorious cedar of Lebanon (your spirit) under the control and at the mercy of the bramble Mammon. Sometimes this bramble-king commands a subject to sell his honesty for dollars, and he knows himself to be disgraced and dishonored before God and his own conscience. To gain a few dollars and lose one's honor—what a miserable bargain! Sometimes the tyrant demands even more, and insists that his slave shall commit murder for money's sake. Generally, he does not show his thorns so openly, but by slow degrees hardens the loving heart and crushes the generous enthusiasm of youth. The desire to grow richer and richer leaves no time for cultivating mind or soul or heart. Reading and meditation do not uplift, because they are only concerned with money-making. The sweetness and richness of fellowship cannot thrive in such a choking atmosphere. A man is terribly poor and wildly extravagant who becomes a millionaire, if he finds in old age that he has allowed his friends to slip out of his life, or if he has not cultivated his mind. And when God's strong messenger calls him to drop all his gold, what a plunge into beggary death will be, if he has laid up no treasure in heaven and has nothing but his name to show for the time wasted on earth. "There is that maketh himself rich, yet hath nothing; there is that maketh himself poor, yet hath great riches."—Prov. xiii: 7.

The bramble cares little about the pleasure of its slaves, and the people who love money above nobler things, seldom find much happiness in its possession. "He that loveth silver shall not be satisfied with silver; nor he that loveth abundance with increase . . . but the abundance of the rich will not suffer him to sleep."—Eccles. v: 10-12.

The old Cornishman who said gleefully: "I've served the Lord for forty years, and, praise the Lord, it never cost me a cent!" was penny-wise and pound-foolish. His economy was utter folly. A religion that costs nothing is worth nothing. The man who boasted that his religion only cost him a shilling a year, was assured that it was "more than it was worth."

I have not room to-day to speak of other bramble-kings, but we all need to be on guard lest we sacrifice the greater things to the lower, allowing the weeds of sin to kill the glorious cedars of righteousness. As Browning expresses it:

"For I say, this is death and the sole
death,
When a man's loss comes to him from
his gain,
Darkness from light, from knowledge
ignorance,
And lack of love from love made mani-
fest;
A lamp's death when, replete with oil,
it chokes;
A stomach's when, surcharged with
food, it starves."

DORA FARNCOMB.

An Attractive Dining Table.

An attractive dining table, with white napery and tasteful dishes, means much to a meal. We will give one set of Austrian china, 40 pieces, free to every one wishing it, who sends us four new subscribers at \$1.50 per year each. The china is very dainty. There is nothing "loud" about it. It is just what you want. Address "The Farmer's Advocate," London, Ont.

He only honors favors generously who appears when they are once conferred, to remember them no more.

—John on



WHAT every cook should know is, which wheat makes the best flour, and why.

Winter wheat is put into the ground in the fall, but does not ripen until the following July. It matures slowly, is soft and very starchy.

Spring wheat is sown in April or May, and ripens in August. It's a flinty, translucent wheat, rich in gluten and contains nearly twice as much nutriment as winter wheat.

Royal Household Flour

is made entirely from the hard, nutritious spring wheat, carefully selected from all the wheat of this kind grown in Canada.

Royal Household is fine, light and pure—milled by the most improved methods—in a mill as clean as your own kitchen.

Ask your grocer for Ogilvie's Royal Household—just enough to try. You won't mind the slight advance in cost when you see the results in your bread and pastry. 21

Ogilvie Flour Mills Co., Limited, Montreal.





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—Corset Covers and Drawers
—Corset Covers and Petticoats

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They do away with all fullness around the waist and over the hips—improve the figure—and make gowns fit better.

In fine cotton, nainsook and bar check muslins,—\$1.25 up.

Every "Duchess" garment is guaranteed by the makers as well as the dealers.

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THE EASTERN ONTARIO

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A large classification is offered for Horses, Beef and Dairy Cattle, Sheep, Swine, Seeds and Poultry.

\$8,000.00 in Prizes.

Poultry entries close January 3d. Live stock entries close January 3th. Write for price list, or send entries to the Secretary.

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WHEN WRITING ADVERTISERS PLEASE MENTION "ADVOCATE"

The Beaver Circle.

[All children in second part and second books, will write for the Junior Beavers' department. Those in third and fourth books, also those who have left school, or are in High School, between the ages of 11 and 15, inclusive, will write for Senior Beavers'. Kindly state class at school, or age, if you have left school, in each letter sent to the Beaver Circle.]

As it seems impossible to publish the prize essays (boys') to-day, without crowding out Justus Miller's story until Christmas has passed, we are giving you the names of the prizewinners; the essays will follow—or, at least, as many of them as we can find room for—in a later issue.

Prizewinners in Boys' Competition.—Senior Boys: Glen Holtermann, Robt. Robinson, John Cusick, Joseph Hodgson, Leslie Wright.

Christmas Eve with Santa Claus.

[Written for the Beaver Circle by Justus Miller, Jr.]

It was Christmas Eve, and the McDougall farm home re-echoed with seasonable merriment. Big Brother Bob and Sister Carrie, Aunt Jo and Uncle Dick, each one overflowing with the spirit of Christmastide, were there, and others were coming. Never had there been such fun, thought the twins, as with shining eyes they romped with the older ones, or with noses flattened against the window-pane, peered through the darkness listening for the tinkle of silver bells. But most charming of all, to them, was the Christmas tree standing in the corner, displaying its many candles, which Santa Claus, they hoped, would adorn in his accustomed manner with the things each one loved best. At last, tired with play and excitement, the little folks lay down beneath its green branches, and, with full hearts, thought of the dear old Saint so beloved by Canadian children, and of the delightful surprises awaiting them in the morning.

As Jacky lay gazing at the topmost candle a wonderful change took place, and he saw emerging from it a beautiful fairy dressed in a gown of flowing silk, embroidered with sparkling frost crystals. On her head was a tiny crown of flashing ice, while in her hand she held a magic wand of the same delicate substance.

Smiling sweetly, she floated down beside the children, and taking one of little Jean's soft, chubby hands, and one of Jack's, she said:

"My name is Beautybright, and I have come to take you, dears, for a visit to Santa Claus. By my magic I shall make you invisible, so no one will see us departing. Come, don't be afraid! Just clasp my hands tightly and close your eyes, and when you open them we shall be far from here in the land of the fairies where Santa Claus lives."

They did as directed. But a moment seemed to have passed when they opened their eyes, and lo! they stood within a magical land on the cloud-tops, beneath the twinkling little North Star. For long months the sleepy sun slept beneath the Southern hill-tops, yet it was not dark. Brightly-flaming fires afar off, kindled by the fairies, threw gleaming lights high into the cold heavens, bathing white mountains of ice and dark forests in their radiance both day and night.

But neither cold nor mountains were heeded by the twins. By her magic, the fairy warned them, and, leading them onward, came at last to a deep pine wood. Forward among the silent trees they proceeded with the snow-mantled boughs hanging still and white above them, until, arising in the very center of the forest, they beheld a wonderful castle, the home of old Santa himself.

Graciously it stood upon its chimney-walls, lifting its most enchanted spires and towers. Little toward the front the castle opened. Of great size was a lobby at the end of the hall, with wide and silver-floored floor, and a pair of marble steps leading up to a grand doorway. The lobby was a golden world, and the steps were of silver. A pair of golden

graven in gold, was the single word, "Welcome."

The heavy doors swung open at a tap from the fairy's wand, and entering a spacious room, a busy sight was disclosed. From numerous smaller doors came queer little fellows, bearing in their arms such countless bundles of toys, games and candies, as made the twins clap their hands with delight. These were taken by others, who quickly ascended a wide stairway winding up into the tower. In an endless procession they came and went, dressed in quaint, green doublets and jackets, high peaked hats, and long-pointed shoes. Despite the great size of their burdens, they seemed never to feel them, but gleefully running backward and forward, sang and shouted, paying no attention at all to the little strangers.

Soon their gaze wandered to the farther end of the room. There, comfortably seated in a capacious chair by a roaring fire, they saw a jolly old chap superintending the work. They knew at once that this must be Santa Claus, and shyly clung to the good fairy's hands.

"Please, Beautybright," whispered Jean, "what do you suppose he'll say? Maybe he doesn't wish to see us."

"He loves good children," replied the fairy, "and, therefore, must love you. Don't be afraid."

At the sound of voices, Santa Claus turned. "Ho! ho!" shouted he, cheerily. "Whom have we here? What? wandered so far, little ones, so see the lonely old man? Come, come, was it not a great journey for such small people?"

The fairy led them to him, and, kneeling before him, said: "Here, O King, are two good children who often have longed to see you, so, knowing how well you love little ones, I have brought them, that they might join to-night in the merrymaking of the fairies. Tell me, I pray, have I done well or ill?"

"Arise, fair Beautybright," replied he. "Always have you been the best of my helpers, flying around the world seeking ever to give pleasure and happiness. Well, indeed, have you done. Greatly pleased am I to see my little friends."

"Come, dears," continued he, placing them upon his ample knees, "soon the tasks of my assistants will be finished, and together we will make merry until the midnight signal. Then I shall take you home with me in the big, white sleigh, drawn by my eight fleet reindeer."

The work was soon completed, and from all parts of the castle the workers came trooping. Imagine the surprise of the twins to see among them familiar friends. First came Old King Cole with his bowl and his pipe, followed by The Three Fiddlers, who, seating themselves by the fireplace, played such a lively tune that the elves and fairies, with one accord, started to dance.

From rooms above and rooms below they thronged. The Queen of Hearts and Little Bo-peep and Jack Horner and Little Boy Blue—they all came, and fairies, the sisters of Beautybright, and little elves, and, last of all, Old Mother Goose, bringing with her Old Mother Hubbard.

Around and around they flew, faster and faster, up and down, backward and forward, here and there. Such leaping and frolicking! Such shouting and laughing! There never was such a time—never! Jack and Jean, losing their shyness, joined in the giddy whirl, and even Old Santa himself could keep still no longer.

From a nearby pantry, the fairies now wheeled long tables, groaning beneath the huge amount of good things they upheld. Savory-smelling turkeys and plump geese, freshly steaming from the oven, were there, and bread pies and puddings and cakes—everything, in short, that either a twin or a fairy could desire. Soon the feast was ready and they were seated. The good Saint occupied the seat of honor, with Jean and Jack on each side, while around them, in high glee, sat the fairies. Here they ate of the delicacies before them, laughing the while at the shrewd looks of the twins, the doctor, and the little boy of whom strove to excel in good good things. But, satisfied at last, the merry feast ended, and the little folks, who arose from the tables with a slow, upward sigh of contentment, turned toward the good fairy.



After dinner came the supreme treat of the evening. Walking to the wall, Santa Claus touched a secret spring; and immediately a hidden door swung open, disclosing a wondrous room.

Within were soft rugs, luxurious sofas, and beautiful pictures, while standing in the center was a fragrant cedar Christmas tree. Its wide branches drooped beneath a multitude of rich presents, reflecting the twinkling rays of a thousand candles, and on the very top a beautiful guardian angel poised, her shining wings overhanging all.

"See, Jacky, see!" whispered Jean, pointing to a flaxen-haired doll hanging upon the tree. "If I could only have her—O, Jacky!"

"And look at that dandy sleigh, with the red top and the iron runners," said the latter, worthy. "Just what I've wanted. Maybe Beautybright could get them for us."

"I wouldn't ask her," replied Jean, "maybe she wouldn't like it, and then Santa Claus might not put anything on our tree."

Before anything further could be said, the fairies asked the twins to play with them until the tree should be unloaded. And a merry time they all did have, to be sure! What rolling and tumbling and elfin gambols there were as Old Santa, with a handkerchief over his eyes, went racing around the room after his nimble fairies. Why, even the toys above in the tower heard the commotion, and came down to take part in the

sport. Long lines of dignified tin soldiers, chessman, sailor boys, sawdust donkeys—they all came, every one of them. Such a wild scampering as there was, then, over the sofas, under the chairs, and around the tree, as "Pussy Wants a Corner," "London Bridge," "Musical Chairs," and kindred games were played. Even when Mary, quite contrary, stepped on the cotton bull-puppy's tail, and the bull-pup bit the Teddy Bear, the pleasure was not marred. Everyone was good-natured; everyone was happy, and, in the thickest of it all, with flushed cheeks and happy hearts, were little Jean and Jack.

At last the time came for the unloading of the tree. Santa Claus advanced, and with beating hearts, the fairies formed a ring around it, anxiously waiting to see what they should receive. The twins, with clasped hands, stood gazing upward with eyes only for the doll and the sled. And they got them, too; yes, they did! and many other beautiful presents, so that the sled was quite heaped full. Each one of the jolly company got what most he longed for, and as the last gift was presented, and the last hearty cheer shouted, with loud alarm, the midnight signal-bell rang.

"Ho! ho! my beauties," shouted Santa Claus, "the time has come. Back to the white sleigh, boys! To your places, fairies, and elves! Harness the reindeer! Out with the great coat, and deer! Out with the great coat, and deer! bring furs for the children! Speed! Speed!"

Everyone hastened to do as bidden, and taking Jack and Jean in his strong arms, he ascended the winding stair, higher and higher, until he reached the golden globe. There, impatiently waiting to be off, stood the reindeer, all ready hitched to the white sleigh which held so many playthings that it was a great wonder to the twins how such a quantity could be packed in so small a space.

From the assembled crowd, who were waiting to see them off, Beautybright came lightly tripping to bid them good-bye and "Godspeed." Even as she spoke, ponderous doors were thrown open and they saw rising in the East a star of such size and brilliance that the whole world was bathed in purest white.

In its beams an immense host of angels were seen approaching, singing with sweet voices as they flew through the heavens, "Glory to God in the highest, and on earth peace, good will toward men."

Straightway the cattle throughout the land knelt in their stables. The crouching lynx slunk back among the shadows and from his prey, the great horned owl, the white spirit of the North, rose upward, in the act of striking, and in all places, as the angels passed, peace reigned.

As the glory faded, gathering themselves together, the reindeer leaping forward, sprang up—up—"Wake up, Jacky—Wake up!"

Jack sat up with a start. "Come

wake up, little man, it's time for bed," said Sister Carrie, bending over him.

"Why, where's Santa—I thought—Gee! haven't I been with Santa Claus," asked he, in sleepy bewilderment.

"To be sure you have," said Carrie, "he just brought you back."

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CHAPTER XLIV.—Continued.

Bigot looked as Cadet said this and laughed: "You would send her to the Parc aux cerfs, eh, Cadet? Par Dieu! she would sit on the throne in six months!"

"No, I do not mean the Parc aux cerfs, but the Chateau de Beaumanoir. But you are in too ill-humor to joke to-day, Bigot." Cadet resumed his pipe with an air of nonchalance.

"I never was in a worse humor in my life, Cadet! I feel that I have a padlock upon every one of my five senses; and I cannot move hand or foot in this business."

"Right, Bigot, do not move hand or foot, eye or tongue, in it. I tell you the slightest whisper of Caroline's life or death in your house, reaching the ears of Philibert or La Corne St. Luc, will bring them to Beaumanoir with warrants to search for her. They will pick the Chateau to pieces stone by stone. They will drag Caroline out of her grave, and the whole country will swear you murdered her, and that I helped you, and with appearances so strong against us that the mothers who bore us would not believe in our innocence. Damn the women! The burying of that girl was the best deed I did for one of the sex in my life, but it will be the worst if you breathe one word of it to Angelique des Meloises, or to any other person living. I am not ready to lose my head yet, Bigot, for the sake of any woman, or even for you!"

The Intendant was staggered by the vehemence of Cadet, and impressed by the force of his remarks. It was hard to sit down quietly and condone such a crime, but he saw clearly the danger of pushing inquiry in any direction without turning suspicion upon himself. He boiled with indignation. He fumed and swore worse than his want when angry, but Cadet looked on quietly, smoking his pipe, waiting for the storm to calm down.

"You were never in a woman's clutches so tight before, Bigot," continued Cadet. "If you let La Pompadour suspect one hair of your head in this matter, she will spin a cart-ropes out of it that will drag you to the Place de Greve."

"Reason tells me that what you say is true, Cadet," replied Bigot, gloomily.

"To be sure; but is not Angelique a clever witch to bind Francis Bigot neck and heels in that way, after fairly outwitting and running him down?"

Cadet's cool comments drove Bigot beside himself. "I will not stand it; by St. Maur! she shall pay for all this! I, who have caught women all my life, to be caught by one thus! she shall pay for it!"

"Well, make her pay for it by marrying her!" replied Cadet. "Par Dieu! I am mistaken if you have not got to marry her in the end! I would marry her myself, if you do not, only I should be afraid to sleep nights! I might be put under the floor before morning if she liked another man better!"

Cadet gave way to a feeling of hilarity at this idea, shaking his sides so long and heartily that Bigot caught the infection, and joined in with a burst of sardonic laughter.

Bigot's laughter was soon over. He sat down at the table again, and, being now calm, considered the whole matter over, point by point, with Cadet, who, though coarse and unprincipled, was a shrewd counsellor in difficulties.

It was determined between the two men that nothing whatever should be said of the assassination. Bigot should continue his gallantries to

Angelique, and avoid all show of suspicion in that quarter. He should tell her of the disappearance of Caroline, who had gone away mysteriously as she came, but profess absolute ignorance as to her fate.

Angelique would be equally cautious in alluding to the murder; she would pretend to accept all his statements as absolute fact. Her tongue, if not her thoughts, would be sealed up in perpetual silence on that bloody topic. Bigot must feed her with hopes of marriage, and, if necessary, set a day for it, far enough off to cover all the time to be taken up in the search after Caroline.

"I will never marry her, Cadet!" exclaimed Bigot, "but will make her regret all her life that she did not marry me!"

"Take care, Bigot! It is dangerous playing with fire. You don't half know Angelique."

"I mean she shall pull the chestnuts out of the fire for me with her pretty fingers, until she burn them," remarked Bigot, gruffly.

"I would not trust her too far! In all seriousness, you have but the choice of two things, Bigot: marry her or send her to the Convent."

"I would not do the one, and I could not do the other, Cadet," was Bigot's prompt reply to this suggestion.

"Tut: Mere Migeon de la Nativite will respect your lettre de cachet, and provide a close, comfortable cell for this pretty penitent in the Ursulines," said Cadet.

"Not she! Mere Migeon gave me one of her parlor-lectures once, and I care not for another. Egad, Cadet! she made me the nearest of being ashamed of Francois Bigot of anyone I ever listened to! Could you have seen her, with her veil thrown back, her pale face still paler with indignation, her black eyes looking still blacker beneath the white fillet upon her forehead, and then her tongue, Cadet! Well, I withdrew my proposal, and felt myself rather cheapened in the presence of Mere Migeon."

"Ay, I hear she is a clipper when she gets a sinner by the hair! What was the proposal you made to her, Bigot?" asked Cadet, smiling, as if he knew.

"Oh, it was not worth a livre to make such a row about! I only proposed to send a truant damsel to the Convent to repent of my faults, that was all! But I could never dispose of Angelique in that way," continued the Intendant, with a shrug.

"Egad! she will fool any man faster than he can make a fool of her! But I would try Mere Migeon, notwithstanding," replied Cadet. "She is the only one to break in this wild filly and nail her tongue fast to her prayers!"

"It is useless trying. They know Angelique too well. She would turn the Convent out of the windows in the time of a neuvaine. They are all really afraid of her," replied Bigot.

"Then you must marry her, or do worse, Bigot. I see nothing else for it," was Cadet's reply.

"Well, I will do worse, if worse can be; for marry her I will not!" said Bigot, stamping his foot upon the floor.

"It is understood, then, Bigot, not a word, a hint, a look is to be given to Angelique regarding your suspicions of her complicity in this murder?"

"Yes, it is understood. The secret is like the devil's tontine—he catches the last possessor of it."

"I expect to be the last, then, if I keep in your company, Bigot," remarked Cadet.

Cadet having settled this point in his mind, reclined back in his easy chair and smoked on in silence, while the Intendant kept walking the floor anxiously, because he saw farther than his companion the shadows of coming events.

Sometimes he stopped impatiently at the window, beating a tattoo with his nails on the polished casement as he gazed out upon the beautiful parterres of autumnal flowers, beginning

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He was six years old and had never gazed into the mystic lens of a microscope, as the New York Times tells the story. Several slides containing animal-cells had been displayed to his astonished vision. He was too amazed to make any comment until he came to one slide that seemed more wriggly than any of the others. It was merely a drop of water. The little fellow gazed at it a long time, with all its nimble particles of animal life, and finally exclaimed to his mother: "O, mamma, now I know what it is that bites you when you drink soda-water!"

to shed their petals around the gardens of the Palace. He looked at them without seeing them. All that caught his eye was a bare rose-bush, from which he remembered he had plucked some white roses which he had sent to Caroline to adorn her oratory; and he thought of her face, more pale and delicate than any rose of Provence that ever bloomed. His thoughts ran violently in two parallel streams side by side, neither of them disappearing for a moment amid the crowd of other affairs that pressed upon his attention—the murder of Caroline, and the perquisition that was to be made for her in all quarters of the Colony. His own safety was too deeply involved in any discovery that might be made respecting her to allow him to drop the subject out of his thought for a moment.

By imposing absolute silence upon himself in the presence of Angelique, touching the death of Caroline, he might impose a like silence upon her whom he could not acquit of the suspicion of having prompted the murder. But the certainty that there was a confederate in the deed—a woman, too, judging by the fragment of writing picked up by Cadet—tormented him with endless conjectures.

Still, he felt, for the present, secure from any discovery on that side; but how to escape from the sharp inquisition of two men like La Corne St. Luc and Pierre Philibert? And who knew how far the secret of Beaumanoir was a secret any longer? It was known to two women, at any rate; and no woman, in Bigot's estimation of the sex, would long keep a secret which concerned another and not herself.

"Our greatest danger, Cadet, lies there!" continued the Intendant, stopping in his walk and turning suddenly to his friend. "La Corne St. Luc and Pierre Philibert are commissioned by the Governor to search for that girl. They will not leave a stone unturned, a corner unransacked in New France. They will find out through the Hurons and my own servants that a woman has been concealed in Beaumanoir. They will suspect, if they do not discover who she was. They will not find her on earth—they will look for her under the earth. And, by St. Maur! it makes me quake to think of it, Cadet, for the discovery will be utter ruin! They may at last dig up her murdered remains in my own Chateau! As you said, the Bastille and the Place de Greve would be my portion, and ruin yours and that of all our associates."

Cadet held up his pipe as if appealing to Heaven. "It is a cursed reward for our charitable night's work, Bigot," said he. "Better you had never lied about the girl. We could have brazened it out or fought it out with the Baron de St. Castin or any man in France! That lie will convict us, if found out!"

"Pshaw! the lie was a necessity," answered Bigot, impatiently. "But who could have dreamed of its leading us such a dance as it has done! Par Dieu! I have not often lied, except to women, and such lies do not count! But I had better have stuck to truth in this matter, Cadet. I acknowledge that now."

"Especially with La Pompadour! She is a woman. It is dangerous to lie to her—at least about other women."

"Well, Cadet, it is useless blessing the Pope or banning the Devil! We are in for it, and we must meet La Corne St. Luc and Pierre Philibert as warily as we can. I have been thinking of making safe ground for us to stand upon, as the trappers do on the great prairies, by kindling a fire in front to escape from the fire in the rear!"

"What is that, Bigot? I could fire the Chateau, rather than be tracked out by La Corne and Philibert," said Cadet, sitting upright in his chair.

"What, burn the Chateau!" answered Bigot. "You are mad, Cadet! No; but it were well to kindle such a smoke about the eyes of La Corne and Philibert that they will need to rub them to ease their

own pain, instead of looking for poor Caroline."

"How, Bigot? Will you challenge and fight them? That will not avert suspicion, but increase it," remarked Cadet.

"Well, you will see! A man will need as many eyes as Argus to discover our hands in this business."

Cadet started, without conjecturing what the Intendant contemplated. "You will kill the bird that tells tales on us, Bigot—is that it?" added he.

"I mean to kill two birds with one stone, Cadet! Hark you; I will tell you a scheme that will put a stop to these perquisitions by La Corne and Philibert—the only two men I fear in the Colony—and at the same time deliver me from the everlasting bark and bite of the Golden Dog!"

Bigot led Cadet to the window, and poured into his ear the burning passions which were fermenting in his own breast. He propounded a scheme of deliverance for himself and of crafty vengeance upon the Philiberts which would turn the thought of everyone away from the Chateau of Beaumanoir and the missing Caroline into a new scheme of public and private troubles, and the confusion of which he would escape, and his present dangers be overlooked and forgotten in a great catastrophe that might upset the Colony, but at any rate it would free Bigot from his embarrassments, and perhaps inaugurate a new reign of public plunder and the suppression of the whole party of the Honnetes Gens.

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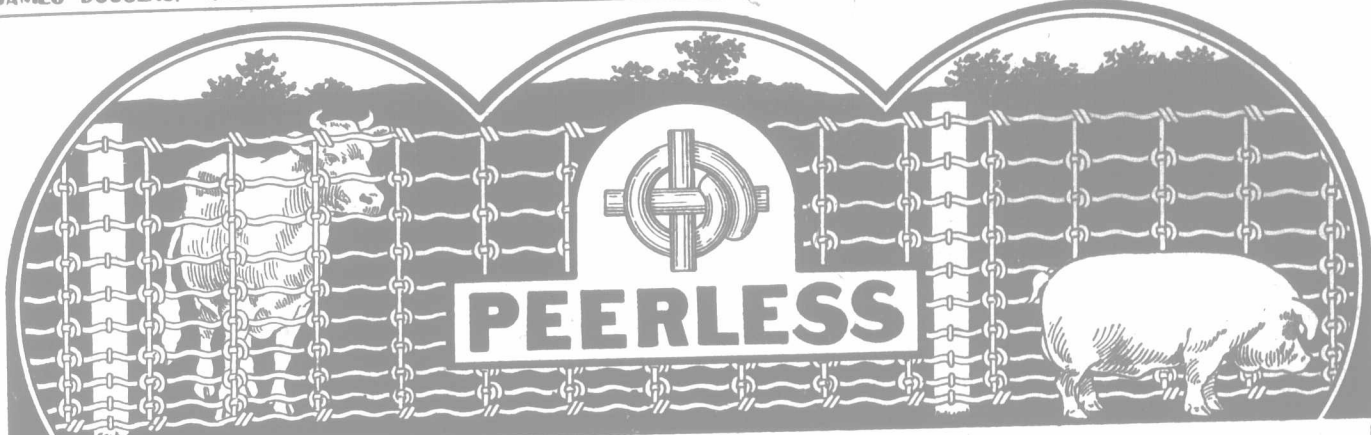
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POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 80 cents.

A FEW good Single-omb Black Minorca cockerels for sale. Prices right. Jno. Ogram, Listowel, Ont.

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

CHOICE White Wyandotte cockerels. Bred from Russel cock and Martin-bred females; also Rhode Island Reds, cockerels and pullets, both combs. Alez McTavish, Chesley, Ontario

CHOICE Barred Plymouth Rock cockerels for sale. Prices right. Leslie Kerns, Freeman, Ont.

FOR SALE—Big, pure-bred, prizewinning Toulouse, Embden and African geese; Pekin and Rouen ducks; Mammoth White Holland turkeys; Buff Cochin bantams. Thirty prizes at Winter Fair, Baker Bros., Springfield Farm, Box 317, Guelph, Ont.

WHITE Holland turkeys for sale. Toms, \$3.00. Miss Mary Caldwell, Gilchrist, Ontario.

INCUBATORS, practically new, for sale cheap. Write for particulars. L. R. Guild, Box 16, Rockwood, Ont.

DRESSED POULTRY

If any for sale it will pay you to write or ship to **P. Poulin & Co., Montreal**, and get the top market price. Prompt returns. No commission. Open for any quantity. References: any bar k.

Maple and Rock Elm Logs Wanted

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

The Bradley Co., Hamilton, Ontario.



Advertisements will be inserted under this heading, such as Farm Properties, Help, and Situations Wanted, and Pet Stock.

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

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

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

WANTED—A middle-aged man who understands and has had experience in growing and cultivating of white beans, to take charge of a 200-acre farm in the Province of Quebec. A good farmhouse to live in provided, and no objection is made to a small family. Apply, giving full particulars, to: Farm, The Farmer's Advocate, London, Ont.

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

DOG MEDICINE—Most dogs have worms. And the worms kill the dogs. Get rid of the worms with **VERMICIDE CAPSULES**. Six capsules, 25c. Hundred capsules, \$3. Mailed with free booklet telling all about worms in dogs on receipt of price. **DR. CECIL FRENCH, WASHINGTON, D. C.**

GOSSIP.

Reserve for grand championship in the beef-cattle department of the Ontario Winter Fair, was Kruger, the two-year-old steer by Archer, exhibited by Jos. Stone, Saintfield, Ont. This is the steer that won the Shorthorn grade championship special.

SALE DATES CLAIMED.
Dec. 30th.—J. W. Richardson, Caledonia, Ont.; Holsteins.

Dec. 31st.—R. B. Martin, Elmira, Ont.; Holsteins.

Feb. 2nd and 3rd, 1910.—Combination Shorthorn Sale, Union Stock-yards, West Toronto, Ont.

March 9th, 1910.—Arthur Johnston, Greenwood, Ont.; Shorthorns; dispersion sale.

Official records of 154 Holstein-Friesian cows were accepted by the American Holstein Association, from November 19th to December 4th, 1909. This herd of 154 animals, of which one-third were full-aged cows, produced in seven consecutive days 61,904 lbs. of milk, containing 2,099.376 lbs. of butter-fat; thus showing an average of 3.39 per cent. fat. Each animal produced an average of 402 lbs. of milk, containing 13.632 lbs. of butter-fat; equivalent to 57.4 lbs. or 27½ quarts of milk per day, and 15.9 lbs. of the best commercial butter per week.

At the Maritime Winter Fair in Amherst, N. S., the champion cow in the dairy test was Maple Grove Louise, a Holstein, belonging to Logan Bros., which, in two days, yielded 133.8 pounds of 4.5-per-cent. milk, making a score of 171.47 points, the highest ever achieved at this fair. The second-prize cow, shown by R. L. Hicks, gave 148 pounds of milk, and made 168.65 points. Last year's grand champion, a grade exhibited by W. W. Black, though scoring 143 points, or 12 ahead of last year's performance, had this time to be content with fifth place on the list.

RIVERSIDE HOLSTEIN SALE.

Holstein breeders, dairymen, and farmers generally, will do well to keep in mind the great sale of registered Holsteins, property of J. W. Richardson, of Caledonia, Ont., to take place at his Riverside Farm, on Thursday, December 30th, as advertised, when 45 high-class Holsteins, 28 females and 17 bulls will be sold. This, as the catalogue shows, is one of the strongest herds of Holsteins in Canada, from the standpoint of official records of milk production in the animals included, and in their immediate ancestors, and this sale affords a rare opportunity to secure breeding stock of the highest-class quality to found or strengthen a herd. There are included 18 heifers two years old or under, making one of the choicest lots ever offered. For particulars of breeding and records, see "The Farmer's Advocate" of December 16th, page 2017, and the advertisement in this issue.

SHEEP AND SWINE AT SMITHFIELD.

At the Smithfield Fat-stock Show, in the sheep section, the Long-wool championship for pen of three went to S. E. Dean & Sons' Lincoln lambs, and the reserve pen for that honor were Devon lambs, winning over Henry Dudding's yearling wethers, which weighed an average of 335 lbs. each. The Short-wool championship went to James Flower's pen of Hampshire Down yearling wethers, the reserve being H. E. Smith's Suffolk yearlings. In Southdowns, C. R. W. Adeane won the breed championship with a pen of 10-months-old wethers, and the King's 21-months-old yearling wethers were reserve. Sir Richard Cooper won the championship for Shropshires with 21-months-old wethers. The Oxford Down championship went to J. T. Hobbs for lambs 212 lbs. each. There were no Border Leicesters shown. The breed championship went to English Leicesters, shown by E. P. Jordan, Yorkshire.

In the swine section there was a fine showing. The champion pen, bred by exhibitor, went to Large Whites (Yorkshires), shown by W. H. & E. Wherry. The Prince of Wales was reserve with Berkshires, which were the champion pen of that breed. The championship for best single pig was awarded to Prince Christian, for a Berkshire weighing 529 lbs. at 11 months 2 weeks 2 days old.

DAIRYMEN'S CONVENTION!

THE ANNUAL CONVENTION OF THE

Eastern Ontario Dairymen's Association

WILL BE HELD IN

BELLEVILLE

Wednesday, Thursday and Friday, JANUARY 5th, 6th, 7th, 1910.

Some of the greatest authorities on dairying in America will address the convention. The public are respectfully requested to attend. SPECIAL RAILWAY RATES.

J. R. DARGAVEL, M.L.A., President. ELGIN.

R. G. MURPHY, Secretary. BRUCKVILLE.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.
2nd.—Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer.
3rd.—In Veterinary questions the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.
4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous.

ABORTION AMONG COWS.

There were quite a few cases of abortion among cows in this neighborhood last winter, both with farmers who were feeding silage, and those who were not feeding it. It has commenced again this winter. We cannot think of any cause, as the cows are hearty and eat well. Kindly state probable cause, and the best means of prevention.

Ans.—The probability is that these are cases of contagious abortion, which may be due to a cow being purchased from an aborting herd, or that has been bred to a bull that has recently served aborting cows, as it is the decided opinion of scientists that the germs of the disease find their way into the uterus via the vulva and vagina from contact with affected animals or their discharges. Preventive measures are repeated thorough disinfecting of the floors of the stable behind the cows, and the washing of the genitals with disinfectants; also the feeding or drenching of exposed animals with carbolic acid diluted with water. When given with the feed, the dose is two drams, or two teaspoonfuls every other day for two weeks. This treatment is usually begun about two months after becoming pregnant, and repeated at intervals of two or three weeks until the last month of pregnancy. Some writers claim to have effected prevention by mixing carbolic acid in salt, kept under cover, where the cows may have access to it, thoroughly mixing at the rate of 4 ounces of crude, undiluted carbolic acid with 12 quarts of salt.

Veterinary.

INDIGESTION.

Pregnant mare, doing no work, and fed on mixed hay and half gallon of oats three times daily, has been sick three times lately. She stops eating, stands with head down, turns head around to side, acts uneasy, lies down, stretches on her side, etc. These attacks last from one to two days.

Ans.—This is indigestion. Give her 1½ pints raw linseed oil, and follow up with 1 dram each of sulphate of iron, gentian and nux vomica, three times daily. Feed some bran and less oats, and give her a couple of carrots, or small turnips, once daily. See that she gets daily exercise, or light work. It will be much better for both her and her foal if you give her regular light work or driving. If she suffers much at any time, give her 1½ ozs. tincture of belladonna and 2 ozs. nitrous ether, in a pint of water. Repeat the dose, if necessary, in three hours.

GOSSIP.

In the advertisement "Bagpipes," in this issue, the word charters should be chanters.

Alex. Hume & Co., Menie, Ont., importers and breeders of Ayrshire cattle and Yorkshire hogs, write: "Our herd is doing nicely. We have many choice young things, we think the best and most uniform we ever had. Lessnessock Royal Monarch (imp.) is proving a great sire. We are now taking orders for imported stock for 1910."

Utility Poultry Awards.

At the Ontario Provincial Winter Fair, Guelph, Ont., 1909.

Chickens.

BARRED PLYMOUTH ROCKS.—Cocks—1, John Pringle, London; 2 and 5, I. K. Millard, Dundas; 3, John Bedford, Toronto; 4, John Gormley, Pickering.

Hens—1 and 4, John Pringle, London; 2, 3, 6 and 10, I. K. Millard, Dundas; 5, G. Morton, Carlisle; 7, John Bedford, Toronto; 8, A. D. Chaplin, Chatham; 9, Thos. Andrew, Pickering.

Cockerels—1, 2, 4 and 9, I. K. Millard, Dundas; 3, John Gormley, Pickering; 5, John Bedford, Toronto; 6, John Pringle, London; 7, Wm. Dale, Brampton; 8, Chas. Hall & Son, Trafalgar; 10, James W. Coker, Jerseyville.

Pullets—1, John Pringle; 2, 5, 7 and 8, I. K. Millard; 3, Hugh A. Rose, Welland; 4, Thos. Andrew; 6, A. Hocking, London; 9, James Hodge, Toronto; 10, G. F. Holden, Toronto.

WHITE PLYMOUTH ROCKS.—Cocks—1, F. A. Andrews, London; 2, C. J. Whitney, Galt; 3, J. A. Butler, Baden; 4, J. W. Shields, Hamilton.

Hens—1, C. J. Whitney; 2, G. A. Robertson, St. Catharines; 3, F. A. Andrews; 4, J. L. Brown, Seaford.

Cockerels—1, Wm. E. Hoggarth, Hensall; 2, F. A. Andrews; 3, J. L. Brown; 4, Guy Bell, Brampton.

Pullets—1 and 2, Wm. E. Hoggarth; 3, C. J. Whitney; 4, J. L. Brown.

BUFF PLYMOUTH ROCKS.—Cocks—1 and 3, G. D. McLean, Ridgetown; 2, J. M. Campbell, Crosshill.

Hens—1, John Bawden, Ridgetown; 2, G. D. McLean; 3, F. W. Krouse, Guelph; Cockerels—1, 2 and 3, John Bawden; 4, J. M. Campbell.

Pullets—1, 2, 3 and 4, John Bawden.

GOLDEN-LACED WYANDOTTES.—Cocks—1, John McPherson, London; 2, J. H. Magill, Port Hope; 3, Jas. Ford & Son, Drumquin.

Hens—1, John McPherson; 2, A. W. Graham, St. Thomas; 3, J. H. Magill.

Cockerels—1, Streib & Becker, West Lorne; 2 and 3, Wm. Daniel, Plattsville; Pullets—1 and 5, Streib & Becker; 2, Wm. Daniel; 3, Jas. Baptie, Springville; 4, J. H. Magill.

WHITE WYANDOTTES.—Cocks—1 and 3, Jos. Russell, Toronto; 2, J. A. Phaneuf, Montreal; 4, Wm. Archer, Paisley; 5, W. J. Patterson, Newmarket.

Hens—1, W. Dawson, London East; 2, 3 and 4, Jos. Russell; 5 and 7, J. A. Phaneuf; 6, R. W. Vout, Brockville; 8, A. Devitt, Berlin; 9, Norman McLeod, London; 10, Gideon Peer, Guelph.

Cockerels—1 and 3, Wm. Archer; 2, R. W. Vout; 4 and 5, J. A. Phaneuf; 6, A. G. Auld, Toronto; 7 and 8, N. McLeod; 9, Chas. Massie, Port Hope; 10, Chas. Massie, London.

Pullets—1 and 8, J. A. Phaneuf; 2 and 5, A. G. Auld; 3, 6 and 10, Geo. Briery, Guelph; 4, W. J. Patterson; 7, A. Devitt; 9, L. H. Baldwin, Toronto.

PARTRIDGE WYANDOTTES.—Cocks—1 and 2, S. F. Glass, London Junction; 3, Arthur Hedden, London; 4, Adam Bros.; 5, G. A. Black, Acton.

Hens—1 and 2, S. F. Glass; 3 and 4, Adam Bros.; 5, Crawford & Sons, Mitchell.

Cockerels—1, S. F. Glass; 2, J. R. Johnson, Leamington; 3 and 4, S. Ruddle, Guelph.

Pullets—1, Adam Bros.; 2, H. W. McCutcheon, London; 3, J. R. Johnson; 4 and 5, S. F. Glass.

SILVER-LACED WYANDOTTES.—Cocks—1, Peep o' Day Poultry Farm, London; 2, Wilber Lemon, Linden; 3, Jas. Arthers, London.

Hens—1, 2 and 3, Wilber Lemon. Cockerels—1, Jas. Arthers; 2 and 3, Wilber Lemon.

Pullets—1, Jas. Arthers; 2, Alfred

Flawn; 3, Wilber Lemon. BLACK WYANDOTTES.—Dinner, St. Watford; 3, A. Hens—1, A. Smith, Stratford. Cockerels—1, Dinner. Pullets—1 and 2, J. R. Smith. BUFF WYANDOTTES.—Mick, Toronto; Norway; 3. Hens—1 and 2, Jas. Dundas. Cockerels—Hughes Sam. Pullets—1, once Allison; 4, Jas. Dundas. SILVER-PARTRIDGE.—Cocks—1, 3, Robert D. Hens—1, F. Bros.; 3, J. C. Cockerels—rows, Guelph. Pullets—1, 2, Spiars B. COLUMBIAN.—1, S. J. S. Scott, St. T. Miss, Brant. Hens—1 and 3, T. H. S. Cockerels—T. H. Scott. Pullets—1, 5, Jos. R. WHITE OMOORE, Ha. Moore, Han. Hens—1 and 4, I. Cockerels—man, Grant. Pullets—3, A. H. W. BUFF ORPINGTONS.—J. W. Clark, Port Ottawa. Hens—1, R. Hoffman, Hellyer; 4, Cockerels—Hellyer; 2, 8 and 9, H. Wlyth, Mar. Pullets—1, Hellyer; 4, Hoffman, I. W. J. C. BLACK KEMP & W. & Scoyne, Granton. Hens—1, Mary's; 3, Cockerels—3 and 5, Berlin. Pullets—1 and 3, F. Fraleigh; 4, 10, Hamilton. S.-C. RE. 1 and 3, W. J. Mil. Guelph. Hens—1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

Flawn; 3, Jas. Baptie, Springville; 4, Wilber Lemon.

BLACK WYANDOTTES.—Cocks—1, R. Dinner, St. Thomas; 2, A. E. Doan, Watford; 3, A. & T. Readwin, Guelph.

Hens—1, A. & T. Readwin; 2, J. R. Smith, Strathroy; 3, G. & J. Bogue, Strathroy.

Cockerels—1 and 2, J. R. Smith; 3, R. Dinner.

Pullets—1 and 2, J. & T. Readwin; 3, J. R. Smith.

BUFF WYANDOTTES.—Cocks—1, Spry & Mick, Toronto; 2, J. Hughes Samuel, Norway; 3, J. H. Eyer, Toronto.

Hens—1 and 3, J. Hughes Samuel; 2, Jas. Dundas, Toronto.

Cockerels—1, Jas. Dundas; 2, J. Hughes Samuel; 3, Spry & Mick.

Pullets—1, J. Hughes Samuel; 2, Clarence Allison, Brampton; 3, Spry & Mick; 4, Jas. Dundas.

SILVER-PENCILLED WYANDOTTES.—Cocks—1, Spiars Bros., Guelph; 2 and 3, Robert Davidson, London.

Hens—1, Robert Davidson; 2, Spiars Bros.; 3, Jos. Houden, Elmvale.

Cockerels—1, Spiars Bros.; 2, Geo. Burrows, Guelph; 3, Robert Davidson.

Pullets—1, Robert Patterson, Guelph; 2, Spiars Bros.; 3, Robert Davidson.

COLUMBIAN WYANDOTTES.—Cocks—1, S. J. Schelly, Brantford; 2, T. H. Scott, St. Thomas; 3, Robert C. Middlemiss, Brantford.

Hens—1 and 2, Robert C. Middlemiss; 3, T. H. Scott; 4, S. J. Schelly.

Cockerels—1, S. J. Schelly; 2 and 4, T. H. Scott; 3, John Pringle.

Pullets—1, 2, 3 and 4, S. J. Schelly; 5, Jos. Rooke, Woodstock.

WHITE ORPINGTONS.—Cocks—1, Wm. Moore, Hamilton; 2 and 3, F. H. J. Moore, Hamilton.

Hens—1 and 3, F. H. J. Moore; 2, Wm. Moore; 4, F. C. Bogart, Napanee.

Cockerels—1, Wm. Moore; 2, A. H. Westman, Granton; 3, F. A. Shultz, Hamilton.

Pullets—1, Wm. Moore; 2, E. A. Shultz; 3, A. H. Westman.

BUFF ORPINGTONS.—Cocks—1 and 2, J. W. Clark, Cainsville; 3, Thompson Bros., Port Dover; 4, A. W. E. Hellyer, Ottawa.

Hens—1, Hugh W. Scott, Caledonia; 2, H. R. Hoffman, Ridgetown; 3, A. W. E. Hellyer; 4, Thompson Bros.

Cockerels—1, 6 and 10, A. W. E. Hellyer; 2, E. Fraleigh, St. Mary's; 3, 8 and 9, H. R. Hoffman; 4 and 5, C. M. Blyth, Marden; 7, J. W. Clark.

Pullets—1, 2, 3, 7 and 8, A. W. E. Hellyer; 4, H. R. Hoffman; 5, H. A. Hoffman, Ridgetown; 6, H. R. Hoffman; 9, J. W. Clark; 10, C. M. Blyth.

BLACK ORPINGTONS.—Cocks—1, Kemp & Waterman, London; 2, Hamilton & Scoyne, London; 3, G. A. Jamieson, Granton.

Hens—1, 2 and 4, E. Fraleigh, St. Mary's; 3, G. A. Jamieson.

Cockerels—1 and 2, Kemp & Waterman; 3 and 5, E. Fraleigh; 4, P. K. Ferguson, Berlin.

Pullets—1, E. A. Rawlings, Forest; 2 and 3, F. J. Ferguson; 4, 6 and 7, E. Fraleigh; 5, Kemp & Waterman; 8, 9 and 10, Hamilton & Scoyne.

S.-C. RHODE ISLAND REDS.—Cocks—1 and 3, Hughes & Taylor, London; 2, W. J. Mihm, Guelph; 4, Brown & Reid, Guelph.

Hens—1, A. P. Hillhouse, Bondville, Que.; 2, Hughes & Taylor; 3, W. H. Mihm; 4, Brown & Reid.

Cockerels—1, C. E. T. Woodley & Sons, Knowlton, Que.; 2, Jos. Russell; 3, Hughes & Taylor; 4, T. A. Faulds, London; 5, Wm. Pearson, Guelph.

Pullets—1, 2, 3, 4 and 6, T. A. Faulds; 5, Jas. L. Vance, Ingersoll; 7, Wm. Pearson; 8, Jos. Russell; 9, William & Goetz, Brantford; 10, C. J. Daniels, Toronto.

SILVER-GRAY DORKINGS.—Cocks—1, G. A. Burns, Ayr; 2 and 3, H. H. McKee, Norwich.

Hens—1 and 2, H. H. McKee; 3, G. A. Burns.

Cockerels—1, 2 and 3, G. A. Burns.

Pullets—1 and 2, G. A. Burns; 3, H. H. McKee.

COLORÉD DORKINGS.—Cocks—1 and 2, Jas. McCormack, Rockton; 3, J. H. Warrington, Cornwall.

Hens—1 and 2, Jas. McCormack; 3, W. H. Reid, Kingston.

Cockerels—1, Jas. McCormack.

Pullets—1 and 2, Jas. McCormack.

WHITE DORKINGS.—Cocks—1, David

Bogue, Lambeth; 2, J. H. Warrington; 3, A. E. Doan, Watford.

Hens—1, David Bogue; 2, J. H. Warrington; 3, Geo. Burn, Tillsonburg.

Cockerels—1, David Bogue; 2, J. H. Warrington; 3, Geo. Burn.

Pullets—1, Jas. McCormack; 2, A. E. Doan; 3, J. H. Warrington.

LIGHT BRAHMAS.—Cocks—1, 2 and 3, H. W. Partlo, Ingersoll.

Hens—1, 2 and 3, H. W. Partlo.

Cockerels—1, 2 and 3, H. W. Partlo.

Pullets—1, 2 and 3, H. W. Partlo.

DARK BRAHMAS.—Cocks—1 and 3, L. C. Sage, London; 2, C. A. R. Tilt, Doon.

Hens—1, L. C. Sage; 2, C. H. Wilson, Hawkestone; 3, C. A. R. Tilt.

Cockerels—1 and 2, L. C. Sage; 3, C. A. R. Tilt.

Pullets—1, C. A. R. Tilt; 2, L. C. Sage; 3, C. H. Wilson.

BUFF COCHINS.—Cocks—1 and 3, Holmhurst Poultry-yards, Whithy; 2, Hugh Wyatt, London.

Hens—1 and 3, Hugh Wyatt; 2, Dr. P. A. McIntosh, Spencerville.

Cockerels—1, Holmhurst Poultry-yards; 2, Hugh Wyatt; 3, Hugh Wyatt.

Pullets—1 and 2, Hugh Wyatt; 3, Holmhurst Poultry-yards.

PARTRIDGE COCHINS.—Cocks—1, F. Wales, Milton; 2, I. J. Cole, Bowmanville; 3, John Handley, Galt.

Hens—1, A. E. Shether, Brandon, Man.; 2, F. Wales; 3, John Handley.

Cockerels—1, Hugh A. Rose, Welland; 2, F. Wales; 3, C. H. Wilson.

Pullets—1, A. E. Shether; 2 and 3, Hugh A. Rose.

BLACK COCHINS.—Cocks—1, Dr. P. A. McIntosh; 2, C. A. R. Tilt.

Hens—1 and 2, C. A. R. Tilt.

Cockerels—1, C. A. R. Tilt.

Pullets—1 and 2, C. A. R. Tilt.

WHITE COCHINS.—Cocks—1, Hugh A. Rose; 2, G. & J. Bogue; 3, Harry L. Leesh, Peterboro.

Hens—1 and 3, Hugh A. Rose; 2, G. & J. Bogue.

Cockerels—1, Hugh A. Rose; 2, Dr. P. A. McIntosh.

Pullets—1 and 2, Hugh A. Rose; 3, David Bogue.

BLACK LANGSHANS.—Cocks—1, John Burgess, Chelsea Green; 2, I. J. Cole, Bowmanville; 3, R. McCurdy, London.

Hens—1 and 2, C. A. R. Tilt; 3, I. J. Cole.

Cockerels—1 and 3, C. A. R. Tilt; 2, R. McCurdy.

Pullets—1 and 2, C. A. R. Tilt; 3, R. McCurdy.

S.-C. BROWN LEGHORNS.—Cocks—1 and 3, A. J. Engel, Waterloo; 2, H. F. Becker, Waterloo; 4, Peter Scott, Guelph.

Hens—1 and 4, W. A. Gurney, London; 2, Streib & Becker, West Lorne; 3, Orr & Creeden, Brantford.

Cockerels—1, 2 and 10, A. J. Engel, Waterloo; 3, 4 and 9, J. G. Taylor, Woodstock; 5, Orr & Creeden; 6, H. F. Becker; 7 and 8, Streib & Becker.

Pullets—1 and 4, W. A. Gurney; 3, 7 and 8, Orr & Creeden; 5, G. G. Henderson, Hamilton; 6, E. F. Montgomery, Guelph; 2, Streib & Becker; 9 and 10, J. G. Taylor.

R.-C. WHITE LEGHORNS.—Cocks—1, I. K. Martin, Galt; 2, H. E. Thorne, London; 3, Ken. A. McLeod, Brantford.

Hens—1, H. E. Thorne; 2, J. H. Eyer, Toronto; 3, A. & T. Readwin.

Cockerels—1 and 3, I. K. Martin; 2, H. E. Thorne.

Pullets—1 and 3, I. K. Martin; 2, H. E. Thorne.

S.-C. WHITE LEGHORNS.—Cocks—1, Jas. L. McCormack; 2 and 5, Wm. Ferguson, Brantford; 3, Jno. A. McDougall, Galt; 4, F. Wales.

Hens—1, Jas. L. McCormack; 2, Durst Bros., Bonmillor; 3, 4 and 5, Wm. Ferguson.

Cockerels—1, 5 and 6, Wm. Ferguson; 2, 3 and 8, E. F. Wales; 4, H. B. Foster, Bowmanville; 7, F. Syer, Milton; 9, Jas. L. McCormack.

Pullets—1, 2, 3, 6 and 9, F. Wales; 4 and 5, Wm. Ferguson; 7 and 8, F. Wales; 10, Jas. L. McCormack.

BLACK LEGHORNS.—Cocks—1 and 3, A. E. Doan; 2, F. H. Gallinger, South End.

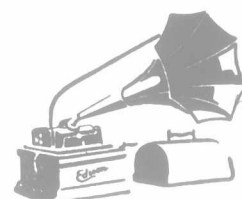
Hens—1 and 2, A. E. Doan; 3, Geo. Burn.

Cockerels—1, 2 and 4, A. E. Doan; 3, W. J. McLeod.

Pullets—1 and 4, F. H. Gallinger; 2, W. Barber & Co., Toronto; 3, A. E. Doan; 5, W. J. McLeod.

R.-C. BROWN LEGHORNS.—Cocks—1

An Edison Phonograph makes a Family Christmas



The one thing that brings joy to all the household, big and little, old and young, is an Edison Phonograph with a selection of Edison Amberol Records.

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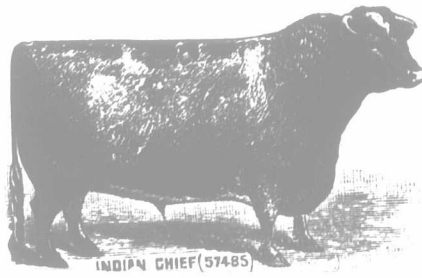
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My 1909 importation of Clydesdale stallions and fillies, Percheron stallions and fillies, French Coach and Hackney stallions are now in my stables. In this lot I can supply the most exacting. Size, style, character, quality and breeding. Will sell on terms to suit.
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Pullets—1, Henderson & Billings; 2, R. M. Patterson, Agincourt; 3, C. H. Wilson; 4, Miss E. Davidson.

BUFF LEGHORNS.—Cocks—1, C. H. Tovell, Galt; 2, R. B. Graham, Galt; 3, Nate K. Cornwall, Thamesville.

Hens—1, C. H. Tovell; 2, N. K. Cornwall.

Cockerels—1, R. B. Graham; 2, C. H. Tovell; 3, N. K. Cornwall.

Pullets—1, 2 and 3, R. B. Graham; 4, N. K. Cornwall.

S.-C. BLACK MINORCAS.—Cocks—1 and 2, T. A. Faulds; 3, R. Smith, Lambton Mills; 4, Chas. Gorvett, Sparta.

Hens—1, R. Smith; 2, 3 and 4, Henry Dunne, Toronto; 5, T. A. Faulds.

Cockerels—1 and 3, T. A. Faulds; 2, Henry Dunne; 4, A. Goebel, Mitchell; 5, Henry Dunne.

Pullets—1 and 4, Henry Dunne; 2 and 3, T. A. Faulds; 5, R. Smith.

R.-C. BLACK MINORCAS.—Cocks—1, B. J. Mountjoy, London; 2, Dr. J. N. MacRae, Galt; 3, T. A. Faulds.

Hens—1, Dr. J. N. MacRae; 2, T. A. Faulds; 3, Ross Swartout, Newport.

Cockerels—1 and 2, Dr. J. N. MacRae; 3, T. A. Faulds; 4, Ross Swartout.

Pullets—1, Dr. J. N. MacRae; 2, Ross Swartout; 3, T. A. Faulds; 4, F. R. Fisher, Newmarket.

WHITE MINORCAS.—1, A. C. Moyer, Waterloo; 2, Thos. Vickers, Owen Sound.

Hens—1 and 2, A. C. Moyer; 3, Thos. Vickers.

Cockerels—1 and 2, A. C. Moyer; 3, Thos. Vickers.

Pullets—1 and 2, A. C. Moyer; 3, Thos. Vickers.

ANDALUSIANS.—Cocks—1, H. V. Cosh, Bobcaygeon; 2, Baker Bros., Guelph; 3, Geo. I. Howard, Guelph.

Hens—1 and 2, H. V. Cosh; 3, Adolph Smith, Guelph.

Cockerels—1 and 2, H. V. Cosh; 3, Chas. Gorvett.

Pullets—1 and 2, Chas. Gorvett; 3, Geo. I. Howard.

HOUDANS.—Cocks—1 and 3, G. & J. Bogue; 2, E. O. Penwarden, St. Thomas.

Hens—1, E. P. Doncaster, Bowmanville; 2, E. O. Penwarden; 3, Wm. Phenix, St. Thomas; 4, J. M. Thorpe, London.

Cockerels—1, C. Day, Highgate; 2 and 3, G. & J. Bogue; 4, E. P. Doncaster.

Pullets—1, Wm. Phenix; 2 and 3, G. & J. Bogue; 4, C. Day.

INDIAN GAMES, ANY VARIETY.—Cocks—1, Nathan Topping, Tambling's Corners; 2, Cecil H. Earl, Milton; 3, John Crawford & Sons, Mitchell.

Hens—1 and 3, Nathan Topping; 2, Andrew L. Virene, Sault Ste. Marie.

Cockerels—1, Will Casey, Mitchell; 2, C. H. Earl; 3, John Handley, Galt.

Pullets—1 and 2, Nathan Topping; 3, Will Casey, Mitchell.

DOMINIQUES.—Cocks—1, Geo. Burn; 2, A. G. H. Luxton, Mt. Forest.

Hens—1, Geo. Burn; 2, G. B. Carbert, Campbellville; 3, A. G. H. Luxton.

Cockerels—1 and 2, G. B. Carbert; 3, A. G. H. Luxton.

Pullets—1 and 2, G. B. Carbert; 3, A. G. H. Luxton.

GOLDEN-SPANGLED HAMBURGS.—Cocks—1, Jas. Baptie, Springville; 2, Samuel C. Spies, St. Thomas; 3, R. Oke, London.

Hens—1, 2 and 3, Jas. Baptie.

Cockerels—1, S. C. Spies; 2, Jas. Baptie; 3, R. Oke.

Pullets—1, Jas. Baptie; 2, S. C. Spies; 3, R. Oke.

SILVER-SPANGLED HAMBURGS.—Cocks—1, R. Oke; 2, Wm. Carter, Constance; 3, Jas. Baptie.

Hens—1 and 2, Jas. Baptie; 3, R. Oke.

Cockerels—1 and 3, R. Oke; 2, Jas. Baptie.

Pullets—1 and 3, R. Oke; 2, S. C. Spies.

GOLDEN-PENCILLED HAMBURGS.—Cocks—1, R. Oke.

Hens—1, Wm. Carter; 2 and 3, R. Oke.

Cockerels—1 and 2, R. Oke; 3, G. & J. Bogue.

Pullets—1, G. & J. Bogue; 2, Wm. Carter; 3, R. Oke.

SILVER-PENCILLED HAMBURGS.—Cocks—1, R. Oke; 2, W. C. Mills, Woodstock.

Hens—1 and 2, R. Oke; 3, Wm. Carter.

Cockerels—1, Wm. Carter; 2, G. & J. Bogue; 3, W. C. Mills.

Pullets—1, Wm. Carter; 2 and 3, R. Oke.

BLACK HAMBURGS.—Cocks—1 and 3, Fred D. King, Aylmer West; 2, R. L. Wheadon, Bracebridge.

Hens—1 and 2, R. L. Wheadon; 3, Jas. Baptie.

Cockerels—1 and 2, R. L. Wheadon; 3, R. Oke.

Pullets—1 and 3, R. L. Wheadon; 2, W. H. Reid.

Turkeys.

BRONZE (2 years and up).—Cocks—1, W. J. Bell, Angus; 2, Jas. Baptie; 3, Chas. Gould, Glencoe; 4, D. Douglas & Sons, Mitchell; 5, W. E. Wright, Glanworth.

Hens—1, Jas. Ford & Son, Drumquin; 2 and 4, W. J. Bell; 3, T. J. Cole, Bowmanville; 5, W. E. Wright.

BRONZE (under 2 years).—Cocks—1, T. J. Cole, Bowmanville; 2, W. J. Bell; 3, Jas. Ford & Son, Drumquin; 4, W. E. Wright; 5, F. Wales.

Hens—1, Alfred C. Crane, Guelph; 2, A. McDougall & Son, Milton West; 3 and 5, W. J. Bell; 4, Jas. Ford & Son.

Cockerels—1, A. McDougall & Son; 2 and 3, Chas. Gould; 4, W. J. Bell; 5, W. E. Wright.

Pullets—1, Chas. Gould; 2, A. McDougall & Son; 3 and 5, W. J. Bell; 4, T. J. Cole.

WHITE TURKEYS.—Cocks—1, Geo. Baker, Simcoe; 2, A. McDougall & Son; 3, Baker Bros., Guelph; 4, A. G. H. Luxton.

Hens—1 and 2, Baker Bros.; 3, A. McDougall & Son; 4, Geo. Baker; 5, A. G. H. Luxton.

Cockerels—1 and 2, Baker Bros.; 3, A. McDougall & Son; 4, A. G. H. Luxton; 5, Jos. Telfer.

Pullets—1 and 2, Baker Bros.; 3, A. McDougall & Son; 4, A. G. H. Luxton; 5, Jos. Telfer.

ANY OTHER VARIETY TURKEY.—Cocks—1 and 2, A. G. H. Luxton.

Hens—1, W. J. Alexander, Ashgrove; 2, A. G. H. Luxton; 3, A. McDougall & Son.

Cockerels—1, A. McDougall & Son; 2, Jos. Telfer; 3 and 4, W. J. Alexander; 5, A. G. H. Luxton.

Pullets—1 and 4, W. J. Alexander; 2, Jos. Telfer; 3, A. McDougall; 5, A. G. H. Buxton.

Ducks.

AYLESBURY.—Old Males—1 and 2, G. & J. Bogue; 3, T. J. Cole.

Old Females—1 and 2, G. & J. Bogue; 3, C. A. R. Tilt.

Young Males—1, T. J. Cole; 2 and 3, G. & J. Bogue.

Young Females—1, G. & J. Bogue; 2, T. J. Cole; 3, C. A. R. Tilt.

ROUEN.—Old Males—1 and 2, Baker Bros.; 3, Thos. M. Shea, Fergus.

Old Females—1, Miss Mary Colwell, Paris Station; 2 and 3, Baker Bros.

Young Males—1 and 2, Baker Bros.; 3, A. G. H. Luxton.

Young Females—1, Miss Mary Colwell; 2 and 3, Baker Bros.

PEKIN.—Old Males—1 and 3, C. A. R. Tilt; 2, D. Douglas & Sons.

Old Females—1 and 2, C. A. R. Tilt; 3, D. Douglas & Sons.

Young Males—1, C. A. R. Tilt; 2, G. J. Lawrie, Maple; 3, D. Douglas & Sons.

Young Females—1, G. J. Lawrie; 2, C. A. R. Tilt; 3 and 4, D. Douglas & Sons.

INDIAN RUNNER.—Old Males—1 and 3, S. D. Furminger, St. Catharines; 2, T. J. Cole.

Old Females—1 and 2, S. D. Furminger; 3, T. J. Cole.

Young Males—1, H. E. Moffatt; 2 and 3, S. D. Furminger.

Young Females—1, H. E. Moffatt, Woodstock; 2 and 3, S. D. Furminger.

CAYUGA.—Old Males—1, Isaac T. Knight, Arkell; 2, A. G. H. Luxton.

Old Females—1, Isaac T. Knight; 2, A. G. H. Luxton.

Young Males—1, C. A. R. Tilt; 2, Isaac T. Knight.

Young Females—1, C. A. R. Tilt; 2, Isaac T. Knight; 3, Miss Mary Colwell.

MUSCOVY.—Old Males—1, Isaac T. Knight; 2, H. E. Moffatt; 3, Gideon Peer, Guelph.

Old Females—1, Isaac T. Knight; 2, H. E. Moffatt; 3, Gideon Peer.

Young Males—1, Isaac T. Knight; 2, Geo. Burn.

Young Females—1, Isaac T. Knight; 2, Geo. Burn.

22



22 Imp. Clydesdale Stallions



Just landed, ages from 2 to 5 years old. A number of them are premium horses. Several are over the ton, or will make it. A number of them are grandsons of Baron's Pride. All are for sale. Prices are reasonable. Intending purchasers will find it to their interest to see these horses before purchasing. Farm two miles from the end of street-car line.

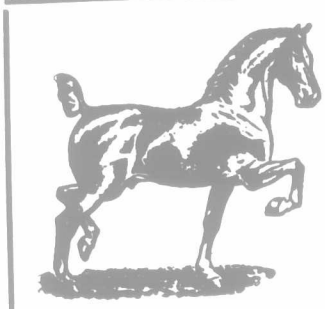
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Long-distance 'phone.

20 Imp. Percheron Stallions 20



Our 1909 importation of 20 Percheron stallions, from 1 to 5 years of age, are now in our stables. Up to over a ton in weight. Big, stylish, choke-full of flashy quality, and faultless movers. Prizewinners among them. The best lot ever imported to Canada. All are for sale on terms to suit.

HAMILTON & HAWTHORNE, Ontario.
Simcoe, - - -

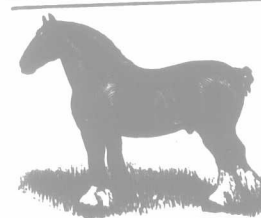


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are from such sires as Baron's Pride, Up-to-Time, Benedict, etc. None but the best imported Stallions and fillies for sale. At Great Eastern Exhibition seven entries took six firsts, two seconds, gold medal and diploma.

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MY NEW IMPORTATION OF

Clydesdale Stallions and Fillies

are now in my stables at Markham, Ont., and, as usual, I have a big range for selection, of a type, breeding and quality seldom equalled, never exceeded, by any previous importation. Call and see them. 'Phone connection. **T. H. HASSARD, Markham, Ont.**

Clydesdales and Percherons

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

J. B. Hogate, Weston, Ont., & Brandon, Man.
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Imported Clydesdales We have a number of imported stallions on hand in our stables in London, Ont., including some very large and heavy horses, several prizewinners. Another consignment, stallions and fillies, sailed Saturday, October 16th, from Glasgow. **DALGETY BROS., LONDON, ONTARIO**

MY NEW IMPORTATION TO HAND. In my new importation of 4 Clydesdale Stallions and 6 Clydesdale Fillies, I have material that will stand comparison with anything ever imported. They have great size, beautiful mould, full of quality, right fashionably bred and perfect action. **JOHN A. BOAG & SON, QUEENSVILLE, ONTARIO.**

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

CLYDESDALES WITH SIZE AND QUALITY. Several of them are up to the ton and over in weight. Their breeding is unexcelled; their type and quality all that could be desired. If in want of the best come and see them. **WM. COLQUHOUN, Mitchell, Ont.**

CLYDESDALES and HACKNEYS We have for sale a few choice Clydesdale mares, imported and Canadian-bred; also some Canadian-bred Clydesdale stallions. Hackney stallions and mares for sale always. Long-distance 'phone. **Hodgkinson & Tisdale, Beaverton, Ont.** G. T. R. and C. N. R.

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

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

QUESTIONS AND ANSWERS. Miscellaneous.

SWITCHING MARE.

Mare three years old past, when working, switches. What will stop her? Would docking her tail prove a remedy? **SUBSCRIBER.**

Ans.—The use of an iron crupper covered with leather has, in some cases, proved a cure of the habit. Docking might have the desired effect, but we cannot advise, not having known it tried for that purpose. Can any of our readers suggest a better plan?

WORKING BY THE MONTH.

A hires with B by the month; A works 168 days without Sundays. Can A claim 26 days for every month? **SUBSCRIBER.**

N. B.

Ans.—A is not legally entitled to reckon on the time in the way suggested. By "month," a "calendar" month is ordinarily intended, and, unless the contract of hiring provided for some other mode of reckoning, the number of working days to the month is immaterial. Such number, of course, varies; and the answer to your question is, accordingly, no.

CEMENTING STAVE SILO.

We have a large stave silo thirty-two feet high by fifteen in diameter. Some have advised us to cement it on the outside. How would I do that, as there are no rings big enough in our locality? Or would it pay me better to tear it down and build a new one? **F. W. A.**

Ans.—It will be better to use your stave silo as long as it is good, and then take it down and build one of cement. If using cement at all, we would rather put it on the inside of the staves, but even this would not advise.

PROPOSED DRAINAGE WORK.

1. Can my neighbor go to work and tile his land and let his outlet run on top of my land if the water-course is that way?

2. Can he force me to open a ditch if he has no outlet for his tiles? **Ontario.**

Ans.—1 and 2. He can obtain an outlet through your lands; but if you are unable to agree upon the method and the matter of work and expense, he must, in order to get ahead with the drainage lawfully, take proceedings under The Ditches and Water Courses Act (R. S. O., 1897, Chap. 285). We would refer you especially to sections 5, 8, 9 and 17 of that Act.

GOSSIP.

The championship for the best pens of sheep or lambs, open to all breeds, at the Birmingham Fat-stock Show, was awarded to James Flower for his Hampshire yearling wethers. The King's Southdown yearling wethers were the reserve pen.

The grand champion pen of three barrows at the Chicago International Exposition this year, were Berkshires fed and shown by the Iowa Agricultural College, and sold for \$8.65 per cwt. Judge C. A. Kurtze, speaking of these hogs, said they were the best pen of barrows ever shown at any international show at Chicago. Their prominent features were the breed characteristics, conformation, and perfection in every way from a breeder's standpoint.

OUT OF THE FRYING-PAN.

The Right Honorable George H. Reid, the Australian statesman, was declaiming against a proposed measure at a public meeting. Mr. Reid is an enormously-fat man, weighing in the neighborhood of three hundred pounds.

"In ten years," he said, "we shall see the futility of this thing. In ten years we shall know how vicious it is. In ten years all men will understand what I am saying, and I shall be proved right. In ten years—"

"How about thirty years?" asked a man in the audience.

"Oh," snorted Reid, "never mind about thirty years. We shall all be dead in that time."

"Then the fat will be in the fire man?"

"Then the fat will be in the fire man?"

HORSE OWNERS! USE

CAUSTIC BALSAM.
A safe, speedy and positive cure. The safest, best blister ever used. Removes all bunches from Horses. Impossible to produce scar or bluish. Send for descriptive circulars.

THE LAWRENCE-WILLIAMS CO., Toronto, Can.

ABSORBINE
Removes Bursal Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from any Bruise or Strain, Cures Spavin Lameness, Allays Pain. Does not blister, remove the hair or lay the horse up. \$2.00 a bottle, delivered. Book 1 D free.

ABSORBINE, JR. (mark in \$1.00 bottle.) For Synovitis, Strains, Gouty or Rheumatic Deposits, Varicose Veins, Varicocele, Hydrocele. Allays pain. Book free.

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Every farmer, liveryman and veterinary surgeon should have a Climax Speculum for administering medicine or getting at the teeth or mouth of horses and cattle. Everyone agrees that it is more durable, more easy to use, more satisfactory in operation than any other on the market. We are so certain that you will be satisfied with it that we make this special offer. Send us \$6.50 by Post Office or Express Order and we will send you a Climax Speculum at once. If, after 30 days' trial, you are not convinced that it is the best speculum you could have, send it back to us, and we will refund the purchase price.

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Don't Have a Blind One

Wonderful Discovery "VISIO"

MOON BLINDNESS and all diseases of the Eye successfully treated with this **NEW REMEDY.**

Money Back if it fails to cure. \$3.00 per bottle postpaid on receipt of price.

Visio Remedy Ass'n, Dept. C, 1833 Wabash Av., Chicago, Ill.

Notice to Horse Importers!

GERALD POWELL, Commission Agent and Interpreter, LILLE, FRANCE

Will meet importers at any port in France or Belgium, and assist them to buy Percherons, Belgians, French Coach horses. All information about shipping, banking and pedigrees. Many years experience; best references; correspondence solicited.

DUNHAMS' PERCHERONS

Fourth large importation within the year arrives November 23rd., which, added to our present stock, offers intending purchasers the finest collection in America. If you want the best horses, horses with bone, quality, size, action, and best breeding, stallions or mares; if you want fair and liberal treatment; if you want lowest prices consistent with good merchandise, visit Oaklawn. Catalog shows the place and the horses. **W. S. J. B. & B. Dunham, Wayne, Ill.**

Peachblow Clydesdales AND AYRSHIRE

Clydesdale stallions and fillies, imported and Canadian-bred. Ayrshires of high-class quality and productiveness, 40 to 50 lbs. of milk a day; females of all ages and bull calves. My prices are right.

R. T. BROWNLEE, Hemmingford, Que.

STALLIONS WANTED

Clyde and Shire, Canadian-bred stallions, from 2 to 5 years old. Must be in good condition. Address:

J. H. Patrick, Ilderton, Ont.

A girl in a small Kansas town has been engaged seven times. Her neighbors have adopted this slogan for her: "Present company always accepted."

Bone Spavin

No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

Fleming's Spavin and Ringbone Paste

Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 4-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of Fleming's Vest-Pocket Veterinary Adviser

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

FLEMING BROS., Chemists
75 Church St., Toronto, Ontario

THE "MAPLES" HEREFORDS

Canada's Greatest Show Herd.

For Sale: 25 bulls from 6 to 18 months of age, bred from imported and show stock; also about the same number of heifers, none better. Prices right.

W. H. HUNTER,
Orangeville P.O. and Sta.

Balmedie Polled Angus and Oxford Down sheep—Offering several exceptionally nice heifers, and a few young bulls. Discriminating buyers will be pleased with my herd. Anything in the herd will be priced. Also ram and ewe lambs. T. B. Broadfoot, Fergus P. O. and Station.

Homestead Aberdeen-Angus

Some extra good bull calves, 6 to 8 months old; also females, all ages. Parties looking for cattie, either sex, should write, or come and see them.

William Ische, Sebringville, Ont.
Long-distance Phone.

Aberdeen-Angus Cattle—Stock all ages, and both sexes, at reasonable prices. Apply to **ANDREW DINSMORE, "Grape Grange" Farm** Clarksburg, Ont.

ABERDEEN - ANGUS

Will sell both sexes; fair prices. Come and see them before buying. Drumbo station.

WALTER HALL, Washington, Ont.

1854—Maple Lodge Stock Farm—1909

Shorthorn bulls and heifers of extra quality and breeding, and from best milking strains.

Leicesters of first quality for sale. Can furnish show flocks.

A. W. SMITH, Maple Lodge P.O., Ontario
Lucan Crossing Sta., G. T. R., one mile.

HIGH-CLASS SHORTHORNS

I have on hand young bulls and heifers of high-class show type, pure Scotch and Scotch topped, sired by that sire of champions, Mildred's Royal. If you want a show bull or heifer, write me.

GEO. GIER, GRAND VALLEY P. O. AND STA., ALSO WALDEMAR STA.

JOHN GARDHOUSE & SONS

Always have for sale a number of first-class Shorthorn bulls, Shires and Lincolns, of both sexes. Drop us a line, or better, come and see for yourself.

HIGHFIELD P.O., ONTARIO.
Weston Sta., G. T. R. & C. P. R. Long-distance phone in house.

Geo. D. Fletcher, Binkham P.O., Ont.

Offers four choice Shorthorn bulls, 10, 13 and 18 months old, with both breeding and quality for herd headers. Prices easy. Stock bull, Benachie (imp.) = 69954=; also Shorthorn females and Yorkshire sows. Erin shipping station, C.P.R.

GOSSIP.

R. B. MARTIN'S HOLSTEIN SALE.

Friday, December 31st, is the date for the dispersion sale by auction of the Holstein herd of R. B. Martin, at his Beaver Meadow Stock Farm, Elmira, Ont., as advertised. The cattle are richly-bred on producing lines, most of them are young or in the prime of life, and the females of breeding age have been bred to the grandly-bred bull, Dottie Sir Abbecker, whose pedigree shows extra-strong backing of records, or to the equally well-bred Auggie Grace Cornucopia Lad, and the herd has been bred for profitable work at the pail. The terms of the sale are easy, and reduced holiday railway rates will be available. Trains will be met at Wallenstein, C. P. R., at 8.40 a. m. from the west, and 10.25 from the east. At Elmira, G. T. R., at 12.05 noon.

QUESTIONS AND ANSWERS. Miscellaneous.

LUMPS ON HEIFER.

I have a heifer coming three years old, giving milk, that has six small, hard lumps about the size of a hickory-nut, two on her side, two on her back, and one on her shoulder. They have been there some time, but do not seem to get any larger. Is her milk fit for use? Do you think I could put anything on them to take them off? She is hearty, and seems well other ways.

SUBSCRIBER.

Ans.—The heifer, being in apparent good health, we think her milk may be quite safely used for food. Probably the application of iodine ointment, first clipping the hair from the parts, will reduce, and, perhaps, quite disperse the lumps. Apply the ointment every other day for a week.

LIME FOR LAND.

I am thinking of applying lime to a piece of young clover, having determined that the land is in need of it.

1. When would be the proper time to apply it?
2. How much would you apply?
3. What would be the best way of applying it?
4. Would land plaster answer as well, and where could it be purchased?
5. Where could I purchase phosphorus?

AN OLD SUBSCRIBER.

Ans.—1. In the fall, or early in spring.
2. Fifty bushels of fresh lime per acre is abundance.
3. Allow it to become air slacked, and then spread evenly.
4. Land plaster, although containing calcium, is not the same as lime, either in composition or action. On virgin soils, it often has a wonderful effect on clover.
5. Phosphorus is the important fertilizing element in bone manures, in raw rock phosphates, in acid phosphate, and in basic slag. These all are commercial fertilizers, which can be procured from dealers in such articles. Such dealers advertise in "The Farmer's Advocate" from time to time.

SORE MOUTH IN PIG.

I have a pig eight months old that I was getting ready to kill, and for a couple of weeks back, it has refused to eat. It wants to drink all the time. Around the head, neck and eyes, it is spotted; that is, the flesh looks red and purple, and dark around the eyes. It acts as if its throat was sore, as it will take anything in its mouth to chew, and spit it out. Can you tell me what is wrong with it? I have been feeding boiled feed, such as mangels, apples and pumpkins, mixed with oat chop, shorts and oil cake.

J. H.

Ans.—From your description, we would say the pig was suffering from simple inflammation of the mouth. Soft food, not requiring much chewing, is best while the trouble lasts. It is not considered serious.

CEMENT FLOORS.

1. How much each of crushed hard heads, sharp sand and cement, will be required for the following: Cow-stable floor, 20x30 feet; horse-stable floor, 40x28 feet; box-stall floor, 20x18 feet?

2. What thickness should these floors be?

3. Which is the better way to lay the floors, to lay the floor in two parts, with 2-inch finishing-coat, or to ram it down all in one body?

E. A. W.

Ans.—1 and 2. Allowing for a thickness of four inches, which is quite sufficient, there would be 700 cubic feet of concrete. It is impossible to give exact amount of the different materials, as so much depends on the mixing, but about 4 cords of crushed stone, 3 cords of sand, and 25 to 30 barrels of cement, would be required.

3. A surface coat is usually preferred, in part because it can be made richer, so that it will stand wear better. It ought to be spread on as soon as possible after the next thickness is laid.

PURITY FLOUR

And Its Keeping Qualities

SOME people find it necessary to buy a considerable quantity of flour at one time—sufficient to last for a long period. Naturally they are anxious to procure a flour of the kind best adapted to lengthy storage.

There are two important reasons why PURITY FLOUR possesses these qualities. One is that it is made entirely from Manitoba Hard Wheat. The other lies in the fact that the careful milling necessary to produce "Purity" absolutely excludes all low-grade particles of the wheat berry. It's the high grade Manitoba Hard Wheat Flour that keeps—stands longest storage. That's "Purity."



"Purity" flour may cost a little more, but is more than worth the difference. Try it. Watch results both for quality and yield.

"More Bread and better Bread"

WESTERN CANADA FLOUR MILLS CO., LIMITED
Mills at Winnipeg, Goderich, Brandon.

FREE TO YOU—MY SISTER



FREE TO YOU AND EVERY SISTER SUFFERING FROM WOMEN'S AILMENTS.

I am a woman. I know woman's sufferings. I have found the cure. I will mail, free of any charge, my home treatment with full instructions to any sufferer from women's ailments. I want to tell all women about this cure—you, my reader, for yourself, your daughter, your mother, or your sister. I want to tell you how to cure yourself at home without the help of a doctor. Men cannot understand women's sufferings. When we women know, I know that my home treatment is a safe and sure cure for Leucorrhoea or Whittish discharge, Ulceration, Displacement or Falling of the Womb, Profuse, Scanty or Painful Periods, Uterine or Ovarian Tumors or Growths, also pains in the head, back and bowels, bearing down feelings, nervousness, creeping feeling up the spine, melancholy, desire to cry, hot flashes, weariness, kidney and bladder troubles where caused by weakness peculiar to our sex. I want to send you a complete 10 days treatment entirely free to prove to you that you can cure yourself at home, easily, quickly and surely. Remember, that it will cost you nothing to give the treatment a complete trial; and if you should wish to continue, it will cost you only about 12 cents a week, or less than two cents a day. It will not interfere with your work or occupation. Just send me your name and address, tell me how you suffer, if you wish, and I will send you the treatment for your case, entirely free, in plain wrapper, by return mail. I will also send you free of cost, my book—"WOMAN'S OWN MEDICAL ADVISER" with explanatory illustrations showing why women suffer, and how they can easily cure themselves at home. Every woman should have it and learn to think for herself. Then when the doctor says—"You must have an operation," you can decide for yourself. Thousands of women have cured themselves with my home remedy. It cures all, old or young. To Mothers of Daughters, I will explain a simple home treatment which speedily and effectually cures Leucorrhoea, Green Sicknes, and Painful or Irregular Menstruation in Young Ladies. Plumpness and health always result from its use. Wherever you live, I can refer you to ladies of your own locality who know and will gladly tell any sufferer that this Home Treatment really cures all women's diseases and makes women well, strong, plump and robust. Just send me your address, and the free ten days' treatment is yours, also the book. Write to-day, as you may not see this offer again. Address:

MRS. M. SUMMERS, Box H., 821. WINDSOR, ONT.

ARTHUR JOHNSTON, GREENWOOD, ONT.

Offers for sale 12 YOUNG BULLS, as well bred and as attractive a lot as he ever offered to his customers. In age they range from 10 to 18 months. Also choice females. All in prime condition.

Arthur Johnston, Greenwood P. O., Ont.
Claremont Station. Phone connection.

A FEW YOUNG BULLS and 20 YOUNG COWS and HEIFERS COMPOSE OUR LIST FOR PRIVATE SALE.
J. A. WATT, SALEM, ONTARIO. FLORA STATION, G. T. R. AND C. P. R. FARM ADJOINS TOWN. BELL TELEPHONE.

SHORTHORNS
Belmar Parc

Calves for sale by our grand quartette of breeding and show bulls. Nonpareil Archer, Imp. Proud Gift Imp., Margold Sailor, Nonpareil Eclipse. Females, imported and from imported stock, in calf to these bulls. An unsurpassed lot of yearling heifers.

John Douglas, Manager. **PETER WHITE, Pembroke, Ont.**

VALLEY HOME SHORTHORNS AND BERKSHIRES

FOR SALE: Three show bulls and five choice-bred pure Scotch bulls of extra good milking strains; some show heifers, young cows and heifers of good milking families, and choice Berkshires, of both sexes. Our prices very reasonable, considering quality. Visitors welcome. **S. J. PEARSON, SON & CO., Madawville P. O. and Sta., C.P.R.**

Meadow Lawn Shorthorns

I am offering for sale young stock, both bulls and heifers, of richest Scotch breeding, and of high-class-show type. I can show some of the best young things in the country.

F. W. EWING, SALEM P. O., ONT., FLORA STATION.

FOR SALE OR EXCHANGE

SHORTHORN COW from imp. sire and dam. A first-class show cow. Regular breeder, and safe in calf to the Cruickshank Mysic bull, Duntroon 64822. Would exchange for a first-class dark red bull about a year old or over. **JOHN M. BECKTON, GLENCOE, ONTARIO.**



SHORT BERSHIRE

In Shorthorns, from 20 calves heifers, 7 yearling cows from 3 year-olds or Berkshires.

Chas. E. Bon

275 4 IMPORT

All choice yearling heifers, 30 cwt. Quality, pedigree, **FRED. BARN** Long-distance

INVERN

I can supply Scotch breeding.

W. H. EA

A. Ed

P. O. B.

Breeds SCOT

Twelve of the most representatives in my (imp.) = 55042 King = 63783 sale. Long-dist



SH

Nine bulls from 10 to 18 months old, and two sp

One pair of bay and black, and two sp

JAMES M

H. SMIT
EXETER
ONTARIO



IT PAYS
To make your stock comfortable. Any progressive dairyman will tell you that

U-BAR STANCHIONS and ACORN COW BOWLS

will earn their cost many times over by increasing the profits from your herd.

U-BAR STANCHIONS are strong, safe and easy to operate. There is no better stanchion made.

ACORN COW BOWLS are the only perfect automatic watering device. They require no float tank, and the piping may be either above or below the stall. The bowls may be placed wherever convenient. Cows immediately learn to press the disc and drink whenever they wish.

Write at once for our Free Illustrated Booklet.

The Metal Shingle & Siding Co., Limited,
PRESTON, ONT. MONTREAL, QUE.

SHORTHORNS, Berkshires, Cotswolds.

In Shorthorns, 53 head to select from: 20 calves (13 bulls and 7 heifers), 7 yearling heifers, 3 two-year-old heifers, and the balance cows from 3 years up. No Cotswolds or Berkshires to offer.

Chas. E. Bennycastle, Campbellford, Ont.
STATION AND P. O.

GLENGOW Shorthorns

Have two excellent bulls left yet, both about ten months old, and good enough for any herd; also a number of choice heifers, all ages. For particulars write to:

Wm. Smith, Columbus, Ont.

275 BURLINGTON SHORTHORNS 275

4 IMPORTED SCOTCH SHORT-HORN BULLS. 12 BULL CALVES, 9 TO 16 12 MONTHS OLD.

All choice yearlings — 2 reds and 2 roans. All from imp. sire and a number from imp. dams.

30 CHOICE YOUNG COWS AND HEIFERS. 30

All belonging to noted Scotch families, and mostly from imported sires and dams.

Quality, pedigree and prices will please you. Farm ¼ mile from Burlington Junction station.

FRED. BARNETT, Manager. J. F. MITCHELL BURLINGTON, ONT.
Long-distance telephone.

We are offering 15 choice young

SHORTHORN BULLS

of serviceable age. Among them are high-class herd-heads. We can supply females of all ages. Farms close to Burlington Jct., G.T.R.

W. G. PETTIT & SONS, FREEMAN, ONT.

INVERNESS SHORTHORNS

I can supply Shorthorns of all ages, with richest Scotch breeding and high-class individuality.

W. H. EASTERBROOK, Freeman, Ont.

Imp. Scotch Shorthorns—When looking for Shorthorns, be sure to look me up. Young bulls fit for service, and females all ages; bred in the purple, and right good ones. **A. C. Pettit, Freeman Ont.**

Maple Leaf Shires, Shorthorns, Hampshire Hogs

1- and 2-yr.-old Shire stallions, females from yearling fillies up; Shorthorns, both bulls and heifers; a choice lot of young Hampshire pigs, both sexes beautifully belted.

PORTER BROS., APPLEBY P.O., BURLINGTON STA. Phone.

A. Edward Meyer **Geo. Amos & Sons,**
P. O. Box 378, Guelph, Ont., **MOFFAT, ONTARIO.**

Breeds **SCOTCH SHORTHORNS** Exclusively. Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls: Scottish Hero (imp.) = 55042 = (90065) 295765 A. H. B.; Gloster King = 68763 = 283804 A. H. B. Young stock for sale. Long-distance phone in house.

For Sale: Seven bulls, some of them show bulls, most of them from imported sires and dams. Write us, or call and see us before buying.

Moffat Station, 11 Miles East of City of Guelph, on C. P. R.



30 HEIFERS AND 29 BULLS
PRESENT OFFERING.

Bred right, made right and at prices to make you feel right. Come early and get your choice. List of these, with catalogue, will be mailed to those who ask for them.

H. CARGILL & SON, CARGILL, ONT.

SHORTHORNS

Nine bulls from 8 to 20 months old, reds and roans; 10 yearling heifers and a few cows. Will sell very cheap to make room in stables.

CLYDESDALES

One pair of bay mares and one dark brown, heavy draft and two spring colts.

JAMES McARTHUR, Gobles, Ontario

Shorthorn Cattle
AND LINCOLN SHEEP.

Females of all ages for sale, of the thick-fleshed, low-down kind, that have been raised naturally, neither stuffed nor starved. Twenty-five Lincoln ewes, bred to our best imported stud ram, also a few choice yearling rams. Prices very reasonable for quick sale.

J. T. GIBSON, DENFIELD, ONT.

H. SMITH, EXETER, ONTARIO. **Scotch Shorthorns**

Extra choice young bulls and heifers for sale. Write for what you want. Farm adjoins town.

QUESTIONS AND ANSWERS.
Miscellaneous.

BLACK-HEAD IN TURKEYS.
Will you kindly let me know what is the matter with turkeys when they get delicate at this time of year; will not eat anything, seem to get blind, pass yellow matter, and die in about a week's time.

OLD SUBSCRIBER.
Mount St. Patrick, Ont.

Ans.—The yellow droppings and death in about a week's time, seems to indicate the disease commonly called "Black-head." If a post-mortem examination is made, the liver will likely be found to be covered with yellowish-white spots of a starry character, and somewhat enlarged. I think it would be advisable to send a diseased specimen (as soon as noticed) to the Bacteriologist, O. A. C., Guelph, and you will be told positively what the disease is. If it is Black-head, as I surmise, I would recommend killing off all your stock, and not raising any more turkeys for at least two years, and three would be safer. The person who can furnish a sure cure for this disease has a small fortune within his grasp. I think that two or three years will eliminate all the germs upon the land when no turkeys are kept upon it.

W. J. BELL.

PLANK FRAME BARN ON CEMENT FOUNDATION.

1. Give bill of material needed to build a plank-frame barn, with cement foundation nine feet high; size of barn to be 60 feet long, 36 feet wide, and 18-ft. posts, and hip roof.

2. Is a roof which is flat on top (upper part of hip roof) any better than pitched?

J. H. S.

Ans.—1. The concrete wall, 12 inches thick, with 24-inch footing, 12 inches deep, will require 53 barrels cement, mixed 8 to 1, with 52 yards gravel; also 17 yards of stone fillers for wall as work progresses.

For an American plank-frame to suit your proposed barn, the following material will be required:

- 16 sills, 2x8x12.
 - 16 sills, 1x8x12.
 - 16 sills, 2x6x12.
 - 12 sills, 2x8x2.
 - 24 cross sills, 2x8x18.
 - 6 splicers for same, 2x8x12.
 - 24 side posts, 2x8x18.
 - 4 end posts, 5x6x18.
 - 24 purline posts, 2x8x30.
 - 12 roof supports, 2x10x28.
 - 12 sub-supports, 2x6x12.
 - 24 stays, 2x4x3.
 - 12 ties, 2x8x5.
 - 12 ties, 2x8x3.
 - 12 braces, 2x6x6.
 - 12 collar ties, 2x12x4.
 - 8 beams (end), 2x8x18.
 - 2 beam-stiffeners, 2x10x16.
 - 2 end stiffeners, 2x8x14.
 - 4 side plates, 2x8x23.
 - 2 side plates, 2x8x15.
 - 8 top plates, 2x10x23.
 - 4 top plates, 2x10x15.
 - 8 purline plates, 2x8x23.
 - 4 purline plates, 2x8x15.
 - 8 plate couplings, 2x8x4.
 - 8 uprights, 2x6x18.
 - 16 braces, 2x6x22.
 - 2 uprights, 2x6x6.
 - 4 braces, 2x6x10.
 - 32 side nailers, 2x6x12.
 - 4 side nailers, 2x6x15.
 - 2 end uprights, 2x6x18.
 - 8 end braces, 2x6x22.
 - 4 gable nailers, 2x6x16.
 - 4 gable nailers, 2x6x13.
 - 4 gable nailers, 2x6x10.
 - 2 gable stiffeners, 2x8x20.
 - 4 braces, 2x4x8.
 - 16 braces, 2x4x4.
 - 42 rafters, 2x6x15 (lower).
 - 42 rafters, 2x6x14 (upper).
- Joists are set on 2-ft. centers, and of a length to suit spacing of girders over basement. Girders to suit plan of stable, for which, as I have not seen it, it is impossible to estimate lengths. Above frame has 6 bents, center 14 feet being for drive, and remaining two spans on each side to be used as fodder storage.
2. Give lower roof a rise of 56 degrees, and upper 34 degrees.
- A. L. A. GILMORE.
Huntingdon, Que.

"Bronchitis."

THE SYMPTOMS ARE

Tightness across the Chest, Sharp Pains and a Difficulty in Breathing, a Secretion of Thick Phlegm, at first white, but later of a greenish or yellowish color coming from the bronchial tubes when coughing, especially the first thing in the morning.

Bronchitis is generally the result of a cold caused by exposure to wet and inclement weather and when neglected will become chronic.

Chronic Bronchitis is one of the most general causes of Consumption. Cure the first symptoms of Bronchitis by the use of Dr. Wood's Norway Pine Syrup

Miss Martha Bourget, Little Fagos, Que., writes: "Last spring I was very poorly, had a bad cough, sick headache, could not sleep, and was tired all the time. I consulted two doctors, and both told me I had bronchitis, and advised me to give up teaching. I tried almost everything but none of the medicines gave me any relief. One of my friends advised me to try Dr. Wood's Norway Pine Syrup. I had scarcely taken the first bottle when I began to get better and when I had taken the fourth bottle I felt as well as ever, my cough had left me and I could sleep well."

Dr. Wood's is the original Pine Syrup. It is put up in a yellow wrapper, three pine trees the trade mark, and the price 25 cents. There are many imitations of "Dr. Wood's" so be sure you receive the genuine when you ask for it.

Manufactured only by The T. Milburn Co., Limited, Toronto, Ont.

ELECTRO BALM
CURES
ECZEMA

Also Piles, Burns, Scalds, Sores, Chapped Hands and Face. Write for sample and booklet of testimonials. 50c. a box at all dealers, or THE ELECTRIC BEAN CHEMICAL Co. LIMITED, OTTAWA.

Maple Grange Shorthorns

Am offering an extra choice lot of 1-2- and 3-year-old heifers. Scotch and Scotch-topped, Clarets, Nonpareils, etc., sired by Royal Bruce, Imp., and among them are daughters and granddaughters of imp. cows. Young bulls also for sale.

R. J. DOYLE, Owen Sound, Ont.
Phone connection.

Spring Valley Shorthorns.

Herd headed by Clipper Chief (imp.) = 64220 = (94673). If you want to get an imported bull, or a good Canadian-bred one to head your herd, be sure and write, or come and see them. Long-distance telephone.

KYLE BROS., AYR P. O., ONT.

Clover Dell Shorthorns

Have several young bulls for sale, of show quality; dark colors, from good milking dams. No fancy prices asked.

L. A. WAKELY, BOLTON, ONT.
Bolton Junction on C. P. R., within ½ mile of farm

High-class Scotch Shorthorns

We are now offering choice young bulls of serviceable age, and a number of one and two year old heifers. Most fashionably bred, and high class show things among them. Also one two year-old Clyde-dale stallion, with size and quality.


Goodfellow Bros. Macville P. O., Ontario.
Bolton station.

SHORTHORNS for Sale I am offering for sale a number of females of various ages, and four first-class bulls. One two-year-old, one yearling and two bull calves. All good ones, and breeding as good as the best. Come and see me.

HUGH THOMSON, Box 556. ST MARY'S, ONT.

Shorthorns and Leicesters—A number of choicely-bred young bulls and heifers from grand milking dams and imp. sires. And an extra good lot of rams and ewes of all ages in show trim. **W. A. Douglas, Caledonia Station, Tuscarora P. O.**

Lump Jaw



The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or how the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser. Most complete veterinary book ever printed to be given away. Durable, bound, indexed and illustrated. Write us for a free copy.

FLEMING BROS., Chemists,
75 Church St., Toronto, Ontario

DISPERSION SALE Holstein-Friesian Cattle

To be held on BEAVER MEADOW STOCK FARM, ELMIRA, ONT.,
FRIDAY, DEC. 31st, 1909.

21 head—5 bulls, 16 females. Bred from noted strains, and for results in building up a herd that had to show profits at the fair.

Sale to commence at 2 o'clock p.m.
Terms: All sums, \$25 and under, cash. Over that amount, 10 months' credit on approved paper, 7 per cent. per annum off for cash on credit amounts.
Farm 3 miles west of Elmira, G. T. R.; 1 1/2 miles east of Wallenstein, C. P. R.

R. B. MARTIN,
Elmira, Ont.,
Auctioneer.

PILES CURED at HOME by New Absorption Method.

If you suffer from bleeding, itching, blind or protruding Piles, send me your address, and I will tell you how to cure yourself at home by the absorption treatment; and will also send some of this home treatment free for trial, with references from your own locality if requested. Immediate relief and permanent cure assured. Send no money, but tell others of this offer. Write to-day to Mrs. M. Summers, Box 821 Windsor, Ont.



ROCK SALT for Stock, \$10 PER TON.
Toronto Salt Works, 128 Adelaide St. E., Toronto, Ont. G. J. Cliff, Manager.

Brampton Jerseys

Canada's greatest Jersey herd offers for sale 3 choice bulls, about 12 months old; also some younger ones, and one two-year-old. Females of all ages always for sale.

B. H. BULL & SON, BRAMPTON, ONT.

Mr. A. J. Hickman

Court Lodge, Egerton, Kent, England.
EXPORTER OF PEDIGREE STOCK OF ALL DESCRIPTIONS. During the winter months the export of cattle of the beef and dairy breeds will be a specialty. Stock ordered is purchased direct from the breeder, and is shipped straight from his farm to port of entry. In no other way can stock be imported so cheaply. Write for terms and references.

WOODBINE STOCK FARM

Offer a number of Holstein cows, heifers and young bulls at moderate prices, sired by Sir's reamelle, whose breeding combines the blood of DeKol Cre melle, world's champion milk cow, with that of Duchess Ormsby, highest-testing family of the breed. Write for anything you want.

A. KENNEDY, Ayr, Ont.

For Sale—7 Holstein bulls; Tamworth pigs from 2 to 6 months old. White Wyandotte cockerels and Buff Orpington hens. **BERKIN & HOSKIN, The Gully P.O., Ont.** Please mention Farmer's Advocate.

GOSSIP.

The champion pair of pigs at the Birmingham Fat-stock Show were the Earl of Ellesmere's Yorkshires, whose weight at the age of 10 months 4 weeks was 552 lbs. each.

At the auction sales of breeding cattle held at Chicago the week of the International Live-stock Show, contributed by various breeders, forty-eight head of Herefords sold for an average of \$191; thirty-nine Galloways for an average of \$145.40; sixty-three Aberdeen-Angus for an average of \$248.95, and fifty head of Shorthorns for an average of \$294. The highest price for a Hereford was \$960; for a Galloway \$345; for an Aberdeen-Angus \$710, and for a Shorthorn \$1,500, for Countess Selina 2nd, winner of third award in two-year-old class at the International.

At a meeting of the executive of the Canadian Clydesdale Horse Association held in Guelph during show week, the following moneys were voted for prizes at the Manitoba Winter Fair, to be held at Brandon. For best Clydesdale stallion, imported, \$50; for best Clydesdale mare, imported, \$50; for best Clydesdale stallion, Canadian bred, \$25; for best Clydesdale mare, Canadian bred, \$25; for best Clydesdale mare or gelding shown on line sired by Clydesdale stallion registered in the Canadian Clydesdale Studbook, \$25; for best team sired by Clydesdale stallion registered in Canadian Clydesdale Studbook, \$25. This is an advance over last year's grant of about \$100.

A six-car consignment of Canadian Northwest cattle were on the Chicago market on December 6th. The shipment was made by A. Squires, of Sunny Slope, Alberta, and included steers and cows, bulk being steers. The sales, which were made by Clay, Robinson & Co., were as follows: 21 steers, 1,460 lbs., \$6.60; 41 steers, 1,415 lbs., \$5.85; 24 steers, 1,248 lbs., \$5.75; 13 cows, 1,190 lbs., \$4.75. The cattle grossed per head as follows: The 21 head, \$96.36; 41 head, \$82.78; 24 head, \$71.76; 13 cows, \$56.53. The cattle were grade Shorthorns, branded and dehorned. They had been grassed all season, and were given just enough oats and hay last winter to keep them in a thrifty and growing condition. While the steers were fat, a big proportion of them were very coarse. They arrived on the market Saturday, and, of course, had to be held over for the Monday trade. Owing to the storm, they were badly drawn, and also in a very muddy condition. Had the cattle arrived fresh, they would have brought 15c. to 25c. per cwt. more than they did. During the high time of the range cattle season, the top Canadian steers would likely have gone at \$7.50 to \$7.60, or as high as range cattle have ever made.—Live-stock Report.

MAPLE LEAF BERKSHIRES.

The splendid quality and marked improvement in bacon type of the Maple Leaf Berkshires, the property of Joshua Lawrence, Oxford Centre, Ont., is the secret of the almost phenomenal demand he has for breeding stock from one end of the country to the other. His grand old stock hog, Imp. British Duke, has shown a most wonderful power of disseminating uniformity and excellence in his get, and it invariably follows that where one of his get is shipped, other orders soon follow. As a show hog, he has been exhibited four times, and won four first prizes. In exactly the same line of high-class excellence are the seven brood sows, all either imported or having imported sire and dam. Put up on splendid bacon-type lines, they are big, smooth, and show a vast amount of quality. From such stock as this for sale are a number of young sows bred, and others ready to breed, and a number of young boars four and five months of age. The rapidly-increasing demand for breeding stock, stimulated by the record prices for live hogs, will very soon deplete the available stock; in fact, the writer has been asked very many times of late where breeding stock could be got. It is certainly wisdom to look after any that is offered, for the scarcity indicates that there will be no lowering of live-hog prices for a long time.

AUCTION SALE

45 Holstein-Friesian Cattle

At Riverside Farm, CALEDONIA, ONT., on

Thursday, December 30th, 1909

28 females all ages, and 17 bulls, including too stock bulls. Riverside herd represents several of the greatest families of the breed: Johanna DeKol, Wayne, Mercedes, Mechthilde, Pieterje, Sarcastic, Posch, Aggie, Ormsby, Paladina, etc.

Caledonia is on Buffalo and Goderich, Hamilton and Port Dover branch of the G. T. R. Reduced railway rates. Arrangements have been made with the G. T. R. for trains to stop at the farm. Trains will arrive at the farm at 9.30 and 10.30 a.m. from south, east, and west. Hamilton and Toronto trains will be met at Caledonia Station at 9.50 a.m. Trains leave the farm at 6.30 and 7.30 p.m. for all points.

Sale commences at one o'clock sharp. TERMS—Cash or up to ten months 6% on approved notes.

Auctioneers—W. ALMAS, Beaufort, Ont.; E. J. WIGG & SON, Cayuga, Ont.

Catalogue ready by Dec. 15. Sale held under cover. Phone connection.

J. W. RICHARDSON, CALEDONIA, ONT.

High-class Holsteins—Head of herd, Pieterje Korodyke Lad. Two nearest dams average 26.09 lbs. butter in 7 days. His sire's dam, Pieterje 2nd had a record of 31.62 lbs. butter in 7 days. Present offering: 2 heifers, due to calve in April, at a bar, aim before Dec. 1 to make room; also 2 bull calves by Mansoor Johanna DeKol, out of officially-tested cows.

WM. C. STEVENS, PHILLIPSVILLE, ONT.

Glenwood Stock Farm—Holsteins and Yorkshires. Holsteins all sold out. Have a few young Yorkshires sows, about 2 months old, for sale cheap. True to type and first-class. Bred from imported stock.

Mess. B. Carlaw & Son, Warkworth P.O., Ont., Campbellford Station.

Imperial Holsteins!

For sale: Bull calves sired by Tidy Abbecker Mercedes Posch, whose seven nearest dams have records within a fraction of 27 pounds, out of show cows with high official records. A most desirable lot of coming herd-heads. **W. H. SIMMONS, New Durham P.O., Ont., Oxford County.**

Holsteins at Ridgedale Farm—Eight bull calves on hand for sale, up to eight months old, which I offer at low prices to quick buyers. Write for description and prices, or come and see them. **R. W. WALKER, Utica P.O., Ont.** Shipping stations: Myrtle, C. P. R., and Port Perry, G. T. R., Ontario Co.

ESTABLISHED 1866

RAW FURS

E. T. CARTER & CO.
84 Front St., East, TORONTO, ONT.

CONSIGNMENTS SOLICITED
Write For Our Price Lists Issued Regularly
WE PAY ALL EXPRESS CHARGES. PROMPT RETURNS.

The Maples Holstein Herd!

RECORD-OF-MERIT COWS.
Headed by Lord Wayne Mechthilde Calamity Nothing for sale at present but choice bull calves from Record-of-Merit dams.

Walburn Rivers, Falden's Corners, Ont.

Holsteins—Maple Grove offers a few richly-bred young cows, safely in calf to Sir Abbecker De Kol 2nd and Mercedes's Sir Posch; also young stock sired by above bulls. For description and prices write

N. BOLLERT, Cassel, Ont.

HOLSTEIN CATTLE!

If you are thinking of buying a choice young cow or heifer in calf, come and see our herd. Will sell anything. Have a dozen beautiful heifers safe in calf to Summer Hill Choice Goods (imp.), who has five sisters averaging 29 1/2 lbs. butter in 7 days, and one sister that held world's record as 4-year-old with 31.60 lbs. butter. Write us what you want. We will guarantee everything just as described. Visitors set at Hamilton by appointment.

D. C. Flatt & Son, Millgrove, Ont.

L-D Telephone 2471 Hamilton

Holsteins FOR SALE: COWS AND HEIFERS
All ages. Also bull and heifer calves, including daughter and granddaughters of Pieterje Hengerveld Count De Kol, whose TWO famous daughters made over 32 lbs. butter each in 7 days, and sire of dam, sire's dam and granddam is: milk in 7 days, 662.85 lbs.; butter in 7 days, 30.58 lbs. We have bulls born Mar., '09, to two weeks old for sale, from Record-of-Merit dams. Long-distance telephone. **P. D. Ede, Oxford Centre, Ont. Woodstock Sta.**

CENTRE AND HILLVIEW Holsteins

140 head, 45 females in R. O. M. Herd headed by Brookbank Butter Baron, Bonheur Statesman and Sir Sadie Cornucopia Clothilde. The average of: sire's dam and granddam is: milk in 7 days, 662.85 lbs.; butter in 7 days, 30.58 lbs. We have bulls born Mar., '09, to two weeks old for sale, from Record-of-Merit dams. Long-distance telephone. **P. D. Ede, Oxford Centre, Ont. Woodstock Sta.**

Lakeview Holsteins Headed by Count Hengerveld Fayne D. Kol, son of Pieterje Hengerveld's Count DeKol, who has five daughters averaging over 30 lbs. butter in 7 days, and whose dam (26.30 lbs. in 7 days) has five bull calves from nine months old down from this sire for sale. G. T. R. and Hamilton Radial close to farm. Visitors met by appointment. **E. F. OSLER, BRONTE, ONTARIO.**

WORLD'S CHAMPION BRED BULL

Grace Fayne 2nd's Sir Colantha.
Sire Colantha Johanna Lad. Dam Grace Fayne 2nd. Average butter received for 7 days of his dam, sire's dam and sister is 32.35 lbs. Average milk for one day of dam and sire's dam is 104 lbs. Choice young bulls for sale.
M. L. & M. H. HALEY, Springfield, Ontario

Fairview Herd

Offers for sale a son of Rag Apple Korodyke. His dam is a daughter of Pontiac Korodyke with an A. R. O. record of 13.08 lbs. butter in 7 days at two years. Price, \$150.00.

E. H. Dollar, Heuvelton, N. Y.

NEAR PRESCOTT.

HERE AGAIN! E. & F. MALLORY, Frankford, Ont.
With high-class **HOLSTEINS** for sale, of all ages, except bulls for service. **CHEESE is HIGH.** Why not invest AT ONCE? We sell at BARGAIN prices. Write or call, we're always home. Railway connections good.

Evergreen Stock Farm

offers for sale choice young Holstein bulls, from 10 to 12 months old, sired by Sir Mercedes Favorite whose dam and sire's dam have average records of 24.60 lbs. butter per week, and 80 lbs. milk per day. Their dams also have A. R. O. Also choice females for sale. Write for prices.
F. E. PETTIT, Burgessville, Ont.

Maple Hill Holstein-Friesians

FOR SALE—Julia Arthur 2nd, calved Aug. 1st, 1905, 9,219 lbs. milk and 312 lbs. fat in one year; calving in Aug. at 3 yrs. 8 days old. Freshened Oct. 19th, '09. Price \$200 cash. Also bull calves.
G. W. CLEMONS, ST. GEORGE, ONT.

The Imperial Kingsville, Ont. appears in this alone in export their product and produce in animals to pended testin

Malloryville, Ont.

Dear Sirs,—Food a thorough six young pig runts of your package of you tions, I can pleased with stunted pigs now just as is, without ex I have ever

I have been six weeks, an results. My condition. I with disease, balance. You in a thriving togs gain fas

South Wood

EDISON PI Edison has o that he wou in every Ame offer is fast n actual fact. and years per his close asso invention. I working with his other inv interest is res state of perf Frieside Mod splendid instr an absolutely the advertisen

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Dr. McLau Dear S upon me, I poor health part of you satisfaction proved with prove such city to rec

TRADE TOPICS.

The Imperial Stock Food Company, of Kingsville, Ont., whose advertisement appears in this paper, are evidently not alone in expressing faith in the efficacy of their product to maintain healthfulness and produce satisfactory gains of weight in animals to which it is fed, as the appended testimonials show:

Mallorytown, Ont., Dec. 3rd, 1909.
The Imperial Stock Food Co., Kingsville, Ont.:

Dear Sirs,—I have given Imperial Hog Food a thorough test by feeding it to six young pigs, three of which were the runts of two litters. After feeding one package of your food according to directions, I can say I am exceedingly well pleased with results. I believe the stunted pigs did the best, as they are now just as tall as the thrifty ones. It is, without exception, the best Hog Food I have ever fed. (Signed)
D. E. FORRESTER.

I have been feeding your hog food for six weeks, and am well pleased with the results. My hogs were in an unthrifty condition. I have lost about \$80 worth with disease, and expected to lose the balance. Your hog food has placed them in a thriving condition, and I never had hogs gain faster. (Signed)
JOHN TRIMBLE.

South Woodilee, Ont.

EDISON PHONOGRAPH OFFER.—Mr. Edison has often expressed the opinion that he would like to see a phonograph in every American home. This free-loan offer is fast making Mr. Edison's wish an actual fact. Mr. Edison has spent years and years perfecting the phonograph, and his close associates say it is his favorite invention. It is said that he prefers working with the phonograph to any of his other inventions, and this personal interest is responsible for the marvellous state of perfection of the latest style Fireside Model Phonograph. Now, this splendid instrument is being offered on an absolutely free-loan offer, as stated in the advertisement on another page of this

RAW FUR COMMISSION HOUSE

58-60 Temperance Street, TORONTO, ONTARIO, CAN.

SHIPMENTS OF RAW FURS SOLICITED. Highest prices, prompt returns, fair assortments. All shipments kept separate until remittance is found satisfactory. We pay all express charges. CHAS. WECKSLER, Manager.



Just Landed with 50 Head CHOICE AYRSHIRES

Including 12 bulls fit for service, a few August calving cows and two-year-old heifers; cows with records up to 70 lbs. per day. I have a choice lot of two-year-olds, yearlings and heifer calves. Anything in the lot for sale. Correspondence solicited. Phone, etc.

R. R. NESS, HOWICK, QUE.

CRAIGIE LC Ayrshires. Have won more money the last 4 years than all competitors combined. They are heavy producers and high testers. Stock of both sexes for sale, of show-ring form.

H. C. HAMILL, Box Grove P.O. Markham, G. T. R. Locust Hill, C. P. R. Bell phone connection from Markham.

Shannon Bank Ayrshires and Yorkshires. Am now offering young bulls and heifers, true to type and high in quality. Young Yorkshires of both sexes. W. H. Tran & Son, Locust Hill P.O. & Sta., Ont.

Please Mention Farmer's Advocate.

AYRSHIRES AND YORKSHIRES

Can fill orders for car lots of Ayrshires, or for good grade dairy cows. Young bulls, cows, heifers or calves of choice breeding. Orders taken for imported stock for 1910. A few young Yorkshires. Write us for anything you need in above lines.

Long distance Phone ALEX. HUME & CO., MENIE, ONT.



Ayrshires from a Prizewinning Herd—Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to WM. STEWART & SON, Campbellford Stn. Menie P.O., Ont.

Ayr-hires Four young bulls, all bred on dairy lines, out of famous dams; fashionable in color, as well as in breeding. Will be sold worth the money. Females all ages. N. DYMENT, Clappison's Corners, Ont.

ISALEIGH GRANGE AYRSHIRES! Our herd were all selected on their ability to produce a heavy yield of milk. We have a number of 40, 45 and 50 lb cows, imported and Canadian-bred. From them are young bulls and heifers for sale. None better. JAMES BODEN, DANVILLE, QUEBEC, ISALEIGH GRANGE FARM.

SPRINGBROOK AYRSHIRES are large producers of milk testing high in butter-fat. Young stock for sale. Orders booked for calves of 1909, male and female. Prices right. Write or call on W. F. STEPHEN Box 163, Huntingdon, Que.

CALVES Raise Them Without Milk Booklet free. The Steele, Briggs Seed Co., Toronto, Ont.

"ADVOCATE" ADVERTISEMENTS.

Stonehouse Ayrshires

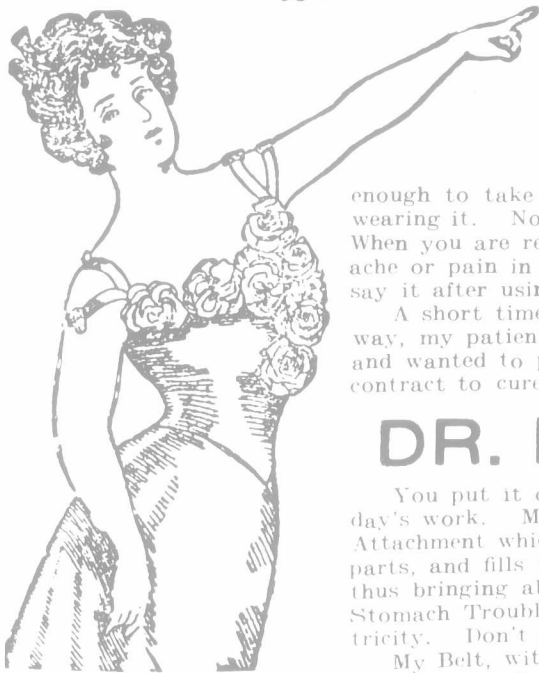
all ages. Am now booking orders for bull calves. Hector Gordon, Howick, Quebec.

paper. The purpose of this offer is to give the opportunity to hear what is claimed to be the latest and best phonograph made. And you get to hear it under the very best conditions, right in your own home. You can pick out your records in advance, and have your friends in and give a concert. F. K. Babson, of Chicago, who has sold thousands of phonographs, says that this method gives the phonograph more publicity than any other, and that he can well afford to give you this free loan just to have you and your friends hear this machine. Very likely some of your friends will want to keep the phonograph on the remarkable terms of only \$2 a month, or you yourself may decide to keep the phonograph. But you are under no obligations to do so, and you do not have to try to sell the phonograph to your friends. Mr. Babson employs no salesmen, and he is willing to make this offer even if no one buys, just to afford the opportunity to see and hear this magnificent phonograph. No one who has ever had a phonograph in the home can realize what it means. You will be astonished at the life and vivacity and spirit that will permeate the entire household. The music of the old masters, the love song that you sang when you were a boy, the best sacred music, and the latest and brightest popular airs, vaudeville turns, monologue hits—all these you can hear again and again, as often as you wish. Send for the free catalogue and list of 1,500 Edison Gold Moulded and Amberol Records. Full particulars of the Free Loan will be sent. You need not send a letter; a postal will do, or the coupon of the advertisement that appears in this issue. Address: F. K. Babson, Edison Phonograph Distributors, Edison Block, Chicago, Ill.

The Royal Agricultural Society's Show for 1910 will be held in the City of Liverpool. Already many liberal cash donations towards the prize list by wealthy patrons have been received, and it is confidently expected that the show of 1910 will be one of the most successful in the history of the Society.

ARE YOU ONE OF THOSE WHO SUFFER

WITH BACK PAINS, WHOSE POWER IS WASTED, WEAK AND NERVOUS, AND AMBITION LOST?



Take my Electric Belt for what it will do for you. Wear it while you sleep at night or while you are resting after your work. You will find it a vitalizer, a tonic to your nerves, a rejuvenator of waning vitality. Use it for any ailment which drugs have failed to cure, and you will never cease praising it.

I claim that I can cure weak men; that I can pump new life into worn-out bodies; that I can cure your pains and aches, limber up your joints, and make you feel as frisky and vigorous as you ever did in your life. That's claiming a good deal, but I have a good remedy, and know it well enough to take all the risk if you will pay me when you are cured. All I ask is reasonable security while you are wearing it. No man can lose on this. If the cure is worth the price you don't have to pay for it until you get it. When you are ready to say you are a big, husky and frisky specimen of vigorous manhood, that you haven't got an ache or pain in your whole body, and that you feel better than you ever did in your life, I get paid. If you don't say it after using my Belt for three months, then give me back my old Belt and I won't ask a cent.

A short time ago I took a case that I couldn't cure, and I couldn't see why, as I had cured hundreds like it. Anyway, my patient returned the Belt, and said I hadn't done him any good. He said he thought I treated him honestly, and wanted to pay me the cost of the Belt, because it couldn't be used again. I refused, and told him I had made a contract to cure him or get nothing, and I wouldn't take a dollar I hadn't earned. It is a pleasure to wear

DR. McLAUGHLIN'S ELECTRIC BELT

You put it on when you go to bed, and get up in the morning with increased strength and glad to begin your day's work. My Belt never burns and blisters, as do the old-style (so-called) electric belts. I have a Special Electric Attachment which I give free to every man who wears my Belt. This attachment carries the current direct to the weak parts, and fills them with its warm, vitalizing power, causing the blood to again circulate in a free and natural way, thus bringing about a sure and lasting cure. Weakness, Rheumatism, Sciatica, Weak Back, Lumbago, Kidney, Liver or Stomach Trouble, Indigestion and Constipation, are all quickly cured by this New Method of mine for applying Electricity. Don't put it off any longer. Act to-day. To-morrow may be too late.

My Belt, with special Electrical Attachment, will restore your vigor. It will check all loss of vitality, and affects every organ of the body. It cures Nervous Debility, Varicocele, Rheumatism, Lame Back, Lumbago, Sciatica, any case of Kidney Disease that has not gone as far as Bright's Disease, Stomach Trouble, Constipation.

If you don't believe in Electricity, let me treat you at my risk. I will give you the Belt on trial, without one cent of risk to yourself. Give me reasonable security, and I will take your case, and you can

PAY ME WHEN CURED

HIS RECOVERY WAS DESPAIRED OF.

Dr. McLaughlin: 181 Sanford Ave., Hamilton, Ont.
Dear Sir,—I am well satisfied with your Belt, as it had a wonderful effect upon me, as is shown by the fact that at the time I thought I was in such poor health that my recovery was almost despaired of, but the wonderful effect of your Belt was felt before I had it one week. It has given complete satisfaction, and I consider the expenditure I made is a mere trifle as compared with the wonders it has worked in my case. I hope your Belt will prove such a help to others as it has to me. I never neglect the opportunity to recommend your Belt at any and all times. Yours very truly,
CHARLES RUSE.

FREE TO YOU.—Get my 80-page book describing my Electric Belt, with illustrations of fully-developed men and women, showing how it is applied. If you can't call, I'll send this book, prepaid, free, if you will enclose this coupon. Consultation free. Office hours—9 a.m. to 6 p.m. Wednesday and Saturday till 8.30 p.m.

DR. M. S. McLAUGHLIN,
112 Yonge St., Toronto, Can.
Please send me your book, free.
NAME
ADDRESS

Had Weak Back.

Would Often Lie in Bed For Days, Scarcely Able To Turn Herself.

Mrs. Arch. Schnare, Black Point, N.B., writes:—"For years I was troubled with weak back. Oftentimes I have lain in bed for days, being scarcely able to turn myself, and I have also been a great sufferer while trying to perform my household duties. I had doctors attending me without avail and tried liniments and plasters, but nothing seemed to do me any good. I was about to give up in despair when my husband induced me to try Doan's Kidney Pills, and after using two boxes I am now well and able to do my work. I am positive Doan's Kidney Pills are all that you claim for them, and I would advise all kidney sufferers to give them a fair trial."

DOAN'S KIDNEY PILLS are a purely vegetable medicine, realizing quick, permanent relief, without any after ill effects. A medicine that will absolutely cure Backache and all forms of Kidney and Bladder Disease.

Price, 50 cents per box, or 3 for \$1.25, at all dealers or The T. Milburn Co., Limited, Toronto, Ont.

In ordering specify "Doan's."

A PERFECT HOG FOOD

You can save time and money by feeding

Imperial Hog Food

The only exclusive hog food on the market. Once used always used. Write for booklet.

The Imperial Stock Food Co. KINGSVILLE, ONT.

FAIRVIEW SHROPSHIRE OFFERED.

12 high-class two-year ewes, sired by grand champions; Bred to grand champions. Every one has proved a fine breeder. Considering their breeding and excellent quality, prices are low. Send for prices and circular to J. & D. J. Campbell, Fairview Farm, Woodville, Ont.

SPRING BANK OXFORDS

Rams and ewes of all ages at a great reduction for next 30 days. Order at once and get the pick. WM. BARNETT & SONS, LIVING SPRINGS P.O., ONT. PERGUS STA., G.T.R. and C.P.R.

Cattle and Sheep Labels



You will want them sometime. Now is the time to send for free sample and circular. Write to-day. F. G. James, Bowmanville, Ont.

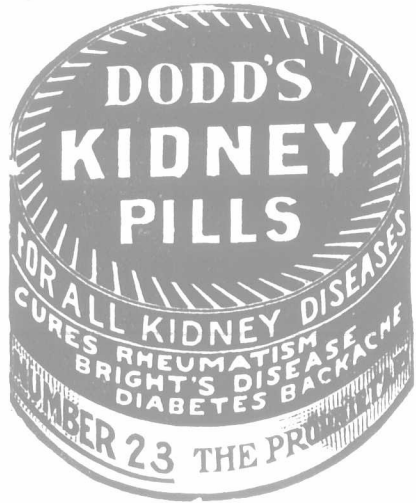
Oxford Down Sheep, Shorthorn Cattle, Yorkshires Hogs.—Present offering: Lambs of either sex. For prices, etc., write to John Cousins & Sons, Buena Vista Farm, Hariston, Ont.

The teacher was living her class their first lesson in fractions. An object lesson seemed to be desirable.

"Mary McCauley," she said, "if there was a mince pie on your dinner table, and your mother asked you if you would have a third or fourth, what would you say?"

"A fourth," said Mary. Some of the children tittered, and the teacher asked, "Why would you have a fourth?"

"Cause," said Mary, "I don't like mince pie."



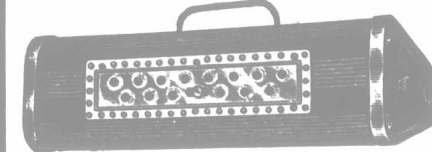
GOSSIP.

Porter Bros., of Appleby, Ont., have lately sold to H. C. Miller and W. W. Singer, of Wyandotte, Mich., the splendid big bay yearling Shire stallion, Admiral Prince, a son of that noted sire, Admiral Togo, and out of the great show mare Rose, winner of many prizes in the hands of John Gardhouse & Sons, of Highfield, Ont. This splendid young horse is bred from prizewinners on both sides, and is a winner himself, having won first prize in the yearling class at Toronto this year. He is a grand colt, and should make good in his new home in Uncle Sam's country.

NEW IMPORTATION OF CLYDESDALES.

O. Sorby, of Guelph, Ont., has lately landed at his stables a new importation of seventeen Clydesdale stallions. One is 11 years old; two are 6 years old; two 5 years old; one 4 years old; ten 2 years old, and one yearling. The high-class character of Mr. Sorby's many previous importations is a byword among Clydesdale fanciers from one end of the country to the other. Outstanding characteristics of this lot are their big size, their splendid flat bone, their well-sprung pasterns, big feet, and gilt-edged breeding, the blood of Darnley, Prince of Wales, Top Gallant, Sir Everard, Baron's Pride, and many others of more modern fame, running through their pedigrees with splendid regularity. The most noted of this lot is that wonderful horse, Enigma, a brown, 11 years of age, said by the Scottish Farmer to be the biggest horse in Scotland. Certain it is, that Monierieffe Marquis, who weighs an even ton, standing beside him, looked like a pony. He was sired by the great Prince Cedric, dam that great show mare, Bridle Knot, winner of first at the Highland, she by Top Knot. Wherever one looks at him, he shows his massiveness, and, withal, stands on a grand set of underpinning. He is a noted sire, his get being remarkable for their size and splendid quality. Prince of Walton is a bay six-year-old, by Fascinator, dam by Prince Stephen. He is a horse of very smooth mould, stylish, and flashy of quality; the kind that takes well in this country. Craigen Prince is a brown five-year-old, by the champion Hiawatha. He is put up more on cart-horse type, thick, smooth, compact and even, and stands on a faultless bottom. Diadem is another brown son of Hiawatha, also a five-year-old, dam by Mains of Airds. He is a superb horse, big, rangy, full of quality from the ground up, and his breeding is absolutely gilt-edged. Earl of Carrick is a bay four-year-old, 17 hands high, sired by Royal Craigie, dam by Lord Edwin. He is a draft horse all over, with character in every inch of his make-up, a horse that will certainly make good here. It is needless to say, that among the ten two-year-olds are some exceedingly high-class animals, up to a big size, showing quality in their every lineament. Space will not admit of individual mention of all of these, therefore those mentioned can be taken as representative of the entire lot. King's Cup Bearer is a bay, by the noted Boreland's Pride, dam by Last of the Princes. This is a coming horse of exceedingly high show calibre, big, smooth and flashy. King's Purser is another bay, by Gartley Cashier, dam by Merry Lad. This is a colt of outstanding quality from the ground up, the kind that wins in any company. Duke of Queensbury is a brown, by the champion Benedict, by Baron's Pride, dam by Lord Lothian. This is probably one of the best colts of the lot, with all the qualifications of a coming champion, and his breeding is right royal, Darnley, the great founder of the breed, appearing no less than four times in his pedigree. Carrion Thyme is another brown, by the noted breeding horse, Up-to-time, dam by Lord Montrose. This is a great massive colt, of ideal draft character, on a remarkably nice bottom. Something away above the average in size, character, quality and soundness of mould is the bay yearling, Baron Haddo, by the famous horse, Rozelle, dam by the no less noted Crown and Feather. He is a colt of outstanding excellence, and looks like a coming winner. All these horses are for sale, at living prices, and on terms to suit.

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for your wagon, sleigh or auto. Clark Heaters will not bend or break. They yield a strong, comforting heat from 12 to 16 hours with no attention. No smoke, smell or flame. Be warm and cozy on every trip. You can buy one from your dealer as low as \$1.20. Get one or write for complete catalogue.

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I HAVE GREAT, THICK, ROBUST

SHROPSHIRE

YEARLING AND TWO-YEAR-OLD RAMS

will also be priced at attractive figures.

and a lot of grand Shropshire and Cotswold ram lambs, ewes and ewe lambs of high class, both breeds, and all of the best breeding. Will sell them in large lots or singly at prices you can afford to pay. Short-horn bulls and heifers, two good registered Clydesdale mares, and a few beautiful Welsh ponies will also be priced at attractive figures. Robert Miller, Stouffville, Ontario

SHROPSHIRE AND COTSWOLDS.

I am now offering a choice lot of shearing rams and ewes of both breeds, also a few of the best ram lambs I ever bred. They are large and extra well covered. JOHN MILLER, BROUGHAM, ONT. Claremont Station, C. P. R.

Farnham Oxford Downs

The Champion Flock for Years.

Our present offering is 20 superior yearling rams for flock headers; some imported, and others by imported sires and from imported dams, or choice Canadian-bred ewes. Also a large number of first-class ram and ewe lambs. Our prices are reasonable. HENRY ARKELL & SON, ARKELL, ONTARIO. Arkell, C. P. R.; Guelph, G. T. R., and Telegraph.

MAPLE VILLA OXFORDS AND YORKSHIRES.

Present offering: Excellent ewes, choice rams, and the best lot of lambs I ever offered; all sired by imported rams, Yorkshires of both sexes and all ages. Boars fit for service. Sows ready to breed. A high-class lot. Satisfaction assured. J. A. CERSWELL, BOND HEAD P. O., ONT., BRADFORD or BEETON STAS.

POPLAR LODGE SOUTHDOWNS AND BERKSHIRES.—For sale: A high-class show flock of Southdowns, also shearing rams and ewes, and ram and ewe lambs. Berkshires of both sexes and all ages; right good ones. An honest representation is my motto. SIMEON LEMON, Kettleby P. O., Ont., Aurora Station.

Shropshires, Shires and Clydesdales.—High-class Shropshires, shearing rams and ewes, ram lambs and ewe lambs, from imported and Canadian-bred stock, show stuff; Shire and Clydesdale fillies; White Wyandotte cockerels and pullets. Prices right. W. D. Monkman, Bond Head P. O., Bradford or Beeton Stations.

SOUTHDOWNS AND COLLIES

will be sold right. Long-distance telephone. ROBERT McEWEN, BYRON, ONTARIO.

Large White Yorkshires



An offering during this month a good lot of young boars ready for service, young sows of breeding age, and a choice lot of spring pigs. Pairs supplied not akin. All bred from large imported stock. Write H. J. DAVIS, Woodstock, Ont.

Newcastle Herd of Rams and Short horns. For quick sale at very reasonable prices, 6 sows sired by Imp. Cholderton Golden Secret, bred to farrow in Jan., Feb. and March, to a Toronto prize boar. Not only all my brood sows are sired by that noted prize hog, Caldwell's Choice, or Newcastle Warrior, champion boar at Toronto, 1901, '02, '03 and '05. I also offer 50 hogs and sows, from 2 mos. to 4 mos. old. Two bull calves one year old. Half-a dozen heifers, from 1 to 3 years old. Long-distance Bell phone in home. A. A. COLWILL, Box 9, NEWCASTLE, ONT.

Hilton Stock Farm Holsteins and Tamworths.

Present offering: 6 yearling heifers and several younger ones. All very choice. Of Tamworths, pigs of all ages and both sexes, pairs not akin. R. O. MORROW & SON, Hilton, Ont. Brighton Tel. and Stn.

PINE GROVE BERKSHIRES.

Sows bred and ready to breed. Nice things, three and four months old. W. W. BROWNIDGE, Milton, C. P. R., Ashgrove, Ont. Georgetown, G. T. R.

MAPLE LEAF BERKSHIRES

For sale: Young sows bred and ready to breed; boars fit for service; also young pigs farrowed in March and April. Imp. sires and dams. Pairs not akin. C. P. R. and G. T. R. Joshua Lawrence, Oxford Centre P. O., Ontario.



MONKLAND YORKSHIRES

With very nearly 100 sows in breeding, of modern type and high-class quality, our herd will stand comparison with any in Canada. We are always in a position to fill large or small orders with despatch. Long-distance phone. JAMES WILSON & SONS, FERGUS, ONT.

Improved CHESTER WHITES

Young sows of breeding age. Some already bred. Also choice young pig of both sexes, 6 to 8 weeks old. Joe No. 5629, first-prize boar at Toronto and London, 1909, at head of herd. Also two grand young Jersey bulls. Chas. E. Rogers, Thames Valley Farm, Dorchester, Ont.

Willowdale Berkshires!

Young sows ready to breed, boars ready for service, young pigs just weaned, all choice stock and bred in the purple. Everything guaranteed as represented. Long-distance phone. J. J. WILSON, Importer and Breeder Milton P. O. and Station C. P. R. & G. T. R.

DUROC - JERSEY SWINE

Imported and home-bred. Sows ready to breed. Boars fit for service, and younger ones either sex. Also Embden geese. MAC CAMPBELL & SONS, HARWICH, ONT.

OHIO IMPROVED CHESTER WHITES.—Largest strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 6 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe delivery guaranteed. E. D. GEORGE, Putnam, Ont.

MORRISTON TAMWORTHS Now offering 50 young boars 2 to 6 months old. Best breeding. Sired by the two imp. boars, England's Choice and Knowle King David. Also 50 young sows of same breeding. Chas. Currie, Morriston, Ont.

PINE GROVE YORKSHIRES

including all the firsts and sweepstakes for best dressed carcasses, both at Guelph and the Ottawa Winter Fat-st. ck Shows of 1908-09. Young pigs for sale, mated not akin, all the progeny of imported stock of superior excellence. Joseph Featherston & Son, Streetsville, Ont.

GOSSIP.

As head for their splendid herd of Shorthorn cattle, Porter Bros., of Appleby, Ont., have lately purchased the Jilt-bred bull, Heather King (imp.), a son of the renowned Lovat's Heir. He is a thick, mellow bull, imported by the late Hon. John Dryden, and should prove a profitable investment, coupled with the high-class females of this herd.

William Heap, of Manchester, England, who judged the grade and cross-bred steers and awarded the grand championship in this department of the International this year, and who is president of the National Federation of Meat Traders' Association, and is in very close touch with the live-stock conditions of Great Britain, in an interview by the Live-stock Report, said: "We are face to face with a big shortage of home-grown cattle. The class of beefes coming to market show a decided deterioration in quality and condition from former years. The result has been a great falling off in choice to prime, well-fatted bullocks. This decrease started seven or eight years ago, due to the competition from the United States and Canadian cattle. Our farmers were unable to raise and prepare cattle for the shambles in the face of this competition. Many have gone into the dairy business, and slaughter their calves at a very early age, thus depleting the cattle herds of the country. In the dairy business, they have found returns to be more quick and safe than growing and fattening beefes. Now that the United States is no more than supplying her own beef needs, our farmers are finding just as strong competition from importations of South American dressed beef. This is especially true of Argentina. This country is buying the best of our breeding stock year after year, and the herds are rapidly being graded up to a surprisingly high standard of excellence. To illustrate Great Britain's dependence upon foreign countries for our meat supplies, 80 per cent. of the beef received at Smithfield alone is imported. This should arouse our civic and local authorities to action. But it seems impossible for them to realize the gravity of the situation. The economic fact is, we are every day becoming more and more dependent upon foreign sources for our largest and most regular supplies of good meat. The big packers of the United States have been among the first to see this deplorable condition. Realizing that the United States will be unable to compete against the South American meats, they are establishing or acquiring slaughtering plants in Argentina."

TRADE TOPIC.

HOW CAN CATTLE FEEDERS MAKE MORE MONEY?

Many cattle men just now are discouraged by high-priced feed, costly labor, and small returns. It is a serious problem when prices on grain and millfeed go sky-rocketing out of reach.

It looks as though the feeder was "up against it," and must devise some scheme for reducing cost of production. Two things are sure—feed isn't going to come down in the face of the present tremendous demand, neither will it pay to use cheap feed.

Is it possible, then, to make a better use of his costly grain? Can he follow any "feeding system" that will give a greater return?

Science says that a large percentage of grain fed to fattening cattle or milch cows is lost through incomplete digestion.

To give the feeding stock power to digest a larger proportion of all rations fed, many men use a tonic preparation, formulated by Dr. Hess (M. D., D. V. S.), which contains tonic elements as strength givers; iron for blood building; and alkalies to act as cleansers. This preparation is called Dr. Hess' Stock Food, but it really is not a food. No one would give it for any food value in itself. Rather, it makes food available, helps the animal turn food into blood, tissue, bone and fat. This Stock Food is backed by a guarantee. And any feeder who uses Dr. Hess' Stock Food and is not satisfied, gets his money back. See the advertisement in this paper.

You Want Our Premiums! We Want New Subscribers!

Any subscriber may have date on his own label advanced 12 months by sending us the names of 2 new subscribers and \$3.

Every Premium We Offer Is Exceptionally Good Value. We Give Greater Value in Our Premiums Than If You Were Paid a Cash Commission. Note the Following List:

BARON'S PRIDE. Handsome picture of the Champion Clydesdale. Size, 17 x 13 in., including margin. Suitable for framing. **1 new subscriber.**



NICKEL WATCH. Good timekeeper. This watch has taken well. **3 new subscribers.**

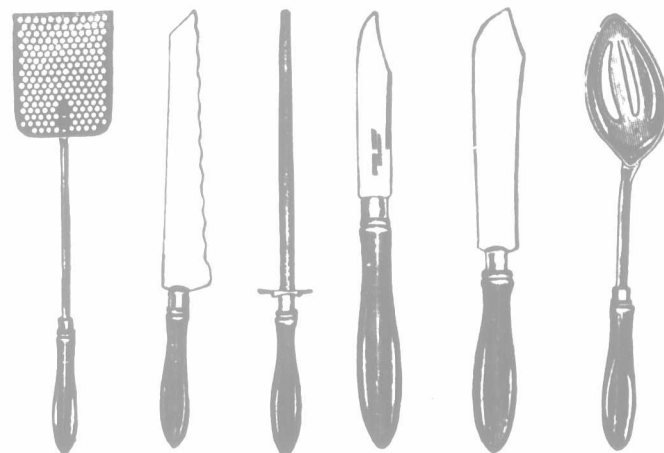
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40-PIECE AUSTRIAN CHINA TEA SET, handsome and dainty in shape, coloring and design; ordinarily retailing from \$4.00 to \$6.00, depending on locality. **4 new subscribers.**

FARMER'S ADVOCATE KNIVES, manufactured by Jos. Rodgers, Sheffield, England. Jackknife and Penknife, both nickel-handled and having two blades. These knives were manufactured specially for the Farmer's Advocate. Worth, retail, \$1.00 each. **1 new subscriber for each knife.**

SET STAGHORN CARVERS. High-class goods. First quality of steel, and staghorn handles and handsome nickel mounting. These carvers will retail at \$3.50 to \$5.00 per set. **4 new subscribers.**



A COMPLETE KITCHEN EQUIPMENT. A UTENSIL FOR EVERY PURPOSE. All made of the highest grade of crucible steel, carefully tempered, ground and polished by the latest improved process. Rubberoid finished hardwood handles, mounted with nickel-plated ferrules. Now is your opportunity to supply your kitchen with a complete cutlery outfit. All six articles sent to any subscriber for sending in only **1 strictly new subscription and \$1.50.**

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"CARMICHAEL": A Canadian Farm Story. Bound in cloth, illustrated. Just the thing for Christmas or Birthday Gift. "Far above the ordinary run of fiction," says the Buffalo Courier. "Should be in all the homes of the people," Toronto World. **2 new subscribers; or cash, \$1.25.**

We must have honest workers. Changing the name from one member of the household to another, or deception of any kind, will not be allowed. If discovered, the premium will be withheld.



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Just as Necessary in Your Home as the Sewing Machine

**Makes Kitchen Work Easy
Saves Room, Time, Toil
Pays for Itself Quickly**



Have a Common-sense Kitchen

MR. Man-of-the-house, do you half realize what toilsome drudgery it is for the women-folks to get the meals in your kitchen without a Chatham Kitchen Cabinet? It is about as up-to-date as if you cultivated your crops entirely with the hoe, instead of the cultivator; as if you mowed your grain with a scythe, instead of a self-binder; as if you threshed with a flail, instead of a threshing machine. You see to it that the farm work is done by modern methods, with labor-saving tools. Outfit your kitchen with this labor-saver—give the wife what rest and ease you can buy her,—kitchen work is hard enough at its easiest. This greatest kitchen convenience makes it far, far easier.

Look at It in the Picture

SHOW this advt. to your wife. Ask her what it would mean to have a cabinet that held everything used in cooking,—focussed the whole kitchen-battery in one spot, right in easy reach of a woman seated, instead of making that woman trot from pantry to cupboard, from cupboard to table, from pot-closet to range, back and forth a hundred times a day. The Chatham Cabinet saves, easily, five hundred steps a day in any kitchen; and the kitchen is easier kept tidy, gets rid of endless clutter, and the foodstuffs are kept in far better shape and wasted less. Isn't it worth while to save the women-folk 150 miles of needless kitchen walking in a year? This cabinet does just that.

Sells for Less than Any Ordinary Cabinet

CHATHAM Improved 1910 KITCHEN CABINET

Guaranteed To Satisfy You In Every Detail

So Practical — So Compact.

LET your wife see the picture here of The Chatham Kitchen Cabinet. She will perceive at a glance that it combines pantry, cupboard, baking kit and kitchen table all in one, and yet takes up less space than the ordinary table alone. Note the large enclosed closet for kettles and larger utensils, with the extra shelf at back for smaller pots, etc. Shelf-rack across closet door holds six aluminized canisters, air-tight,—supplied free with Cabinet, as are also six large canisters seen on table section. See the big flour-bin at the bottom, below the drawers—glides out on roller-bearings, has metal bottom, is dust, fly and mouse proof, and holds 75 pounds.

Table-Top Is Zinc and So Roomy.

NO drawer nor bin opens on the table-surface, which is covered with heavy sheet zinc, easy to keep clean, and unwearoutable. Drop leaves at each end, self-locking when lifted and strong enough to hold a man's weight, almost double the table's surface. Nothing about in its own way; roomy, handy, right,—within Table top is 2 floor; whole 6 ft. high, than a good and yet has for everything, spices, package tea, baking kit, and pans,—used in getting



MANSON CAMPBELL.

Handsome, Solid, Sensible

EVERY Chatham Kitchen Cabinet is framed throughout of finest selected hardwoods, richly finished; metal bottoms are provided every place they'd be useful; drawers are of snowy basswood; glass and mirror (at top, centre) of best quality; catches and knobs heavy copper finished,—every part of it BUILT RIGHT, and better built than any other cabinet sold. Metal bottom under whole cabinet, and dust-tight back; mounted on triple-action roller casters,—easily moved about.

Be sure to examine The Chatham Kitchen Cabinet fully before you invest in any. If we have no representative near you, you can buy direct from the factory. Send for fully illustrated free booklet.

The MANSON CAMPBELL CO., Limited, Chatham, Ont.

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