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Census and Statistics  
Dept. of Agriculture

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

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Vol. XLV.

LONDON, ONTARIO, APRIL 28, 1910.

No. 918

# PURITY FLOUR

Take Your Choice  
of the "PURITY"  
Family



196 POUNDS



98 POUNDS



49 POUNDS



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7 POUNDS

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**D. SUTHERLAND,** The Director of Colonization, Parliament Buildings, TORONTO.  
**HON. J. S. DUFF,** Minister of Agriculture.



### 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.

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W. W. CORY,

Deputy of the Minister of the Interior.

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

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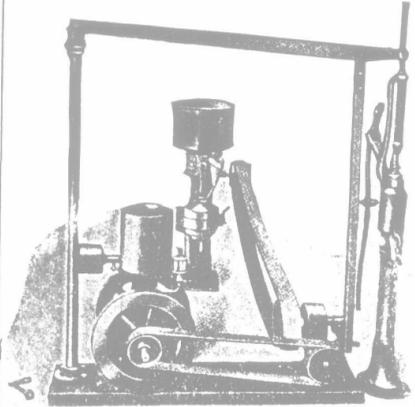
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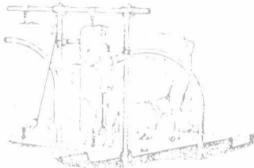


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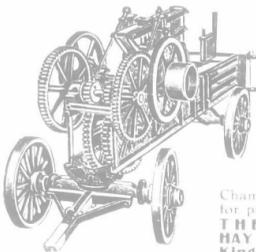
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The Dain Vertical Lift feature is controlled mechanically—not by sheer human strength, when raising the cutter bar over stumps or stones; or in turning corners. A pull at the hand lever or a push on the foot lever, and the cutter escapes all obstructions. In raising the cutter bar to an upright position, for transportation, the operation is made an easy and rapid one by using the hand lever and the foot lever together. This automatic control is at the driver's right. It is worked while in the seat.

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It is simple in design.

Does not easily get out of "kilter." Your boy can start it.

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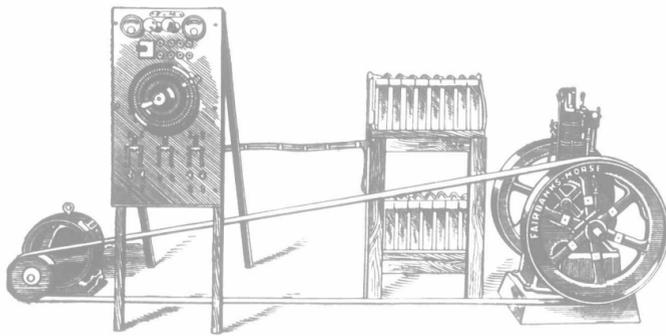
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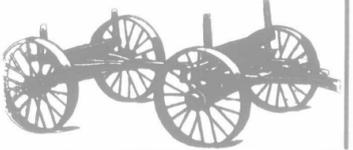
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THE LARGEST AND BEST **ROOT CROPS**  
JUST AS SURE AS YOU'RE SURE OF ANYTHING IF YOU USE **STEELE - BRIGGS SEEDS**

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HAMILTON-TORONTO-WINNIPEG

# The Farmer's Advocate and Home Magazine

"Persevere and  
Succeed."

Established  
1868.

Vol. XLV.

LONDON, ONTARIO, APRIL 28, 1910

No. 918

## EDITORIAL.

All over this continent the cost of living has suddenly awakened town folk to realize that the farmer is a king.

What methods are readers of "The Farmer's Advocate" pursuing to conserve for the growing crops of this season the saturation of moisture which the soil received during winter and early spring?

Would you attempt to grow a crop of grass or grain between your rows of corn? Yet this would be wisdom, compared to the effort to harvest such crops from among a full-bearing apple orchard.

An orchard, for best results, once it has reached bearing age, requires the full use of the land. Particularly in the early part of the season, it demands all the moisture and plant food the soil can furnish.

Who knows how much we have yet to unlearn of theories about handling quality and other external indications of beefing merit? We have opinions and dicta plenty, but of solid, incontrovertible information none too much.

A skilled tradesman, with a permanent position, bringing him \$3 per day, in London, Ont., gave it up to work a small farm, and, after a fair trial, concludes that, under no consideration would he return to city dirt, drudgery and distractions.

The recent sale in the United States of a Canadian-bred Shorthorn bull for the handsome price of \$10,000, is a vindication of his championship honors at the National Exhibition at Toronto, last autumn, and an added evidence of the capability of Canadian breeders to produce the highest type of live stock.

A good many members of Federal and Provincial Parliaments appear to have the notion entrenched in their noddles that their chief duty is to represent some political party. Wrong. They are sent there to work for the whole people, not for themselves, or any particular faction in their own constituency or elsewhere.

Before embarking in the dubious Hudson's Bay Railway project, the Canadian Parliament would do well to complete the Grand Trunk Pacific and the proposed Georgian Bay Canal, and redeem the pre-Confederation promise of affording adequate continuous communication with the mainland to the patient public of Prince Edward Island.

Ontario has wonderful wealth in Cobalt, but this same Cobalt is a disastrous sink-hole for many people's good money. Rather, Cobalt is the bait which induces them to throw money into the pockets of sharps and boomsters. Prof. W. G. Miller, Provincial Geologist, says nine-tenths of those men in Cobalt who have written most reports, and given most advice, are fakirs. Plums in the investment line do not go begging. Nor does it follow that an investment is wise because the money is put into the stock of a good mine. Overcapitalization and manipulation are neat ways of milking the credulous investor. Only the man on the inside has any chance worth mentioning. The average man should let stocks severely alone. Most of them are like cheap merchandise—made to sell.

That the United States does not propose to allow farming to grow inert or languish may be gathered from the fact that the appropriation by the sixty-first Congress for the Department of Agriculture amounts to \$13,522,636, an increase of \$547,600 over any previous bill. The increases are chiefly for new work in research, demonstration, and in the conflict with animal and vegetable pests.

Two very successful strawberry-growers at the O. A. C. short course in fruit-growing, last February, laid much stress on spraying with Bordeaux mixture before blooming. One of them sprays, also, just after blooming. Our spray calendar recommends two applications for the leaf-spot, one before the blossoms open, and one soon after picking. Plow down at once after second crop. In setting out a plantation, choose only healthy plants, with no sign of disease.

Hon. Mr. Fielding, the Finance Minister, announced at Ottawa that the Government had strained a point, and decided to redeem defaced coins, such as those with holes punched in them, at 75 per cent. of their face value. Worn coin was being recalled and exchanged at par. Most of the requests for the redemption of defaced coins come from church treasurers. If there is any meaner trick than trying to palm off coins on the Lord that nobody else will take, it has escaped our notice.

The American politician keeps his grip like a horse-leech on the "free-seed" humbug, for which the present Congress appropriated \$318,000. Secretary Wilson and a host of self-respecting men are opposed to it, but the political hack wants something to hand out to his friends at the public expense. F. D. Coburn, State Secretary of the Kansas Dept. of Agriculture, makes the sensible suggestion that the amount be divided among the Experiment Stations for work in the improvement of grain and other crops.

The Secretary of the Canadian Swine Commission has written an interesting bulletin on swine husbandry. Some well-known facts have been presented afresh, and some details of European hog-raising practices set forth once more. The report, however, contains nothing of importance that is new, for the simple reason that there was little new to glean. We have heard it practically all many times before. If experience was wanted, the Commission could have spent at least a portion of its time to better advantage in Canada.

Some men don't know a bargain when they see it. One of the 1907 split-log-drag competitors who built and kept a first-class mile of road with this homely implement, upon removing to another township, offered to repeat the performance if some small compensation were to be allowed. But lo and behold, the best the commissioners would do was not to charge him anything for the privilege of working on the road! This township owns two road machines, and year after year blue muck is scooped from ditch-bottoms into the middle of the road, to be levelled down by traffic, not to mention the heavy cost to the township. Our correspondent adds that, from his experience with the drag and King ditcher, he is satisfied the expense could be halved. Of course it could, and with better results.

## Which Industry Draws More Capital?

"In the past ten years, \$170,000,000 of American capital has gone to Canada." Quoting this reported remark of Eugene N. Foss, millionaire manufacturer, of Boston, "Industrial Canada" waxes eloquent over the advantage that has come to Canadian industry through a tariff which has been the means of establishing in our midst such plants as that of the Canadian Westinghouse Company, the Plymouth Cordage Co., and others. Our contemporary's editorial is impressive, but not convincing. It fails to prove that as much American capital would not have come to Canada for investment under a very much lower tariff, or even under free trade. But, passing that point by, permit us to draw attention to the fact that the American settlers going into the West last year are estimated to have taken with them nearly a hundred million dollars of capital, or more than half as much as came to us from the United States for industrial investment in a whole decade. Which industry, agriculture or manufacturing, is the more important to us? Which is the better worth encouraging?

## Deane Willis to Judge at Toronto.

The directors of the Canadian National Exhibition, and breeders of Shorthorn cattle in the Dominion, are to be congratulated on securing as judge of the breed at Toronto this year J. Deane-Willis, of Bapton Manor, Codford, Wiltshire, widely known as one of the most prominent and successful Shorthorn breeders in Great Britain. Mr. Willis' fame dates from his purchase of ten females and a bull from the Sittyton herd of the late Amos Cruickshank, at its dispersion, and his success as a breeder is evidenced by the brilliant prizewinning record of representatives of his herd at the Royal and other leading shows, and by his being the breeder of the great show bull, Whitehall Sultan, imported in dam, sire of more International champions than any other in America in recent years.

## How to Spray Thoroughly.

A good many orchard-owners will spray this year for the first time. Barring, of course, exceptionally disastrous conditions as to weather or markets, the work will be well repaid; in many cases it will be repaid two or three times over. But unless one certain condition is observed there will be many disappointments at the imperfect results achieved. That certain condition is thoroughness. If you want to fence chickens out of a garden, you don't stretch netting along 20 panels, leaving gaps here and there. You fence in the whole enclosure. So in spraying, to destroy the scab spores, the codling moth, and the numerous other fungi and insects, spray the whole tree, covering every twig, leaf and embryo fruit. Imperfect spraying will leave gaps through which much injury will be accomplished, and, in the case of the codling moth, will allow enough larvae to mature to form a destructive second brood (that is, of course, in sections where there are two broods in a season). The difference between ordinary and thorough work may easily mean the equivalent of the difference between No. 1 and No. 2 grade on half the crop. On a hundred-barrel crop that difference in grading would come to from twenty-five to thirty-five dollars per acre, the amount depending on the spread in price between the two grades. This estimate is not excessive, because thorough spraying will not only put more apples into the No. 1 grade, but will save many from being discarded as culls.

It is so easy for a beginner to slight the work

## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

PUBLISHED WEEKLY BY  
THE WILLIAM WELD COMPANY (LIMITED)

JOHN WELD, MANAGER

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday.  
It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrearages must be made as required by law.
5. THE LAWS, that all subscribers to newspapers are held responsible until all arrearages are paid and their paper ordered to be discontinued.
6. REMITTANCES should be made direct to us, either by Money Order or Registered Letter, which will be at our risk. When made otherwise we will not be responsible.
7. THE DATE ON YOUR LABEL shows to what time your subscription is paid.
8. ANONYMOUS communications will receive no attention. In every case the FULL NAME AND POST-OFFICE ADDRESS MUST BE GIVEN.
9. WHEN A REPLY BY MAIL IS REQUIRED to Urgent Veterinary or Legal Enquiries, \$1 must be enclosed.
10. LETTERS intended for publication should be written on one side of the paper only.
11. CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P.O. address.
12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve THE FARMER'S ADVOCATE AND HOME MAGAZINE, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
13. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or  
THE WILLIAM WELD COMPANY (LIMITED),  
LONDON, CANADA.

a little. Because the tree looks wet from where he stands, he is inclined to think it is all well sprayed, when careful examination of the twigs would convince him to the contrary. Here are a few rules that every beginner should follow scrupulously:

1. Follow directions implicitly as to materials, proportions, and time of application. Consult the spray calendar for this.
2. In the case of average-sized trees, say, twenty-five years old, one barrel of mixture should be put on every ten or twelve trees at the first spraying, and at the one just as the blossoms fall one barrel should not be expected to cover more than eight trees that have bloomed. Those which did not bloom will do with less, but ought not to be skipped.
3. Spray every tree from eight angles—four angles from each side. By so doing, you cover every side of every twig in every part of the tree.
4. For the most important spray, just after the blossoms fall, drench the trees thoroughly, spraying from above, using either a tower or a very long bamboo rod, and forcing the spray downwards into the blossom end of each fruit. An elbow at the end of the rod to which the nozzle is attached will enable you to do this.
5. Put this last-mentioned spray on immediately after the petals fall, or even while the last ones are dropping. Ten days after that will generally be too late to spray effectively for codling moth.
6. Thoroughly control the first brood of the codling moth and there will be little danger of the second, unless there is an unsprayed neighboring orchard nearby. In this case, a late spraying may be necessary for the second brood.

We can sincerely congratulate you on the excellency of "The Farmer's Advocate." It is steadily improving, and is exercising a great influence in the advancement of agriculture. "The Farmer's Advocate" is the best known, and the most influential journal in the Province. Wishing you continued success in your truly national work.  
Simcoe Co., Ont. FOYSTON BROS.

### Where to Tap the Vein.

The other day, one of our contemporaries, a dairy paper, and official organ of a couple of dairy-breed societies, including the Canadian Holstein-Friesian Association, figured up the percentage of buyers at a certain recent Holstein sale who were on its subscription list. The proportion, we believe, was fifty per cent. More out of curiosity than for any other reason, one of the clerks in our business office looked up the list of buyers at this sale, and found that 66.66 per cent. were bona-fide subscribers to "The Farmer's Advocate." This comparative showing is remarkable, when it is considered that the other paper, by virtue of its official-organ arrangement, goes to every member of the Canadian Holstein-Friesian Association. Moreover, it was noticeable that the roster of "Farmer's Advocate" readers included nearly all the men who paid the best prices, indicating the substantial character of the men who subscribe for this paper. Pursuing the examination further, our mathematician analyzed the published records of a number of other representative recent sales, with the following result:

	Per Cent.
J. A. Caskey, Madoc, Ont.; Holsteins; sale, March 25th, 1910	66.66
Wm. Slaght, Bealton, Ont.; Holsteins; sale, March 30th, 1910	100.00
G. A. Gilroy, Glen Buell, Ont.; Holsteins; sale, April 7th, 1910	70.40
A. W. Smith, Maple Lodge; Shorthorns; sale, March 24th, 1910	75.00
Combination sale; Shorthorns; Feb. 2nd and 3rd, 1910; of the Canadian buyers.	80.00
Walker-Gunn sale; Shorthorns; February 4th, 1910	68.75
Arthur Johnston sale; Shorthorns; March 8th, 1910	85.00

Such data could be accumulated at almost any length, all going to explain the splendid drawing power of "Farmer's Advocate" advertisements, a drawing power that is further attested by the steady growth of our advertising patronage. Once an advertiser, always an advertiser, so long as in the business, is the almost invariable rule. Now and then a breeder or other advertiser resolves to see whether he cannot obtain nearly as good results from some publication with lower rates. Seldom does such a one try the experiment a second time. The great difference in number of inquiries and percentage of purchases at good prices effectually convinces him that, dollar for dollar, advertisements in "The Farmer's Advocate" yield returns not to be compared with those from any other medium in Canada. Facts speak, and wide-awake advertisers pay attention to their talk.

### Do Not Spray Trees in Bloom.

At almost any local fruit-growers' meeting where spraying is discussed one may see an earnest beekeeper or two, anxious lest somebody may recommend or sanction spraying fruit trees when in bloom. Zealously they point out the danger of losing much fruit in that way by poisoning the bees so necessary for fertilization of the blossoms. Modestly, they admit their own slight interest in the matter, which accounts for their solicitude in the fruit-growers' behalf. However, joking aside, the beekeepers have a strong case. They really are the fruit-growers' best friends. Indeed, some growers purchase a few colonies of bees to place in their orchards for the special purpose of insuring the pollination of the blossoms, without ever a thought of honey at all. Indeed, some know or care so little for the bees themselves as to let them die, new colonies being purchased the next spring. Many striking instances could easily be cited to show the advantage of having bees kept in or near an orchard. And, as the beekeepers point out, the best fruit-growers consider spraying during the period of full bloom as a useless waste of material, and harmful to the setting of the fruit. It is universally condemned by entomologists in every part of America. The recommended formulas state distinctly to spray apple orchards, first, just as leaf-buds are expanding; second, just before blossoms open; third, just after blossoms fall; fourth, ten days or two weeks later, if required.

Spraying in bloom is indeed prohibited by an Act of the Ontario Legislature, assented to in 1892, the provisions of which are as follows:

"1. No person, in spraying or sprinkling fruit trees during the period within which such trees are in full bloom, shall use or cause to be used any mixture containing Paris green, or any other

poisonous substance injurious to bees. 2—Any person contravening the provisions of this Act shall, on summary conviction thereof before a Justice of the Peace, be subject to a penalty of not less than \$1.00, or more than \$5.00, with or without costs of prosecution, and, in case of a fine, or a fine and costs being awarded, and of the same not being, upon conviction, forthwith paid, the Justice may commit the offender to the common jail, there to be imprisoned for any term not exceeding thirty days, unless the fine and costs are sooner paid."

Spray, but do not spray while the trees are in bloom. Do not commence until the petals have mostly fallen. After that stage, though, the sooner, the better.

## HORSES.

### Thoroughbred and His Usefulness.

Editor "The Farmer's Advocate":

In your issue of April 7th there is an article by T. B. Macaulay, of Montreal, "a breeder of draft and carriage horses, and a close observer of the horse stock of the country, etc.," and the article finishes up with these words:

"I have no objection to racing as such, but, for the reasons given, I do not myself think that the encouraging of racing, by permitting betting, would have any beneficial effect whatever upon horse-breeding in Canada."

Now, Mr. Macaulay's experience and knowledge may or may not be of wider and more practical kind than that of those gentlemen who gave evidence in person before the Select Committee at Ottawa, when the recent legislation in connection with the racing bill was being considered before Parliament, but a few names of those gentlemen might claim Mr. Macaulay's attention for a moment, and perhaps he may admit they know as much about the matter as he claims to.

Duncan McEachren, V. S., a breeder and importer (not of Thoroughbreds, but of Clydesdales) of over forty years' experience, contradicts distinctly Mr. Macaulay's statements.

Veterinary Director-General Rutherford most emphatically does the same.

Dr. Quinn, of Brampton, ditto.

Hon. Adam Beck, of London, likewise.

Colin Campbell, of Montreal, also disagrees with Mr. Macaulay.

B. McLennan, of Montreal, does the same.

Col. Lessard, of Ottawa, likewise disagrees with Mr. Macaulay.

A. E. Dymont, of Barrie, follows suit.

So does D. Hughes Charles, of Peterboro; the Hon. Lt.-Col. John S. Hendrie; W. B. Henderson, a farmer from Montreal, and numerous others whose names are available, if wanted.

I quite agree with Mr. Macaulay that the heavy-draft horse is the staple horse for this country, but it does not necessarily follow that other breeds for lighter work should not be encouraged, as well, and at least the opportunity given to some farmers who wish to follow that line of improving and keeping up the lighter breeds of horses.

Mr. Yeager, a breeder from Simcoe, Norfolk County, one who has handled as many high-class harness horses as any man in Canada, gave unqualified evidence that he got the best results from crossing the Hackney stallion upon mares with a dash of warm or hot blood in them. He sold four harness horses last spring for \$11,000, got by his Hackney stallion out of mares of which three were half-bred; i. e., got by a Thoroughbred stallion. The highest-priced half-bred Hunter gelding ever bred in Canada sold for \$5,000 at public auction in New York a few years ago, and he was by a trotting-bred stallion, out of a mare with a dash of warm blood. Might I point out to Mr. Macaulay that right to-day, horses, both light and heavy, by the thousands, are going from Ontario into our Northwest Provinces, at good prices; and the reason that Ontario enjoys this large and lucrative market for our farmers and breeders is on account of having, for years back, had the "horse sense" to recognize the fact that you must have a dash of warm blood in the lighter breeds of horses. Mr. Macaulay's argument is that if a 1,500-pound horse is worth \$250, a 1,600-pound horse is, therefore, worth \$300. Not so, by any means; and I buy large numbers, but not on such a principle.

Mr. Macaulay's argument that the Thoroughbred should not be crossed on Clydesdales or other heavy breeds is a sound one, but who advanced such an impractical and foolish experiment? Certainly, all of the gentlemen I have named spoke to the opposite. Might I ask Mr. Macaulay why is it that, for many years back, continental buyers from all over Europe attend the sales in Ireland, and there purchase at a high price the cream of the young stock of the country, especially mares? And these are all got by Thoroughbred stallions?

Might I also ask Mr. Macaulay why France, Germany, Austria, Italy, Russia, Argentina, and other countries, are always prepared to give unlimited prices for the best of English Thorough-



Commencing Spraying Operations in "The Farmer's Advocate" Demonstration Orchard.

The owner, Mr. Poole, and his son, are doing the work. In the lower left-hand corner of the picture is the barrel of lime-sulphur, with a vinegar faucet to draw off the concentrated solution. A wagon or cart would be better for supporting the pump-barrel, but no old one was available when spraying was commenced.

bred blood? Why should Fayardo, the top-notch on the English turf last year, be worth \$300,000, that sum being refused for him; likewise, Ard Patrick and Galtee More, both purchased by the German Government to improve their lighter stock of native horses, for over \$100,000 each, and so on?

The betting end of racing is incidental to the sport, and in this country, as in every British country, the individual should have the liberty of exercising his opinion of making a wager, if he wishes to do so.

Racing, like many other sports and pleasures, can be overdone, and to some extent that condition prevailed in Ontario and British Columbia last year. But to say that, because a few selfish individuals, controlling some of the racing associations of this country, are blind to public opinion, is just and sufficient grounds for condemning the Thoroughbred and his usefulness, is to make an assertion that many people will not agree with, I amongst them. WILLIAM HENDRIE, Wentworth Co., Ont.

**The Clydesdale Clash.**

Editor "The Farmer's Advocate"

In your issue of April 7th, "The Question of Identity Again" is touched upon by Mr. MacNeillage, and surely he must be sore over some phase of it, or he would let the matter drop. However, if he prefers carrying the war into Africa, I have no objections, and a spade will then have to be called a spade. In writing of this matter, the horse imported by Smith & Richardson will be called Sir Henry [6104] (13200), and the one in Scotland Braidlie Prince (12871), so there will be no misunderstanding.

In the Scottish Farmer of March 19th Mr. MacNeillage says that action of the Canadian Clydesdale Association was "unprecedented and oppressive." This is fairly strong language, and whilst the members of the Canadian Clydesdale Board wish to be courteous to all other associations, they felt they should do right, as well, so they took the Canadian view, viz., that no Canadian importer would be safe if Mr. MacNeillage was allowed to change pedigrees at his sweet will. The stallion, Sir Henry, imported by Smith & Richardson, was photographed before he died. This is true, but was done by the orders of Smith & Richardson last July, and was taken over to Scotland by Mr. Richardson, and left with Peter Crawford, as we had nothing to hide about the horse or his pedigree. Time passes on, and does it not seem rather strange that the horse, Braidlie Prince (12871) turns up at Mr. Crawford's sale of March 21st; and surely it stands to reason that Braidlie Prince (12871), with his short pedigree, would be worth a great many more pounds, if, by any means, he could have the pedigree of Sir Henry (13200)? And I do say the pedigree played a most important part; or, let me put it in another way: Either horse could come to Canada in 1906, but Braidlie Prince (12871) could not come in 1910, unless some change could take place, such as Mr. MacNeillage

MacNeillage means by "a comparatively short time" some few months after August, 1906, then I say his statement is false, and I am prepared to take the lie if he can prove by any means that the firm of Smith & Richardson ever heard of anything wrong until the spring of 1909. Ontario Co., Ont. WM. SMITH.

**Standard-bred Registry.**

1. Can a horse be registered as Standard-bred by performance, or have his ancestors to be all registered?
2. What is the address of the Standard-bred Horse Association?
3. What is Whistle Jacket's number, also his sire and dam, their numbers?
4. What is Clear Grit's number?

JOHN SPICER.

In reply to the above, at the present time the only recognized record in the world for Standard-bred horses is the American Trotting Register, located at 355 Dearborn St., Chicago, Ill. The rules of entry are as follows:

**THE TROTTING STANDARD.**

When an animal meets these requirements, and is duly registered, it shall be accepted as a standard-bred trotter.

1. The progeny of a registered standard trotting horse and a registered standard trotting mare.
2. A stallion sired by a registered standard trotting horse, provided his dam and grandam were sired by registered standard trotting horses, and he himself has a trotting record of 2.30, and is the sire of three trotters with records of 2.30, from different mares.
3. A mare whose sire is a registered standard trotting horse, and whose dam and grandam were sired by registered standard trotting horses, provided she herself has a trotting record of 2.30, or is the dam of one trotter with a record of 2.30.
4. A mare sired by a registered standard trotting horse, provided she is the dam of two trotters with records of 2.30.
5. A mare sired by a registered standard trotting horse, provided her first, second and third dams are each sired by a registered standard trotting horse.

**THE PACING STANDARD.**

When an animal meets these requirements, and is duly registered, it shall be accepted as a standard-bred pacer.

1. The progeny of a registered standard pacing horse and a registered standard pacing mare.
2. A stallion sired by a registered standard pacing horse, provided his dam and grandam were sired by registered standard pacing horses, and he himself has a pacing record of 2.25, and is the sire of three pacers with records of 2.25, from different mares.



A Bad Case of Tree Butchery.

The owner of this orchard, which is located within three miles of "The Farmer's Advocate" Demonstration Orchard, must have been too busy to attend the Lambeth Fruit Institute, or to read agricultural journals. For lack of correct information, he has butchered his trees about as badly as we ever saw it done. The orchard is an old one, and has been sadly neglected. With commendable zeal, but exceedingly poor judgment, the owner went heroically to work this spring to prune it. About three times as much wood was taken out as should have been removed the first season, and what bearing wood is left is all at the extreme top, exposing the trunk and main branches to danger of sun-scald, endangering even their life, besides rendering it physically impossible for the trees to bear anywhere near a full crop of fruit. What does set is liable to be blown off, if it falls, it is badly bruised, and what does not fall is difficult and expensive to pick. It would take many years to get this orchard back into proper shape. The only hope now is to let some suckers run up from the lower limbs to form new branches, and practically re-form the head. An owner of a good orchard would better lose \$200 than allow an acre of his trees to be mutilated in this way.

3. A mare whose sire is a registered standard pacing horse, and whose dam and grandam were sired by registered standard pacing horses, provided she herself has a pacing record of 2.25, or is the dam of one pacer with a record of 2.25.

4. A mare sired by a registered standard pacing horse, provided she is the dam of two pacers with records of 2.25.

5. A mare sired by a registered standard pacing horse, provided her first, second and third dams are each sired by a registered standard pacing horse.

6. The progeny of a registered standard trotting horse out of a registered standard pacing mare, or of a registered standard pacing horse out of a registered standard trotting mare.

Clear Grit's number is 859.

The horse, Whistle Jacket, which you probably refer to, raced at St. Thomas in 1887. He had a mark of 2.40, but we do not find him on record in the American Trotting Register. If you wish for further information about him, you had better write to Frank E. Best, 355 Dearborn St., Chicago, Ill.

## LIVE STOCK.

### Leicester Sheep.

By A. W. Smith.

About the middle of the eighteenth century, Robert Bakewell, Dishley, England, began the improvement of the native long-wooled sheep of Leicestershire and the other Midland Counties, producing what has been known as the "Bakewell Leicester," thus giving to the world what has continued to the present time, one of the most popular and profitable of the English breeds of sheep.

There is no reason to believe he used any cross in establishing the good qualities of the breed. Having firm faith in the power of animals to transmit their good qualities to their offspring, he, by wise selection, with a well-defined idea in his mind, and careful feeding and attention to the stock, so improved his flock that they rapidly became celebrated in all the Midland and North Counties of England, and were freely used for the improvement of other breeds now popular. It is evident, too, that his efforts were appreciated, and his work rewarded financially. His first rams offered for hire, in 1760, brought him only \$4.00 each, while in 1786 they reached about \$600 each, and twelve years later he realized \$6,000 for three of his rams for one season's use, and over \$10,000 for seven others. One farmer in Lincolnshire paid \$5,000 one season for the use of two rams, and a two-thirds privilege for one ram brought \$4,000, a rate of \$6,000 for one season's use.

For many years Leicesters were bred after Mr. Bakewell's type, which meant increased size, great improvement in quality and quantity of wool, early maturity, and good feeding qualities, with a greater wealth of flesh.

They were bred largely in the Midland and North Counties, while in Yorkshire they maintained the greatest popularity.

About the middle of the nineteenth century, and after, large numbers of them were imported into Canada, where the competition in the show-ring became, perhaps, stronger than in their native land.

They were at that time largely distributed in Canada, their blood to-day predominating in the grade sheep of the country.

The breeders along the borders of England and Scotland, by careful selection, changed the type considerably, giving to the world the Border Leicesters, which have been practically the only Leicester imported into Canada during the last thirty or forty years. Both the Bakewell and Border Leicesters are eligible for registration in the American Leicester Record and in the Canadian Leicester Record, and the remingling of the blood gave what very high authority claims is an improvement on each. To-day our Canadian Leicesters are very largely of Border-Leicester blood, with the old English Leicester foundation, or bred in their purity.

For three generations or more, the name of Jordan, of Driffield, Yorkshire, has been prominent among the English breeders; while Harrison, and others, largely residents of Yorkshire, have been keen rivals.

In the border counties of England and Scotland, Lord Polwarth, of Merton, stands out as the master mind in moulding the Border Leicester type, winning for it the popular place the breed holds to-day. With him have been associated the Messrs. Clark, of Oldhamstocks; Wallace, of Auchincrain; Twentymann, of Wigton; Hon. A. J. Balfour, Whittingham; Hume, of Barrelwell; Templeton, of Sandyknowe; MacIntosh, and scores of others, from Carlisle to John O'Groats.

Simon Beattie, Russells, Snells, Whitelaws, Smith, Kelly, Douglas, Gardhouse, and many others, are names that appear prominently in the history of the breed in Canada.

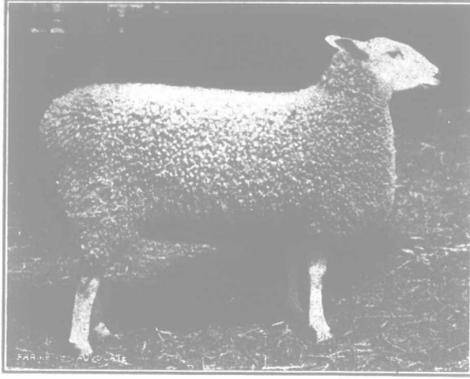
The present accepted ideal Leicester is a fairly large sheep, counted one of the large breeds. They

have a very sprightly appearance, with a graceful carriage, that adds very much to their beauty. The head should be fine, and very clearly-cut; broad between the eyes; a fair length, and almost straight, or only slightly Roman; thin from the eyes to the nostrils (which are rather large); the crown not too prominent. The ears thin, of medium size, and carried well up and forward. Eyes prominent and bright, giving a very alert appearance. The nose should be black, and the head and ears covered with fine, straight, white hair, but no sign of wool, which should, however, come close up behind the ears, and up to the jaws. More strength is required in the head of the ram, but must be free from coarseness. The neck is of medium length, and carried almost perpendicular from the body; rather fine at setting-on of the



Border Leicester Yearling Ram.  
Winner at leading Scottish Shows.

head, but strong as it curves into the back, particularly in the ram. The breast should be broad and full; the neck veins full. Shoulders smooth, and wide on top; front flanks well let down, giving a big, full girth around the heart. The back straight, broad, and well covered with firm flesh. The sides nicely arched from the back, and of good depth. The loin broad and strong. Quarters long, and well let down. As in other breeds, a great improvement has been made in the quarters of the Leicesters, and they are now full and well fleshed, making a good "leg of mutton." The legs are straight, and well placed under them, free from wool, but covered thickly with white hair, as on the face. Bone not coarse, but strong and firm, with good feet and comparatively straight pasterns.



Border Leicester Yearling Ewe.

Reserve to champion, Highland Society's Show. Bred by David Hume, Brechin, Scotland.

The wool should have great lustre, bright, and fine in fibre, well crimped to the skin; the locks medium size, very thick and dense, and very curly, forming a thick mass of curls of even quality all over the body, and with no sign of parting along the back. Some years ago, Leicesters were faulted for a tendency to "go bare" of wool underneath. Now, any such stripping is a disqualification.

Leicesters are very hardy, the lambs coming very strong, and are on their feet seeking nourishment in a very few minutes after being dropped. The loss at birth should be very small, and, because of their small heads, very little loss or fatality amongst the ewes is found at lambing time. On the ranges this is found a great advantage, and is much prized. The ewes are very prolific; an increase of 47.5 per cent. is quite common, and, being good mothers, as well, giving a

large flow of milk, the lambs mature quickly, making it possible to have a lot of plump, large lambs at an early age. They are good feeders, and make splendid gains for the food consumed. They retain their size and good form under many different conditions of treatment exceedingly well. In fact, Richard Gibson, one of our very best authorities on sheep in Canada, says: "The Leicester is the only breed of sheep that has been improved upon in America." Henry Stewart, in his book on sheep, says: "The modern Leicester is a model sheep, a subject for the naturalist and artist to admire, and the shepherd to make his money out of, and has been used in the refinement of almost every other modern breed. The chief value of the breed doubtless lies in the ability to improve others on which the rams are crossed, and the grades of it are quite doubled in value by the cross."

After a hundred and fifty years or so of breeding in their purity, they still remain one of the most popular of breeds in Great Britain. The prices obtained for them at the annual sales at Kelso are amongst the very highest obtained at auction for any breed, and continue at high-water mark year after year, bringing at that sale, as they do, as high as from \$1,000 to almost \$2,000 for single animals.

When put on equality of conditions, they make a grand showing for the breed in general utility. During 1896, Prof. Curtis, of Iowa Agricultural College, Ames, Ia., conducted a test with ten wether lambs of each of the nine mutton breeds, mostly bred in Canada and the United States, and mostly all selected from Canadian flocks, the results being most creditable for the Leicesters, which stood at the top of the list, or close up, in all the lines of comparison, namely, total gain, cost of food per pound of gain, cost of food consumed per 100 pounds of live weight, percentage of mutton to live weight, value of carcass when cut up for retail market, value of fleece, etc. The test was continued in 1897 with the same number of lambs, and with practically the same result, giving strong proof of the great value of Leicesters to the general farmer.

When used on the ranges to cross on the range ewes, they produce lambs of very uniform type, carrying themselves attractively; of good marketable size, with a heavy fleece of high selling value, commanding high prices for feeders. Used, as in Scotland, for crossing on the Cheviot or Blackfaces, they give a cross much valued by the feeders in the Lowlands, to consume their turnips, and turn them into lamb and mutton that command the highest prices in the best markets of England. So, also, is it in New Zealand, where they are much sought after, and whose buyers pay some of the highest prices for rams of the breed at Kelso and the other markets in Scotland. In Prince Edward Island they are the foundation stock, and their blood predominates in the lamb for which that Province has become so famous in the Canadian and American markets.

### Trouble from Feeding Mangels and Sugar Beets.

"Stockmen have long been under the impression that sugar beets and mangels, when fed to breeding animals, will in some way cause the formation of renal and urinary calculi, or kidney or bladder stones." Such is the statement made in the introduction of Bulletin No. 112 of the Iowa Experiment Station, Ames, Iowa. In order to determine just how far such an opinion is justified, a series of experiments covering five years was carried on at that station. Breeding rams were used as the subjects of experiment, as they seem to be more subject to trouble from kidney or bladder stones than other stock.

Beginning in the winter of 1904-05 with four rams, in two lots of two each, the number under test was increased, until, in 1907-08 there were 42 rams, in four lots, fed as follows:

- Lot 1, hay and grain.
- Lot 2, hay, grain, and silage.
- Lot 3, hay, grain, and mangels.
- Lot 4, hay, grain, and sugar beets.

The feeding of roots in liberal measure had a good effect on the growth and fattening of the rams, and on the marbled appearance of the meat. But the suspicion that the formation of kidney and bladder calculi was induced by the feeding of mangels and sugar beets, was borne out by the fact that two of the rams being fed mangels, and two of those fed sugar beets, died before the end of the test period, and examination showed many small calculi in the bladders of two, several that were large in the bladder of a third, while the kidneys of the fourth, whose bladder could not be examined because it was destroyed, were much broken down. When the rest of the animals were slaughtered and examined, it was found that, while the kidneys of those receiving hay and grain, and hay, grain and silage, were normal, and bladders also normal, except in the case of a few, the kidneys and bladders of all those that had been fed mangels and sugar beets were more or less affected, and two of them had developed calculi.

The conclusions of the experimenters are as follows:

1. Sugar beets and mangels favor the formation of renal and urinal calculi, or kidney and bladder stones, when fed to breeding rams.

2. It is very probable that these roots have the same effect when fed to ewes or to cattle.

3. In view of the fatal results often attending the formation of these stones, it would seem inadvisable to feed sugar beets and mangels to breeding animals.

4. There is no particular danger in feeding sugar beets and mangels to fattening animals, as the calculi are not likely to develop sufficiently during the fattening period to cause serious results.

The above conclusions are startling enough, but, in view of the fact that the animals under test were fed heavily on roots for a lengthened period, and the further fact that mangels and sugar beets are fed much more generally in Canada than in the adjoining States, with no ill effects observable, except, possibly, in the case of a few sheep, little alarm need be felt.

### Alberta Spring Live-stock Show.

The most successful Spring Live-stock Show yet held in Alberta was that which materialized at Calgary in the first week of the present month, at which prizes were offered for horses, beef cattle, sheep, swine, dressed carcasses, and judging competitions, upwards of one thousand entries being booked for the stallion and horse show alone. The breeding section of horses was represented by entries of Clydesdales, Percherons, Shires, Belgians, Suffolks, Thoroughbreds, Hackneys and Standard-breds. Prof. W. L. Carlyle, of Moscow, Indiana, judged the heavy-draft classes, and R. H. Taber, of Condie, the light-horse classes. The saddle horses were judged by H. C. Lawson, of Regina.

In the class for Clydesdale stallions five years and over, first place was given to Royal King (imp.), a bay horse, by Royal Edward, shown by Walter Moss; second to Master MacQueen, by MacQueen, shown by James Clark; third to Sonsie's Best, by Lord Charming, and owned by Wm. Moodie. In the four-year-old class, James Clark was first with Gay Times; Marshall & Watson's Scotland's Knight was second, and A. L. Dollar's Scotland's Magnet, third. In the three-year-old class the placing was, James Clark's Col. MacQueen first; J. A. Turner's Wealthy Prince second, and the same owner's Economist third. The championship for best Clydesdale any age or sex went to Royal King, the first-prize aged horse. The champion female of the breed was A. G. Dewdney's first-prize aged mare, Proud Beauty (imp.), by Baron's Pride.

Percherons made a strong showing. The call for stallions four years or over brought out six good ones. Garon, a gray four-year-old, owned by Geo. Lane, was the winner. This horse has been shown in Western Canada since he was a two-year-old, and has often been a top-notch. W. W. Hunter's Dentiste, also a gray, was second. Halifax, formerly owned by Colquhoun & Beattie, but now by Geo. Lane, led the three-year-old class, and W. B. Thorne's Illico the two-year-old section. E. J. Wigle's Fairlad coming third. The champion stallion was Lane's four-year-old Garon, and the reserve was the same exhibitor's three-year-old Halifax. The champion female was Bichette, the first-prize aged mare, also owned by Geo. Lane.

Shires were shown by W. W. Hunter, of Olds, and F. A. McHugh & Sons, of Calgary. Windridge Boy, a brown three-year-old, 17 hands, and weighing 2,070 pounds, owned by Hunter, was the winner in the aged stallion class. McHugh was second with Norley, a low-set horse. Hunter had the winning aged mare, whose weight was 1,920 pounds.

Belgians were well shown by the Belgian Horse Ranch, of Calgary, and Suffolks were creditably shown by Jaques Bros., Lamerton, and J. Lyons, Cheadle. The champion stallion was Ashmoor Microphone (imp.), shown by Jaques.

In the Hackney class, W. E. Butler, of Ingersoll, Ont., was first with Devondale; the Baxter-Reed Ranching Company, of Olds, second, with Terrington Flashlight, and John A. Turner, of Calgary, third, with Seaham Mason. The champion Hackney stallion was Butler's Devondale, and the champion female was Ermine, a bay mare of fine type and character.

J. E. Moody, of Calgary, was a strong exhibitor of Standard-breds, securing second and third awards for stallions three years and over. Halmont, owned by Geo. T. Haag, of Calgary, won first and championship.

Thoroughbreds were shown by R. F. Boyan and R. W. Meiklejohn, of Cochrane, who were the largest exhibitors. Gay Boy, owned by D. A. Campbell, of Calgary, was the champion stallion.

### THE BULL SHOW.

The number of bulls was greater than last year, and the quality and condition of the animals well up to the standard. Some fine animals were found among the lot, some 118 being cat-

logued. Before the bulls were put up for sale, they were judged, and placed in their respective classes.

Shorthorns.—Three years and over—1, H. Talbot, Lacombe; 2, J. Hogg, Okotoks; 3, D. Sinclair, Innisfail. Two years and under 30 months—1, T. Kurp, Lacombe; 2 and 3, Wm. Sharp, Lacombe. Thirty months, and under three years—1, A. H. Bolton, Gladys; 2, A. S. Fowler, High River; 3, D. Martin, Gladys. Eighteen months and under two years—1, J. L. Walters, Clive; 2 and 3, J. Sharp, Lacombe. Yearlings and under eighteen months—1, S. R. English, Lanuke; 2 and 3, W. P. William, Fort Saskatchewan. Championship Shorthorn—H. Talbot.

Herefords.—Three years and over—1, E. B. Randall, Lacombe; 2, G. Phipps, Cochrane; 3, H. W. Watkins, Olds. Two years and under thirty months—1 and 2, Palmer; 3, A. Fletcher, Mound. Eighteen months and under—1 and 2, S. Mace, Ekisko; 3, O. Palmer. Yearlings and under eighteen months—1 and 2, S. Mace; 3, P. M. Ballantyne. Champion Hereford—S. M. Mace.

Aberdeen-Angus.—Three years and over—1, Alex. Shaw, Medicine Hat. Under two years—1, Geo. G. Melson, Olds; 2, T. Croxford; 3, L. Hutchinson. Two years and under three years—1, F. R. Cathro, Calgary; 2, G. G. Melson. Champion Angus—Geo. G. Melson, Olds.

Galloways.—W. E. Tees, of Tees, Alberta, won all the prizes in this class.

### BULL SALE.

This was the tenth annual auction sale of bulls. The sale was very successful, and the prices realized were encouraging to all stockmen. Ninety-six animals were sold, and the average price realized was \$96 for Shorthorns, \$111 for Herefords, \$99 for Aberdeen-Angus, and \$75 for Galloways. Last year the average was: Shorthorns, \$108; Herefords, \$101; Aberdeen-Angus, \$121; and Galloways, \$50.

The ranchers and stockmen who attended the show were very much impressed with the quality of the animals, and in every instance the price paid was satisfactory. The largest purchaser was J. A. Markle, Inspector of Indian Head Agencies, who purchased thirty bulls for his wards on the various reserves. The highest price, \$205, was paid for the Shorthorn bull, Carnation's Hero, offered by James A. Hogg, of Okotoks, and purchased by A. Sullivan, of Olds, Alta.

Some of the herd averages were: James Sharp, \$111 for five head; Wm. Sharp, \$109 for five head; James Wilson, \$122 for six head; A. S. Fowler, \$73 for eight head; A. H. Bolton, \$79 for six head; Geo. G. Melson, \$93 on four head; S. M. Mace, \$139 on five head.

Place the hogpens a good distance from the house. Odors from such pens are not agreeable.

## THE FARM.

### A Fifty-bushel Wheat Crop.

Editor "The Farmer's Advocate":

I am sending you a photo of a section of our wheat field in 1909. I am sorry I did not have same taken while being cut, as the grain stood about even with the horses' backs. The yield was about 50 bushels to the acre, but a few small spots went down before heading out, and there was also considerable waste where the crop was lodged, and, also, on account of being threshed outdoors.

Essex Co., Ont.

L. C. PALMER.



Mr. Palmer's Wheat Field.

### How to Test Seed Corn.

Authorities in the corn belt have been warning farmers to test their seed corn. At a certain corn show in Indiana last winter, 90 per cent. of the exhibits were found to be more or less seriously damaged by frost, and showing many soft, darkened germs. Some of the exhibits were found to be so seriously affected by frost as to be entirely worthless for seed purposes. Other investigations revealed that this was not a merely local condition.

Under such conditions, remarks A. T. Wiancko, Agriculturist of the Purdue Experiment Station, there is nothing for the farmer to do but make careful individual-ear germination tests of all his seed corn that was exposed to the frost. If this is not done, there is sure to be much disappointment in the character of the stand of corn secured next spring.

The importance of seed-corn testing, and the great amount of saving that may be made by a little work of this kind, and methods of making tests, have been so thoroughly discussed in all agricultural papers during the last four or five years, that it would seem to be unnecessary to do more at this time than simply point out the fact that much corn has been damaged, but for those who are not yet familiar with up-to-date methods of making germination tests, the following simple and effective plan is recommended:

Take ordinary inch lumber and make a shallow tray of convenient size, say, about two by three feet, and two and one-half inches deep. Then bore small holes through the sides and ends, about one and one-half inches above the bottom, and put an inch and three-quarters apart. Through these holes string light galvanized or copper wire in both directions. Then fill up the tray to the wires with sand, earth, or fine sawdust. Sand is preferred because it is clean, and easily kept in good condition. Each square marked off on the surface by the cross wires is intended for the kernels from a single ear of corn. Instead of weaving in the cross wires as indicated, a piece of large-meshed, wire chicken-fence may be fastened in. If this is preferred, the tray should be made one and one-half inches deep, then the piece of chicken-fence fastened on top, and an inch strip nailed on top of that, so as to raise the edges of the tray an inch above the wire netting, as in the other case. After the tray has been filled up to the wire with sand or other material, as directed above, and thoroughly moistened, the tester is ready for use. If much corn is to be tested, several of these testers should be provided. They are easily made, and with good care will last many years. For the average farmer, one will be sufficient, as about three bushels of seed ears can be tested at one time.

When making tests, some convenient system of arranging the ears on a floor, table, shelf or rack must be employed, so that the ear corresponding to a certain square in the tester may be readily located. Begin filling the tester by placing five kernels from the first ear, selected by taking one from each of five different parts of the ear, in the first square at the upper left-hand corner, and fill each row of squares in regular order.

After the kernels have been placed, the material in the tester must be kept thoroughly moist. Some kind of cover must be used to keep the surface from drying, and, if this is properly done, the kernels need not be buried out of sight. Panes of glass or a glass window sash make the most satisfactory cover. This should rest loosely on the edges of the tester, so as to admit some air. With such a cover, the soil need be moistened only once for each test, as the evaporated moisture

will condense on the under surface of the glass and drop down again. When moistening is necessary, after the kernels have been placed, a towel or other cloth should be spread on the surface, and the water poured gently on top. If this is not done, the water poured on will move many of the kernels out of place.

The tester should be placed in a room ranging around 70 degrees F. in temperature during the day, and not falling below 50 at night. The ordinary living-room is a good place for it, but it should not be placed too near the stove. All kernels which do not send out vigorous root and stem sprouts within five days, under these conditions, should be considered as too weak to germinate properly under ordinary field conditions. If the germination of any lot of kernels is unsatisfactory, the ear from which they came should be discarded. About 95 per cent. of the kernels should germinate strongly within the five days.

A handy person can easily make an individual ear test of five or six bushels in a day, and the labor involved will be paid for many times over in the better stand of plants, and the consequently larger crop secured. You cannot afford to neglect it. An illustration of a seed-corn tester prepared this way appeared in "The Farmer's Advocate" of April 14th.

### Refrigerator—Chart of Beef Animal.

1. Give the proper name of each cut of beef.
2. The price generally paid for each cut.
3. What is the best and cheapest method of constructing a refrigerator big enough to hang a beef when cut in quarters?
4. How long can you keep beef in such a place in hot weather?

Ans.—1 and 2. A chart of beef animal is to be published in Home Magazine Department in an early issue, or as soon as space permits.

3 and 4. Answered by J. A. Ruddick, Dairy and Cold-storage Commissioner: It is impossible to properly describe any system of constructing a refrigerator, in answer to a question of this kind. The best we can do is to state briefly a few of the principles which must be followed. There are several systems by which the cooling power of ice is utilized. The circulation system is automatic in its operation, and involves less labor than any other plan. In this system there are two chambers, one for ice, and one for the articles to be cooled. Provision is made for a circulation of air between the two chambers. The ice-chamber may be above the cooling-room, or alongside. If above, the circulation is controlled by having openings along the wall on either side. A false partition should carry the opening to the top of the ice, on one side, which will cause the warm air to rise at that side. The cold air will fall through the opening on the other side. If the ice-chamber is alongside the cooling-room, openings at the top and bottom of the partition between the two chambers provide the necessary circulation.

The walls require to be constructed with as nearly as possible an impervious shell outside and inside, the space between these two shells to be filled with planer shavings, not sawdust. The space for the shavings should be about one foot thick, for good results. The floors and ceilings must also be insulated. Spruce lumber should be used for the interior finish. Give it one or two coats of shellac to prevent the wood from absorbing moisture and encouraging the growth of mould.

The floor of the ice-chamber must be provided with drainage, well trapped, to carry off the water from the melting ice. The outlet must be trapped, to prevent passage of air. The floor of the ice-chamber must be water-tight. Galvanized-iron covering is probably the simplest way of securing that result. Put a rack on top of the galvanized iron to protect it from injury when the chamber is filled with ice.

Double boards on the outside, and double boards inside, with damp-proof paper between, give a fairly good construction for the walls of the two chambers. The partition between the ice-chamber and the cooling-room should be insulated in the same manner as the walls.

The ice-chamber may be large enough to hold the supply of ice for the whole season, or it may be made smaller, and filled from time to time.

In the cylinder system, only the cooling-room need be insulated. Galvanized-iron cylinders, about a foot in diameter, resting in a water-tight trough provided with drainage, pass through the ceiling to the floor above. These are filled with crushed ice and salt. The ice can be stored in the ordinary way. The cylinder system, if properly attended to, and if plenty of salt is used, will give a lower temperature than the circulation system. It is possible to reach a temperature of freezing with the cylinder system. The circulation system gives a temperature of about 38 to 40 degrees.

Send to the Dairy and Cold-storage Commissioner for plans of small cold storages.

### A Full Silo.

A silo is a benefit in proportion to how it is filled, both regards quantity and quality. The animal cannot devour the silo, whether it is wood, steel or cement. The thing is, then, to make sure there will be enough to fill it. Indeed, if larger production of milk is desired, cows must be fed better than they have been in the past. This feeding a cow poorly, then sneaking around behind and stealing the milk from her, contributes neither to one's manhood nor wealth.

There are other ways of feeding a cow besides feeding her silage, but silage offers at once the best and cheapest feed. It is a mighty good thing as a filler and should be fed as a necessity, not as a luxury. If we expect a cow to give more milk, she must be fed well all the year. A cow must have the power, as well as the inclination, and systematic, good care all the time gives her vitality and power.

Feed given to a cow is not all returned at once, but, like "bread cast upon the water," will be seen after many days. Then, when we consider one-half an acre of good corn will produce enough to make over six tons of silage, 12,000 pounds—40 pounds a day for 300 days. One-quarter of an acre of roots will produce more than a cow can eat in 200 days. Less than three-quarters of an acre gives a cow a full belly all winter and part of the summer. And, what with the straw, so plentiful on almost every farm, there is no excuse for cows being so poor as they often are.

Corn is the easiest and surest crop of all to grow, if it is gone about in the right way. There are many I know that have never had a poor crop of corn since I can remember, and there are many others that do not have a good crop, except in a very favorable year. It must be remembered corn loves heat, and we can greatly assist the growth by keeping the land stirred and letting the air in to it. The land cannot be too rich for corn, but at the same time, a very fair crop can be grown on poorer land by good tillage. I have grown a very fair crop on sandy land almost too poor to grow anything else. Though it was short on fertility, it was long on heat. For corn, I would prefer to have the manure put on in the winter, or early in May. Plow the land before the 10th of May, harrow once and roll, and let it lie for ten days or two weeks. This is enough work to start many weed seeds growing. Then work the land up with disk or cultivator, and harrow well. For seed, White-cap Dent is the best for most of Ontario; it is earlier than any dent corn I have ever got hold of, and I prefer the dent corn, as it does not "sucker" as the flint does, and grows a bigger crop, and, if the ground is worked properly, it will mature enough. As to quantity of seed, for Southern Ontario, on warm land, about 25 pounds to the acre will give the maximum of quality and quantity. As we go further north, less seed should be sown, and on heavier land, else the corn will be too sappy to make the best quality of silage. A peck to the acre will give a good crop anywhere, but we can sow thicker than that in Southern Ontario, and get more to the acre, and I believe it makes better silage. This is my conclusion after six years, growing 30 to 40 acres yearly.

After the ground is thoroughly worked up, sow the seed. From 20th to 25th of May is our time here, but the weather should be warm, so the corn will start to grow quickly. I used to sow with the four-horse drill, putting in over fifteen acres a day. That drill would sow three rows at a time, 12 inches apart. Roll after drilling the corn, then, in a few days, harrow again. This harrowing will depend upon the weather. I like to harrow just whilst the kernels are starting to sprout, but before there are many rootlets. Then, if the harrow teeth move any of the kernels, it will not do any harm. This harrowing kills a lot of small weeds, as they germinate before the corn, and saves much after-work. Besides, it livens up the soil, and makes the corn come along faster. Harrow with the rows. After the corn is three or four inches high, go across with the weeder, or, if the ground is packed with a heavy rain, a light harrow will do; but we cannot harrow on sand after the corn is up. Cultivate when the corn is 4 to 6 inches high, drawing away from row. Cultivate when 8 to 12 inches high, shoving the soil up until the earth from adjoining rows meets. This would smother out about all the weeds left, if the former tillage has been thorough.

GEO. RICE.

I beg to acknowledge with thanks the premium set of scissors sent me for one new subscriber. I find the scissors better than I expected, and consider the premium, together with the Christmas number you usually mail to subscribers, worth the price of subscription. I congratulate you on issuing the leading paper of this Province, which no wide-awake agriculturist can afford to be without.

WM. C. VANSICKLE.

Wentworth Co., Ont.

### Experiments with Cement Tile.—I.

Paper read by Prof. W. H. Day, O. A. C., Guelph, before the Cement Convention in London, Ont., 1910.

Since the Ontario Agricultural College began College Extension Work on the subject of Farm Drainage, some five years ago, there have been numerous inquiries for information on the subject of cement tile. People usually wanted to know two things: first, whether the cement tile could be made cheaper than the clay tile; and, secondly, whether they would be durable. When these inquiries first began to come in, there were not, so far as I am aware, any extensive or conclusive data as to the durability of cement drain tile, nor was there any grave question about their durability. There was a general impression, however, that they should prove durable, judging from the manifold conditions in which concrete had proven its usefulness. Therefore, at first we concerned ourselves with the cost of manufacturing cement tile by hand, for the point made by most of the inquirers was that they were thinking of procuring molds and making their own tile.

For use in our experiments on the cost of manufacture, the London Concrete Machinery Company furnished us with one of their two-piece cement-tile machines, since taken off the market. And the experimentation was undertaken by A. M. Shaw, one of our students, who had had considerable experience in cement work with his father. During the months of April and May, 1908, experiments were conducted in making cement tile.

While writing the report of these experiments, in the latter part of the year, we learned of the controversy over the durability of cement drain tile, and we must confess that the idea of cement being soluble was a new one to us. After reading the attack on cement, and the answer to it, we counselled farmers to go slowly in the adoption of cement tile. At the same time, however, we decided to conduct some tests in order to learn for ourselves something about the solubility of cement, and to deduct from the information thus obtained some idea of the probable durability of cement tile. These experiments were begun in February, 1909, and have been continued until the present.

Besides the points already mentioned, the porosity of cement tile received some attention during our experiments.

#### THE COST OF MAKING CEMENT TILE BY HAND.

The tile made by the London two-piece machine were hexagonal on the outside, being about three-quarters of an inch thick in the thinnest part, and considerably thicker at the corners. Mr. Shaw found that, mixing his own material, he could make a shade over 500 complete three-inch tile in a day, when everything was once in order. The material had to be mixed quite dry in order that the molds might clean—so dry, indeed, that it was impossible to tamp it close enough to make a compact tile. By oiling the molds, it was found that the material might be mixed much wetter, but still not wet enough to make what we consider a good tile. We also thought that considerably more material was used in these tile than would be necessary for a round tile; and, besides, the amount of handling required for two-piece tile was double that for one-piece. These features led us to doubt whether this type of machine would ever be popular with farmers. On consultation with the company, we found that they had arrived at the same conclusions, and that they were withdrawing the machine from the market. These circumstances at first led us to think that the work done on this phase of the problem was of little practical value, and we discouraged the extensive publication of the results, although we placed them in our annual report, just as a matter of record. On second thought, however, we have changed our minds somewhat, for the following reason: The rate of manufacture determined must represent fairly well what might be expected with a round-tile machine of similar dimensions; the round tile would be slower to tamp, but there would be only half as many pieces to handle. And, as a matter of fact, we have since learned of a hand machine for round tile, recently invented, on which one man can make about 500 tile a day, thus establishing that the rate of manufacture determined in our experiments is in all probability a fairly representative one.

We found, further, that 6 cubic feet of sand and one bag of cement (approximately a cubic foot), would make 78 complete 3-inch tile. But a round tile, one-half inch thick, requires only 55 per cent as much material as the one made on the two-piece machine, hence, the material mentioned above would make 142 tile, provided they were tamped to the same compactness. As they could be made wetter, they would likely be somewhat more compact. This, however, would be counterbalanced by the use of another half bag of cement, making the proportions 1 of sand to one of cement (6 to 1 is too poor for really strong tile), so that we may fairly assume from our

figures that from 6 cubic feet of sand and 1 1/2 bags of cement there can be made 142 three-inch tile, say 140, in round numbers. This gives us a means of arriving at an estimate of the cost of making three-inch tile, one-half inch thick, by hand, when the price of material is known. In Guelph, we pay \$1 a yard for sand, and \$1.90 for cement. At these prices,

6 cubic feet of sand cost .....	\$ .22
1 1/2 bags of cement cost .....	.71
<hr/>	
Total price of material for 140 tile .....	\$ .93
Total price of material for 500 tile.....	3.32
Wages of one man for one day .....	2.00
<hr/>	
Total cost of 500 tile .....	\$ 5.32
Total cost of 1,000 tile .....	10.64

In this estimate no allowance is made for hauling the material, as this can be offset against the hauling of clay tile, if it is desired to make a comparison between the cost of the two kinds.

The prices used in estimate may be high in some localities, but knowing that 6 feet of sand and 1 1/2 bags of cement will make 140 tile, and that a good man can make about 500 tile a day on certain types of machine, the cost of manufacture may be figured out to suit cost of material in various localities. Or, again, if type of machine is such that a man can make only 400, instead of 500 in a day, the cost of the tile can readily be calculated.

**Corn-growing in South-western Ontario.**

According to the 1909 report of the Ontario Bureau of Industries, we learn that the corn fields of the Province produced in that year 23,601,122 bushels of corn. Those counties producing the greatest number of bushels were as follows: Essex, 6,389,543; Kent, 5,580,639; Elgin, 1,946,032; Lambton, 1,527,251; Middlesex, 1,352,828; Norfolk, 1,164,364.

It will, therefore, be seen that more than two-thirds of the corn which is now being grown for grain in the Province is produced in these six counties in South-western Ontario. The two Counties of Essex and Kent, it will be seen, produce nearly one-half of the total crop. These two counties are very happily situated in regard to climatic conditions, which are very similar to those which exist in Northern Ohio, Michigan, and Southern Wisconsin. This explains the popularity of this crop, and here the dent varieties of corn are grown to a degree of perfection equalling any of the above-mentioned States. The hot, humid climate seems to be exactly what the corn plant requires. The varieties grown and the methods of cultivation vary greatly, even within very limited distances, depending in a great measure upon the type of soil and the season. It is, therefore, impossible to outline a uniform system which is practiced by all corn-growers.

There are several practices which are essential to successful corn culture, wherever the crop is grown. One of the most important of these is proper drainage. The unusually wet season of 1909 has done a great deal to convince farmers as to the value of underdrainage. Hundreds of acres of corn were lost through the early spring and June rains of that year. As a result, many of the corn-growers whose land requires drainage have invested in tile, and have spent the past winter and spring in getting these into the fields intended for this season's crop. The corn plant is very sensitive to wet, and in many cases last year, underdrainage meant the difference between a good crop of corn and no crop at all.

**MANURING.**

It is a generally-accepted fact that corn requires rich soil in order to give good results, and, usually, the richer the soil, providing other conditions are right, the greater the yield of corn at husking time.

As to the time of applying, and the amount per acre, there is a considerable difference of opinion, depending upon the soil, drainage, etc. The most successful growers usually depend upon clover as a factor in fertilizing for corn. The manure is applied to the clover sod at the rate of from 10 to 15 loads per acre. Some prefer applying this manure to the new seeding, and taking off a crop of hay. This is advocated chiefly by growers on undrained land, as they claim that manure applied to the corn ground in the fall has a tendency to keep the soil sad and sticky. This condition has not been found troublesome on land thoroughly underdrained, and manure applied to the sod either in the fall or spring has been found to give good results.

**SOIL PREPARATION.**

There is some difference of opinion as to the value of spring and fall plowing. In many parts of Essex and Kent, the advocates of spring plowing for corn are more numerous than those who advocate fall plowing. This is especially true on

undrained land. The snowfall in these sections is very light, and often there is very little frost in the soil. This lack of winter protection offsets in many cases the value of the fall plowing, and under these conditions land which has been fall plowed is very likely to run together badly. Where land has been thoroughly tilled, however, fall plowing has been found to give good results. On the higher land in the north and eastern part of the peninsula, fall plowing is practiced to a much greater extent.

Methods of fitting the soil for corn also vary. Over the greater portion of the area devoted largely to corn there is not the same attempt to produce an extremely fine seed-bed, as is the custom further east. The disk harrow is the implement used mainly for this purpose, and the soil is worked up quite deeply; it is then smoothed down with the smoothing harrow, and is ready for planting.

**SEED SELECTION.**

The question of seed selection is one which has not received the attention in the past that its importance warranted. There has been in former years an attempt to increase the yields per acre by growing late, high-yielding varieties that had been found to give good results in the Southern and Central States. The uncertainty of these varieties has induced the best men to grow only such varieties and strains as have been found to mature thoroughly year after year. These men are now depending upon proper drainage, better methods of cultivation and selection for increased yields, rather than upon late, high-yielding varieties. The variety question is, therefore, gradually righting itself, and each locality is growing the varieties most suitable to its conditions, and a gradual evolution from the medium dents to flints will be found as we proceed north and eastward.

Closely coupled with suitable varieties comes careful selection within the variety. Though there are still a considerable number of growers who go directly to the crib, select their seed corn, shell it, and plant it, their number is gradually diminishing.

The most successful growers select their seed corn in the fall, hang it up in an attic in the house, or in some place where it will dry out thoroughly. This seed is carefully tested before planting, some testing each individual ear, and others making a general test representative of the supply. This work is done early in the months of February or March, so that if the seed does not give a strong germination, there will still be time to procure seed from a neighbor whose corn has given a strong test. Usually, however, seed corn properly stored and cured will give good satisfaction.

The next step adopted by many is to grade the seed. This is done either by a mechanical grader or by hand, the object being to separate the large grains from the small and medium grains. The large butt and small tip kernels are first removed and discarded; then, if the grading is to be done by hand, the ears having the broad, thick type of kernel are shelled by themselves. The ears with the narrow or shoe-peg type of kernels are also shelled separately. These different types of kernels are kept separate. Then one lot is run through the planter until finished, before commencing the other. This results in a much more even stand than if large and small kernels were mixed together and planted. Mechanical check-row planters are used almost entirely. Practically all corn is planted in hills 3 feet 6 inches or 3 feet 8 inches each way, and from 3 to 4 kernels dropped in each hill.

**TILLAGE.**

The first tillage operation is to go over the fields with a harrow immediately after planting. This is often done as many as three times, and is kept up until the corn is two or three inches high. When harrowing corn which has reached this height, the work is started at noon, when the corn is wilted, as there is less danger of breaking down the stalks than in the morning, when they are rigid and full of sap.

The harrow breaks up the crust, forms a soil mulch, conserves soil moisture, and kills thousands of weeds which have just begun to grow. Thus, all the objects of cultivation are obtained at a time when it would be impossible to use a cultivator, and later much more cheaply than it could possibly be done with this implement. From four to six times are about the average number of times corn is cultivated. The two-horse cultivator is used entirely for the first few cultivations. This implement is kept going as often as is necessary to preserve a soil mulch, and prevent the growth of weeds. An effort is made to get through the corn after every rain, as soon as the soil is dry enough. Cultivation with the two-horse cultivator is stopped as soon as the cultivator begins to break down the corn when turning at the ends. The one-horse cultivator or scuffer is then brought into play. This implement is rapidly superseding the old double-shovel plow, which at one time was very popular in dent-corn sections. There was nothing to prevent the shovels from going into the ground to a depth of six inches or more, and great damage was done to the crop by tearing out the feeding roots, which grow quite closely to the surface, and often meet in the center of the row. The broad blades, or thistle cutters, are placed in the centre and outside back teeth of the scuffer; these clip off any weeds which may have been left from previous cultivations, and do not go deeply enough into the soil to injure the roots. Cultivation is kept up until the silks begin to appear, when the scuffer is laid by.

Some growers sow red clover seed at the rate of about ten pounds to the acre between the rows just before the last cultivation. This they claim will give a very satisfactory catch of clover, but unless the season is a moist one, the chances for a good catch are not very favorable.

The last cleaning-up operation before leaving the field is to go through and pull out all large weeds which the cultivators have missed. These, besides going to seed, interfere materially with cutting.

Essex Co., Ont.

There are three beet-sugar factories in Canada, one at Wallaceburg, Ont.; one at Berlin, Ont.; and the third at Raymond, Alberta. A total of 75,056 short tons of beets were treated last year, producing 19,711,801 pounds granulated sugar. More than half of this, 12,684,412 pounds, was manufactured at Wallaceburg, from 6,600 acres of beets, an average sugar extract of 12.88 per cent. Farmers there received \$289,294, an average of \$5.87 per ton. Average yield of beets per acre, 7.46 tons; value, \$48.83. The Berlin factory treated 13,388 tons of beets from 2,200 acres, extracting 13.12 per cent. sugar, amounting to 3,511,692 pounds in all. Beets averaged 6.09 tons, or \$35 per acre. The factory at Raymond, Alta., from 2,300 acres of beets manufactured 2,515,697 pounds sugar. Average yield of beets per acre, 5.4 tons; value, \$27.07; sugar extracted, 14.15 per cent. The Wallaceburg district, though having the lowest percentage of sugar, gave much the best returns per acre.



Corn Planting in Essex Co., Ont.  
Plowing, harrowing, rolling and planting on the Curtis farm, near Leamington. In this way, about seven acres a day has been prepared and put in.

### Stiffen-up on Hay Prices.

Editor "The Farmer's Advocate":

I noticed in the Government Annual Report, the other day, that there is one-third less hay in Ontario on the 31st of March this year than a year ago.

Now, I cannot understand why farmers are giving their hay away at the present prices. I have seen several articles in "The Farmer's Advocate," asking the reason why farmers' sons are leaving the farms. I think one reason is that, after they have worked hard and grown the crops, these are oftentimes sold away below their cost, simply because there is no organization amongst the farmers to know what they should really sell their crops for. The dealers all get together and set the price, when, in reality, the farmers should set the price, so to have a profit. Last fall, one of the large milling companies advised all the farmers to hold their wheat, unless they got \$1.00 a bushel for it. The farmers of Ontario took this advice, and the wheat has remained the same all winter.

Now, if every farmer who has got one or two tons of hay for sale puts it on the market, it will mean to force the price of hay down \$4 or \$5 a ton. What they make on the two or three tons they sell, they will lose \$100 on next year's crop. I would advise every man who has three or four tons of hay to sell, not to sell it unless he gets from \$18 to \$20 a ton in the barn for loose hay, and not to sell a pound of new hay under \$12 per ton at the barn. I will sign myself,

"FARMER."

### Potatoes Grown in Rotation.

In Clay County, Minnesota, rather intensive methods of raising potatoes are followed in a three-year rotation: one year of grain, one year of grass, and one year of potatoes. As much of the land as possible is manured at the rate of twelve loads per acre, and frequently commercial fertilizers are used at the rate of 500 pounds to the acre. Under these conditions, a yield of 162 bushels per acre has been known on a field of 237 acres. The cost per acre, including seed, spraying, insecticides, planting, harvesting, etc., was but \$37.72. In the same locality, the cost on unfertilized land, in 1907, on a scale of 331 acres, was \$26.36 per acre. The yield was 127 bushels. The moral is evident.

### Cultivation Exhausts Humus.

Cultivated crops include corn, potatoes, mangels, and all root crops that are planted in rows and cultivated during growth. Such crops have been regarded as beneficial to soil fertility, but investigations at the Minnesota Experiment Station show that continuous growth of cultivated crops depletes the soil more rapidly than does the growing of grain continuously. The summer cultivation tends to dissipate the humus. Cultivated crops serve an admirable purpose in rotation, but should not, as a rule, be successively sown on the same field. Follow them with grain seeded to clover.

### Rotation Increases Yields.

Wheat grown at the Minnesota Experiment Station continuously on the same plot since 1891 shows an average yield of 18.6 bushels per acre since 1900. Grown in a three-year rotation since 1900, the average yield has been 20.6 bushels per acre. No manure being given the plot, the increase must be credited alone to rotation, the seed and other conditions being substantially the same. Corn grown at the Experiment Station continuously on one plot since 1891, has given an average yield since 1900 of 21.4 bushels per acre. In a three-year rotation of wheat, clover and corn, the corn yield has averaged 45.2 bushels per acre since 1900, showing a difference of over 21 bushels increase, due solely to rotation.

A cistern on the farm is one of the practical conveniences that should be furnished the women. Cheap cisterns can be made, says the University Farm Press News, Minnesota, by plastering against the sides of a hole in the ground with cement mortar, made of one part Portland cement and three parts good sharp sand. One coat can be put on in the morning, and the second towards night. In digging, give enough slant to the sides so there is no danger of caving. Bricks may be used to arch over the top. Don't put the well too near the privies and barns. Water is the great source of typhoid fever, is easily contaminated with disease germs through the soil, and should never be used for domestic purposes nor for stock when taken from a well located near barns, privies, etc., nor where drainage from them can pollute the water.

## THE DAIRY.

### Payment for Milk at Cheese Factories.

Editor "The Farmer's Advocate":

At the opening of the cheese-factory season it may be well to call attention to a question which has been discussed more or less during the past twenty years, since I have been in charge of the Dairy Department of the College.

We have received a number of letters recently asking if we still advise adding two to the percentage of fat when dividing proceeds among patrons of cheeseries. One man asks, "Is not testing the fat in milk the fairest method of paying cheese patrons?" These inquiries indicate interest and doubt in men's minds on this question of testing and paying for milk delivered at cheese factories. One man, closely in touch with factory conditions in Western Ontario, said that he believed farmers were ready and willing to adopt the test plan generally, but that the cheesemakers were the stumbling-blocks in the way. Naturally, cheesemakers are not anxious to cause themselves more work for the same amount of pay. The testimony is almost unanimous that, where the testing plan has been adopted, it requires less milk to make a pound of cheese. If the present rate of increase in the milk required to make a pound of cheese continues, the "average" will be so high that the matter will remedy itself. Patrons will be compelled to adopt some method of testing in order to protect themselves. The cheese industry of Canada is built upon the principles of truth and honesty, otherwise it must totter to its fall.

In order to understand the questions involved, we must first know something about the composition of milk, or what it is made up of. Milk consists of about 87½ per cent. water, having dissolved and in suspension about 12½ per cent. of solids. These solids consist chiefly of five constituents—one for each finger, and one for the thumb, of the hand. They are: Albumen, which corresponds with the little finger; ash, the thumb, sugar, the wedding finger, because of its sweetness; casein, the fore or index finger, because of its importance; and fat, corresponding with the middle finger, because of its supposed greatness and importance, and also because of its presence in large quantity in many samples of milk.

The chief functions of the water in milk are those of a carrier and diluent of the solid material; the ash builds bony material; the albumen and the casein build muscles, while the sugar and fat furnish heat, and tend, also, to form fat in the animal body. It is agreed by all authorities that the muscle-forming foods are most expensive to produce, mostly costly to purchase, and of most value to the consumer. This being so, the wonder is that we have heard so much about fat, and so little about casein. The difficulty in the past has been to determine the casein in milk, except by chemical analysis, which is a tedious and expensive process. However, what is known as the "Hart Casein Test" has been used in the Dairy Department of the College for the past two years, with very satisfactory results. Any person who can operate a Babcock test for fat, can get good results from the Hart casein test, as the principles are similar in both. In the Babcock test for fat the casein is dissolved with sulphuric acid, and the fat is massed in suitably graduated bottles towards the center of a centrifuge. In the Hart casein test the fat is dissolved with ether, the casein is precipitated with acetic acid, and afterwards massed at the outside of a centrifuge in suitably graduated bottles. The reversal of the positions of fat and casein in the centrifuge of the two tests is due to the difference in specific gravity of fat and casein.

We realize that it is difficult for one generation of dairymen to welcome two great and important milk tests. A new generation, who have not worshipped so devoutly at the milk-fat shrine, will be inclined to give more honor to a casein tester than will be possible to obtain from those who gathered at the fat Mecca of 1890, and have made an annual pilgrimage ever since.

This, however, does not alter the principle which should govern in dividing proceeds among those supplying milk for the manufacture of cheese. At the risk of re-repeating what we have said many times, the fat of pure milk governs its value for buttermaking; the fat and casein govern for cheesemaking. For all practical purposes, no other constituent than the fat of milk or cream which is sweet and pure need be considered in calculating the relative values of different lots of milk or cream to be manufactured into butter. This is so plain that nearly everyone is agreed on this point.

For cheesemaking, authorities differ as to the governing factors. Some argue that weight of milk is all right; some say weight of milk-fat is all that we need to consider; while we have tried to convince the dairy public for many years that fat and casein are the milk constituents to reckon with in cheesemaking. Because of the difficulty,

up to the present, of accurately determining the casein in milk, we suggested adding the factor two to the percentage of fat in milk, the sum obtained being equal to the available fat and casein in milk for cheesemaking.

In order to convince those who are still of the opinion that all milk is of equal value per 100 pounds, for cheesemaking, allow us to refer to a table of results based on experiments conducted at the College:

Milk containing	Lbs. cheese per 100 lbs. milk.	Increased yield of cheese per 100 lbs. milk.	Lbs. cheese per lb. fat in milk.
3 per cent. fat.....	8.9		2.9
3.5 " " ".....	9.5	.6	2.7
4.0 " " ".....	10.4	.9	2.6
4.5 " " ".....	11.0	.6	2.5
5.0 " " ".....	11.8	.8	2.4

(The foregoing table is not absolutely correct, as we have left off the second and third decimal, in order to simplify it, but it is near enough for all practical purposes.)

By way of comment, please notice that an increase of one-half of one per cent. fat in the milk (from 3 to 3.5) gave an increased yield of cheese amounting to six-tenths of a pound per 100 pounds milk; an increase in percentage of milk-fat, from 3.5 to 4, produced nearly one pound more cheese per 100 pounds milk, yet there are those who say that "the test don't make any difference."

For those who think the fat of milk should determine its value for cheesemaking, please note the gradual decrease in pounds of cheese produced per 100 pounds milk as the percentage of fat in the milk increased. This decrease is one-half pound of cheese per pound of fat in the milk, comparing 3 and 5 per cent. milk. While the fat test alone is better than no test for milk to be used in cheesemaking, it gives an undue advantage to a less-important constituent when payment is based entirely upon the fat content of milk. There is also a tendency to withhold skim milk and fore-milk, both of which are essential in milk for cheesemaking. The casein of the milk is the carrier in cheese of the moisture and fat. Without casein, cheese, as ordinarily understood, cannot be manufactured. It is that portion of milk which is acted upon by the rennet, and, as previously pointed out, it is the muscle-forming portion of cheese which makes it so valuable as a food for the working man.

### THE DOLLARS-AND-SENSE SIDE OF THE QUESTION.

We take it that all patrons, or the majority of them, are anxious to receive all the dollars due them for milk pooled with neighbors, and that they are also endowed with business sense. Let us see how it works out practically. For the sake of argument, we shall assume that the milk having increases of one-half per cent. fat, from 3 to 5, is sent to a factory by five neighbors, to be made into cheese. If they pooled the money received for the cheese made on the basis of weight of milk delivered, cheese netting 10 cents a pound, then each would receive \$1.032 per 100 pounds milk. On the basis of fat alone, the man sending 3-per-cent. milk would receive 77.4 cents per 100 pounds; 3.5-per-cent. milk, 90.3 cents; 4-per-cent. milk, \$1.03; 4.5-per-cent. milk, \$1.16; and 5-per-cent. milk, \$1.29 per 100 pounds. The actual values on the basis of weight of cheese produced are:

% milk is worth \$	"Fat plus 2"
3 " " is worth \$ .89 per 100 lbs.....	\$ .86
3.5% " " ".....	.95
4 " " ".....	1.04
4.5% " " ".....	1.10
5.0% " " ".....	1.18

Notice how closely the "fat plus 2" method comes to the actual cheese value of the milk. It tends to give a little less than its actual value to the 3-per-cent. milk, and a little more than the actual value for milk testing 4 per cent. fat and over. This is a compromise which ought to be acceptable to all parties. All great questions are usually settled as the result of a compromise.

In the meantime, do patrons of cheese factories in Canada consider it a "square deal" to continue the present system, which results in more or less robbery on the part of some who would not knowingly be guilty of putting their hands into their neighbors' pockets? Will a man rob his neighbor?

H. H. D.

The annual reports of Canadian cargo inspectors at British ports again draw attention to the large percentage of broken cheese boxes landed. It is claimed that the poor is not due to rough handling, but to the trouble quality of the wood used in their construction, and to carelessness in not getting boxes that fit snugly over the cheese. Shortage in weight is also complained of as occurring too often. This is an old complaint, for which there should be no reason.

**A Wonderful Producer of Human Food.**

A Holstein cow, owned by the Dairy Department of the University of Missouri, in one year produced more human food in her milk than is contained in the complete carcasses of four steers weighing 1,250 pounds each. This statement, impossible as it seems, is not only true, but does not even do full justice to the cow. The solids in the milk which are completely digested and used by the body are counted against the entire carcass of the steer, which is only in part edible.

The cow that performed this feat of producing the equivalent of four steers is Princess Carlotta. In the year she produced 18,405 pounds of milk. Below is given the amount of proteids, fat, sugar and ash contained in this milk, and the amount of the same substances found by Dr. P. F. Trowbridge, in an analysis made of the carcass of a fat steer weighing 1,250 pounds.

	18,405 lbs. milk.	1,250-lb. steer.
Proteid .....	552 lbs.	172 lbs.
Fat .....	618 lbs.	333 lbs.
Sugar .....	920 lbs.	..... lbs.
Ash .....	128 lbs.	43 lbs.
Totals .....	2,218 lbs.	548 lbs.

The total amount of dry matter in the milk was 2,218 pounds, all of which is edible and digestible.

The steer, with a live weight of 1,250 pounds, contained 56 per cent. of water in the carcass, leaving a total of 548 pounds of dry matter. In this dry matter of the steer is included hair and hide, bones and tendons, organs of digestion and respiration; in fact, the entire animal, a considerable portion of which is not edible. The analysis of the steer's carcass was made from animals taken after grinding up together one-half of the complete carcass, and is not in any sense an estimation of the composition of the carcass.

Princess Carlotta produced proteids sufficient for more than three steers; nearly fat enough for two; ash enough to build the skeleton for three, and, in addition, produced 920 pounds of milk sugar, worth as much per pound for food as ordinary sugar.

These figures indicate the remarkable efficiency of the cow as a producer of human food. It is because of this economical use of food that the dairy cow, and not the steer, is kept on high-priced lands. When land is cheap, and feed abundant, the meat-producing animals predominate, but when the land becomes high in value and feed expensive, the farmer turns to the dairy cow.

C. H. ECKLES, Prof. Dairy Husbandry.  
University of Missouri.

**Seven Stones in Herd-building.**

1. Milking clean, to obtain all that a cow can give, and to prevent early drying-off.
2. Use of pure-bred sire from strain of large producers, to acquire good qualities and perpetuate dairy tendencies. Of what value is a scrub?
3. Regular and careful feeding as to time, quantity and quality, adjusting the grain ration to the production of milk and butter-fat; to get the utmost value for the foodstuff grown or purchased.
4. Providing succulent feed, as roots, silage and soiling crops, to sustain and prolong the flow of milk.
5. Culling out poor cows; no one wants them either to feed or breed from. Beef them.
6. Good care, including kind treatment, and everything conducive to comfort, cleanliness and health, so as to give the cow an opportunity to work to the best advantage. Better methods; not necessarily much outlay of cash.
7. Keeping records. Much of the foregoing naturally hinges on records; a knowledge of each cow's performance and capacity is the prime necessity for increasingly profitable production; a mere estimate may be far astray, and gives no basis on which to work intelligently. Guesswork is not businesslike, but a careful record supplies information of the utmost value at every turn. Record forms are supplied free on application to the Dairy Commissioner, Ottawa. C. F. W.

T. H. Lund, who for the past two years has held the position of Assistant Dairyman at the South Dakota State College, Brookings, S. D., has recently accepted a position with the Dairy & Food Division, of Virginia, with headquarters at Richmond, Va. Mr. Lund is an O. A. C. boy of the mold. After leaving Guelph, he pursued his studies in Wisconsin, and during this time visited Canada to give an address at the Western Dairymen's Convention, in Woodstock, 1908, on the newly-discovered Hart casein test. He has been sending us of late some interesting dairy notes from across the line. His many Canadian friends will wish him well.

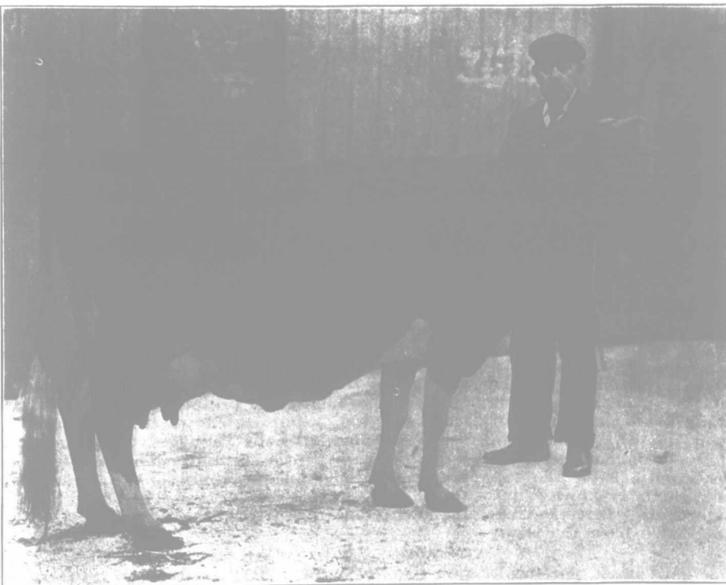
**Renovated Butter and Oleomargarine.**

As showing the extent of the business of renovating butter across the line, note these figures from the New York Produce Review, which observes that the March output of renovated butter in the Chicago district was somewhat larger than during any month since December. The total production for the past four months was as follows:

Month of March .....	1,750,052 lbs.
Month of February .....	1,142,900 lbs.
Month of January .....	1,651,752 lbs.
Month of December .....	1,995,600 lbs.

At the same time, there was a larger output of oleomargarine in that district during March than in the previous month, the consumption of oleo in some sections of the country being heavy. During the past six months, October to March, the output of oleo in the Chicago district was 54,137,382 pounds of colored, and 1,474,700 pounds uncolored, or a total of 55,612,082 pounds oleomargarine.

Prof. Haecker, of Minnesota, an international authority on dairying, estimates the feeding value of a ton of fodder corn at \$4.90, as compared with a ton of timothy hay at \$6.00.



Golden Cherry.  
Guernsey cow. First in Inspection Class, London (England) Dairy Show, 1909.

**APIARY.**

**Elementary Instructions in Bee-keeping.—V.**

Morley Pettit, Provincial Apiarist.  
THE DZIERZON THEORY.

[Note.—Through no fault of his own, Mr. Stroschein has found it impossible to continue at this busy season the interesting series of articles on "Elementary Instructions in Beekeeping," four instalments of which have been already published. At our request, Mr. Pettit has consented to take up the thread, and contribute, in systematic order, helpful, seasonable articles for the special information of beginners. Mr. Pettit's education and practical experience are sufficient guarantee as to the reliability and merit of the correspondence he will submit.—Editor.]

In pursuance of Mr. Stroschein's discussion in recent numbers of "The Farmer's Advocate," of the natural history of the honeybee, it will be of interest to present a resume of what claims to be the first detailed account of the "Dzierzon Theory" ever given in the English language. It is found in the first number of the first volume of "The American Bee Journal," January, 1861, and, aside from its historical interest, is a very clear presentation of facts which everyone must know who wishes to keep bees intelligently.

The facts concerning the propagation of life in the hive which were first given to the scientific world by Dzierzon, a German scientist, are stated as thirteen propositions, as follows:

1. A colony of bees in its normal condition consists of three characteristically different kinds of individuals: the queen, the workers, and the drones.
2. The queen is the only perfect female.
3. The queen possesses the ability to lay male or female eggs at pleasure.

4. In order to become qualified to lay both male and female eggs, the queen must be fecundated by a drone.

5. The fecundation of the queen is always effected outside the hive, in the open air, and while on the wing.

6. In the act of copulation, the genitalia of the drone enter the vulva of the queen, and the drone simultaneously perishes.

7. The fecundation of the queen, once accomplished, is efficacious during her life.

8. The ovary of the queen is not impregnated in copulation, but a small vesicle or sac situated near the termination of the oviduct, and communicating therewith, becomes charged with the semen of the drone.

9. All eggs germinated in the ovary of the queen tend to develop as males, and do develop as such unless impregnated by the male sperm while passing the mouth of the seminal sac, or spermatheca, when descending the oviduct. If they be thus impregnated in their downward passage, they develop as females.

11. If the contents of the spermatheca of a fecundated queen become exhausted, or, if from enervation or accident, she lose the power of using the muscles connected with the spermatheca, so as to be unable to impregnate the passing egg, she will thenceforward lay drone eggs only.

Numbers twelve and thirteen refer to laying workers.

These important propositions were strongly opposed by many when first advanced, but have since been proven beyond the shadow of a doubt. The point which presents the greatest difficulty in the breeding of bees is enunciated in No. 5. It has so far put the mating of queen bees beyond perfect control. The situation in this respect is about what it was with reference to the breeding of cattle in pioneer days, when herds mixed indiscriminately in the woods. If the reader could imagine a case where his pasture fields were open for any kind of scrub males to roam about and mate with his pure-bred stock, he could have some idea of the situation in the matter of improving the strain of bees in an apiary. This is the problem which has puzzled

scientific apiculture for more than a century, and is apparently no nearer a solution to-day. Much has been accomplished by isolating the breeding apiary, and by preventing drone-rearing in all but chosen colonies, but the nut still awaits the cracking by some enterprising scientist. How to compel any one queen to mate with any one drone, or even with one of a hundred selected drones. And he will need to be resourceful, as well as enterprising, to accomplish what has been tried again and again, without lasting success.

**SHOULD EVERY FARMER KEEP BEES?**

The line of articles taken up by Mr. Stroschein in "The Farmer's Advocate" of March 31, and subsequent issues, is a good one. I can endorse most of what he says, and am sorry he is unable to continue them. In some points I might be allowed to criticise his attitude, however. I would not say that every farmer should keep bees. Successful honey production requires time, attention and skill acquired by experience. Not more than one in twenty who take up beekeeping succeed. If there were an apiary on every twentieth farm, the nectar and fertilization of blossoms would be well looked after. What is needed in Ontario is not more beekeepers, so much as better beekeeping. Small, well-cared-for apiaries I would not for a moment discourage, but small, neglected apiaries are only a burden to the busy farmer, and, from the standpoint of bee diseases, are a menace to the industry. They are too often harbors for disease, which has cost Ontario beekeepers hundreds of thousands of dollars, is costing the Department of Agriculture thousands annually in an effort to stamp it out, and the end is not yet. Hence, I would say beekeeping is a business to be taken up either as a speciality, or as a side line which is to be given proper consideration.

In the hands of those who have counted the cost before starting, and are willing to pay the price, apiculture, as your correspondent has well

said, is both handsomely profitable and fascinating. It offers a good source of income for young people of either sex. Some of your readers might be surprised to learn what a number of ladies are joining this division of the Ontario Experimental Union. I am satisfied that quite a number of business and professional girls could get release in this direction from a strenuous indoor life, with at least no decrease of income.

## GARDEN & ORCHARD.

### Strawberries in Young Orchards.

It is questionable, said Prof. J. W. Crow at the O. A. C. short course in fruit-growing, last February, whether such long-lived, vigorous-growing trees as Baldwin and Spy should be planted closer than 40 feet apart each way. For quite a number of years much of this land is unoccupied. Interplanting with quick-maturing, early-bearing varieties of apples would in many sections be found to give splendid returns. Or plums, peaches and cherries may be used. These trees should be removed at the end of about 12 years, but the period will vary with the vigor of growth of the standard trees. A man should not interplant in this way, however, unless he has the courage to put the axe to the trees at the proper time.

Jas. E. Johnson, of Simcoe, grows strawberries as fillers. From the ten acres grown in this way last year, 84,000 baskets were harvested. This is rather a small crop for Mr. Johnson. The berries are grown in a matted row about eighteen inches wide. The rows are forty-two inches apart from center to center. In the first season, cultivation goes on steadily once or twice per week. In the fall these berries are mulched with straw. After the first crop is removed, the mower is run over the ground, then the hay tedder is put on, and, as soon as the whole is dry, fire is run over the patch. Then the land between the rows is plowed, and the rows narrowed to about one foot. The harrows are now put on, and the whole thoroughly cultivated. The mixing of the fresh earth with the plants is an advantage, but care should be taken to see that they are not buried. Cultivation is kept up for a time. In the winter another mulch is put on, and then the patch is ready for another crop. After the second crop is harvested, the patch is plowed up. When the berries are in an orchard where the trees are getting big, it will not do to burn the straw on the ground.

In selecting plants for a new patch, the whole row is dug, and only the best plants chosen. This is important, as the ordinary method of choosing plants from the outside of the row does not give good results. In growing matted rows, it is necessary to place each runner in its proper place, and then cut off new runners, so that the new plant shall spend all its energies in getting ready to bear next year.

#### SPRAYING THE STRAWBERRIES.

Spraying is done once or twice before bloom. A very heavy application is given of Bordeaux made up of copper sulphate 6 pounds, lime 10 pounds, water 50 gallons. A traction sprayer is used. This is considered one of the most important operations in the growing of the crop.

L. A. Hamilton, Lorne Park, also intercrops his orchard with strawberries. Mr. Hamilton is an example of a business man who came out into the country, and, without previous experience, has learned how to produce crops of high quality, and profit. His methods approach those of Mr. Johnson; he also takes two crops of berries, and then plows up. The following are some of the points brought out in his address:

Size, color, hardness and quality are the four main essentials in a good strawberry. Size and color are most important for the home market, because consumers pay more attention to these things than to quality. Some of our smaller berries are of the finest quality, but grocers and consumers do not seem to want them. Then, too, it is much harder to secure pickers for small berries than for large ones. For shipping, hardness—that is, carrying quality—is perhaps the most important, but it must also be combined with size and color.

Rolling the soil tends to the exhaustion of moisture. Last year the patch was rolled just previous to marking the ground for planting. Then, circumstances intervened which delayed planting. When the plants were set, the ground was very dry, which resulted in a partial failure of the plantation. Heavy applications of commercial fertilizers are used.

It does not pay to have the rows too wide; 16 to 18 inches is the limit. The best berries grow on the outside of the rows, and, if the rows

are very wide, the pickers crush the berries. Have the pickers pick each half of the rows on either side of the place where they are walking. This saves crushing of the berries.

In regard to varieties, Glen Mary, a perfect-flowering variety, seems to be best suited to the district. For shipping or canning, Williams is good, but, as it has a green end, it seems to be losing a little in favor. Sample seems to be the coming berry for shipping. Mr. Hamilton is experimenting with a number of new varieties, of which Three W's, Chesapeake, and \$100 seem to be best. These are very promising, and last year stood the drouth exceedingly well.

Great stress was laid on the value of spraying. This is done with great thoroughness before and after bloom. The formula used is copper sulphate 4 pounds, lime 12 pounds, water 40 gallons. The first time the patch was sprayed, the foreman announced that the vines would all die, but they managed to live all right, and the strawberries were magnificent.

A rotation of crops is absolutely necessary. The rotation followed is: Sod, grain, clover, roots, strawberries. After first crop is removed, the straw is tilled up and burned. One very dry year the fire injured a lot of the crowns of the plants. At the end of the second crop, the land is plowed, and sowed to hairy vetch, or sometimes to turnips.

### Pruning Instructions in Brief.

"Low heading is the new idea in pruning," said D. Johnson, of Forest, at the Fruit Institute in Lambeth. "We are buying young trees, and heading them down to within eighteen inches of the ground for apples, and 16 inches for peach trees. The head of a well-pruned tree should be about equally open all through, with fruit spurs right down to the base of the limbs. A common mistake is to trim all the limbs up smooth and clean, leaving only a tuft of bearing wood at the outer and upper end. Such a tree cannot bear a large crop of fruit. It is awkward to pick the fruit, and the fruit is not only more liable to be blown off by wind, but suffers more when it does blow off. We had one tree in our orchard which three years ago bore 26 barrels of apples, the crop selling for over \$80. In the case of an old tree that has been improperly pruned, with the inside all cut out, and only the large limbs left in the center of the tree, I would allow some suckers to grow up to form new limbs, and protect the large branches from sunscald. Do not cut off the low-growing branches unless they are very low. Try to get a large head, with the bearing wood evenly distributed throughout the whole tree, but not too thick, and with the crossing or interlocking limbs cut out or shortened back."

### Treatment for Potato Scab.

Don't plant potatoes on land on which scabby crops have been raised previously. If seed to be used is scabby, it should be treated as follows: Mix one pound (one pint) of commercial formaldehyde (40 per cent.) with thirty gallons of water, in which potatoes should be immersed for two hours. Placing potatoes to be treated in a gunny sack, and then immersing them in a solution, will be found a very convenient way of handling them. Remove, cut, and plant, or spread out to dry. Keep treated potatoes out of and away from bags, baskets or other receptacles in which scabby potatoes have been.

The Canadian export apple trade was much larger the past season than was expected. Early shipments to Britain were of good quality, and, landing in good condition, made satisfactory prices. But, as the season advanced, the bulk of the shipments were of No. 2 and No. 3 grades, which arrived, as a rule, in poor condition. In consequence, markets became glutted, and prices dropped. Since January, shipments have been of better quality, and higher prices have prevailed. The keeping quality of Spies has not been so good as usual.

A good many more boxed apples have been sent over to Britain than in 1908-09, but complaint is made that the quality of a considerable percentage of it was only ordinary. The demand for boxed apples in Britain is growing, but only high-grade fruit is wanted in that style of package.

Lawn Clipping.—If no other and better means of keeping the lawn clipped be at hand, the horses or sheep will be of service in doing it. Remove the horse droppings, however.

The orchard is a splendid place for poultry to range in. Poultry are very good insect-destroyers.

Plant trees this spring to protect from wind and shut out undesirable views.

### Fertilizing Orchards.

The first thing to do in fertilizing an orchard is to give the trees the sole use of all the plant food, and, incidentally, all the moisture in the soil. Roberts, of Cornell, has estimated that an acre of apple trees planted thirty feet apart would remove from the soil in twenty years, in the form of fruit, leaves and wood, \$377.50 worth of plant food, valued at commercial-fertilizer rates. He has further estimated that an acre of orchard between the ages of thirteen and thirty-three years, or covering a period of twenty years, would remove, in fruit and leaves blown off, \$207.45 worth. A twenty-five-bushel wheat crop, grown every year during the same time, would remove in grain and hay, together, only a little more, or, say, \$213.00 worth; yet, farmers who devote two years' use of the soil to the production of one crop of fall wheat, will expect their orchards to yield fruit year after year, and a crop of grain or hay, besides. When it is remembered that the grain and hay crop harvested from among the trees robs them of the plant food and moisture during the early part of the season, when trees have special need of both to produce wood and leaves, the unwisdom of this intercropping in a mature orchard is apparent. Give the trees the full use of the land, cultivating thoroughly till the middle of July, or, in northerly latitudes, until the latter part of June, then sow cover crops to check late wood-growth, protect the tree-roots from freezing during the winter, and add to the humus and fertility in the soil the equivalent of five tons or more of manure per acre, which will generally be the case if a leguminous cover crop has been sown. In addition, the orchard may be manured to some extent, and this should be, as a rule, supplemented by an application of wood ashes, say, thirty bushels per acre. Where wood ashes are not available, commercial potash salts may be used, instead, supplemented by phosphoric acid in some form, preferably as acid phosphate, which is the most available form. Orchards make heavy demands on the potash supply. A very moderate dressing of fertilizer to use in an orchard where cover crops are grown and plowed under to supply humus and nitrogen, would be 200 pounds muriate or sulphate of potash, and 250 pounds acid phosphate. These might be mixed and applied in the fall, or very early in the spring. And this amount could probably be put on almost every year. The cost per acre should not exceed eight dollars. Of course, fertilizing varies, according to the orchard, the amount of wood growth being made, and so on, each orchard requiring different treatment. Not infrequently it is found, where cultivation and sowing of cover crops are regularly practiced, that the wood growth in time becomes rather excessive, and in such cases it may be advisable to abstain from using barnyard manure, and seed down to clover for a year or two. This seeding-down, however, should be looked upon as an exceptional practice, rather than the rule. No crop on the farm to-day pays better than fruit, no crop will yield a larger net profit in return for a few dollars judiciously expended in cultivation, cover-crop seed, and fertilizer.

## POULTRY.

### Limber-neck.

My hens are dying; they seem to be all right, and appear healthy, and then, all of a sudden, they sit down for about a day, and die, with no other apparent symptom than to have their heads twisted down over their breasts. J. S.

Ans.—The symptoms point to limber-neck, a peculiarly fatal disease. It is usually the result of intestinal irritation, and this irritation may be the result of several causes. A frequent cause is acute indigestion, caused by indiscretion in feeding. Sometimes a ration will be continued, without variation, or the birds may have been eating impure animal or vegetable food, which all tend to bring on the disease. The most effective and easily-administered treatment is to give one or one and a half teaspoonfuls of oil of turpentine, mixed with equal parts of sweet oil. Half an hour afterwards give a tablespoonful to each fowl of the following mixture, viz.: one teaspoonful of finely-powdered ginger, thoroughly mixed into a half cup of hot milk. This may be repeated in two or three hours. Give a generous ration of soft food, with green stuff, or raw potatoes cut up fine. An improvement should quickly follow, if the ailment is not due to brain affection, for which there is no cure. But give the treatment a trial.

A. G. G.

**The Lay of the Ancient Egg.**

(A sidelight on the cost of living.)

I am the Egg.  
I was laid.

I'm the Hen that Laid the Egg.  
I got a Place to Roost and Part of my board.

I'm the Farmer who Owned  
The Hen that Laid the Egg.  
I got Twenty Cents a Dozen.

I'm the Man who Took the Egg to the Station  
For the Farmer who Owned the Hen that Laid the Egg.  
I got Two Cents a Dozen.

I'm the Express Company that Shipped the Egg  
From the man who took the Egg to the Station  
For the Farmer who Owned  
The Hen that Laid the Egg.  
I got Six Cents a Dozen.

I'm the Railroad that Carried the Egg  
For the Express Company that Shipped the Egg  
From the Man who Took the Egg to the Station  
For the Farmer who Owned  
The Hen that Laid the Egg.  
I got Four Cents a Dozen.

I'm the Wholesaler who Cold-stored the Egg  
After the Railroad Carried the Egg  
For the Express Company that Shipped the Egg  
From the Man who Took the Egg to the Station  
For the Farmer who Owned  
The Hen that Laid the Egg.  
I sold the Eggs for Forty Cents a Dozen.

I'm the Jobber who Passed Along the Egg  
From the Wholesaler who Cold-stored the Egg  
After the Railroad Carried the Egg  
For the Express Company that Shipped the Egg  
From the Man who Took the Egg to the Station  
For the Farmer who Owned  
The Hen that Laid the Egg.  
I sold the Eggs for Forty-eight Cents a Dozen.

I'm the Grocer who Sold the Egg  
I got from the Jobber who Passed Along the Egg  
From the Wholesaler who Cold-stored the Egg  
After the Railroad Carried the Egg  
For the Express Company that Shipped the Egg  
From the Man who Took the Egg to the Station  
For the Farmer who Owned  
The Hen that Laid the Egg.  
I sold the Eggs for Sixty Cents a Dozen.

I'm the Poor Devil who Ate the Egg  
My Wife Bought from the Grocer who Sold the Egg  
He got from the Jobber who Passed Along the Egg  
From the Wholesaler who Cold-stored the Egg  
After the Railroad Carried the Egg  
For the Express Company that Shipped the Egg  
From the Man who Took the Egg to the Station  
For the Farmer who Owned  
The Hen that Laid the Egg.  
I got Ptomaine Poisoning.

—Life.

**THE FARM BULLETIN.**

**Must Boss Himself.**

Editor "The Farmer's Advocate":

Am a young man, and, therefore, am interested in the articles appearing in your paper from time to time about the young man and the farm. It is certainly a much-vexed question, and the contributors to the discussion generally get some hard raps for their pains.

However, many men, many minds; and, as this is a large country of ours, with many kinds of people living in it, it is only reasonable to suppose that all do not live and think alike.

In comparing this part of the country to that of Mrs. Hopkins', I have come to the conclusion that there is a big difference. Here, for instance, I have often seen the advanced agriculturists lift their hats to the ladies, quite a few of whom are members of the Women's Institute. Also, if a young male member of the family gets the notion that he owns everything, he is promptly referred to the bottle.

As for the wagon scene in town, while not rare, yet the stage-settings are different. The agriculturist has conducted his business, and drives to the door of the main hotel for his wife. Instead of peacefully smoking a pipe, he is anxiously puffing a cigar (thinking about the cows at home), and, to forward operations, jumps out, helps his wife with her baskets, and they go merrily down street, looking with a certain amount of aloofness at the crowd of loafers on the street-corner.

Then, again, the word swain is wrong. It is out-of-date, and conjures up visions of long hair and hayseeds. The former is all right for some animals, and it is a good idea to sow the latter on our fields, but, taken together, and worn by a human being, they are out of place. Certainly,

they are unavoidable at times, but the idea is not to get the habit.

I think the average young man in the country to-day has no reason to feel as Mrs. Hopkins would lead us to believe, on going to town. Why should he be? Has he any reason to feel ashamed of his calling? Not on account of having to market his product, surely? As to dress, he does not need to have his clothes cut in the latest fashion to vie with the ordinary town dweller.

Now, farming is what we make it. If we are content to slouch around, and let things look after themselves pretty much, we will find it a deadening job. The thing to do is to look after our business in a systematic way, getting something done every day, and doing it right. They say a farmer is his own boss. Don't believe it. He's got to boss himself.

FARMER'S SON.  
Simcoe Co., Ont.

**P. E. Island Agricultural Legislation.**

The Legislature of Prince Edward Island pro-rogued on Friday, April 8th, after a session of eight weeks, during which 38 bills came before it, of which 36 became laws. Of the total appropriations for all purposes of \$407,441, \$6,500 was for agriculture, and \$6,850 for exhibitions.

Following is a comparative statement of the appropriations for agriculture for the years 1909 and 1910:

	1909	1910
Salaries, office expenses, etc. ....	\$2,150	\$2,500
Printing and postage .....	1,500	1,500
Grants to Institutes, Associations, etc. ....	2,000	2,500
Repairs to farm buildings .....	400	000
<b>Total .....</b>	<b>\$6,050</b>	<b>\$6,500</b>

The increase for salaries, etc., is made up of an increase of \$150 for the secretary, and \$200 for the time of the stenographer that is given to this department.

The grants to Institutes, Associations, etc., are allotted as follows:

	1909	1910
To Farmers' Institutes .....	\$ 816	\$ 900
Dairymen's Association .....	300	300
Fruit-growers' Association .....	75	75
Provincial Seed Fair .....	378	400
Standing-grain Competitions.....	216	330
Agricultural scholarships .....	460	640
Prizes, stock-judging .....	60	60
Co-operative Fruit Co. ....	000	110
<b>Total .....</b>	<b>\$2,335</b>	<b>\$2,755</b>
Receipts .....	248	315
<b>Net expenditure .....</b>	<b>\$2,087</b>	<b>\$2,440</b>

The grant for Farmers' Institutes varies from year to year. Each Institute sending in an annual report and membership list is entitled to an annual grant of \$20, and may receive, in addition, a special grant, not to exceed \$30, for the purchase of pure-bred live stock. There are now about 30 institutes in active operation.

In addition to the \$300 which the Dairymen's Association receives, the Department of Agriculture, through the Association, is this year offering cash prizes to the amount of \$240 to the patrons of cheese factories and creameries for the largest production of milk per cow during the cheese season, and for the largest amount of butter-fat per cow for one year. These prizes will not, however, be payable till after the close of the present financial year.

The grant for the Fruit-growers' Association is to defray the expenses of the annual meeting, and to provide a premium list for the Winter Fruit Show. The annual report of the Association is printed and distributed by the Department of Agriculture.

The fruit industry is still in its infancy in this Province. Quite a number of people are producing more than is needed for their own families, but there is not sufficient of one kind produced to make a shipment, or even to make it worth while packing them. To meet this situation, the Government succeeded in having a co-operative fruit company formed, and are making a grant towards the expenses of management. It is not expected that this grant will be continued after the company is well established.

The Provincial Seed Fair is managed by the Prince County Institute. The necessary funds are raised by private subscription, by grants from Institutes, etc., and the deficit is made good by the Department of Agriculture. No admission is charged, and there are no entry fees. Last year the deficit amounted to \$378, and this year a definite grant was made.

The number of competitions in fields of standing grain is to be doubled this year. Last year there was one for oats, wheat and barley in each county. Now each county is to be divided. Cash prizes amounting to \$25 for oats, \$20 for wheat, and \$10 for barley, will be offered in each competition.

To induce farmers and farmers' sons to attend the short course at the College of Agriculture, Truro, N. S., scholarships of \$10 each were offered. The number was increased from 46 in 1909, to 65 in 1910, but only 64 were taken.

The prizes for judging live stock were given in connection with the Provincial Exhibition, and the money spent was really a further grant towards the Exhibition Association, and, as the sentiment is growing that too large a proportion of the money appropriated for agricultural purposes is given to Exhibition Associations, this grant will not be made.

Six medals will also be given for Agricultural Merit Competitions, for the best kept, managed and cultivated farms.

The only other legislation affecting agriculture was an act guaranteeing bonds to the amount of \$25,000 for the Island Cold-storage Company, and an amendment to the Tax Act.

The principal stockholders in the Island Cold-storage Company are the firm of Davis & Fraser, pork-packers. Their head office is in Halifax. They bought the old pork-packing plant at Charlottetown, which cost its first owners upwards of \$100,000, for about \$15,000, and made arrangements with the Local and Federal Departments of Agriculture for the establishing of a system of cold-storage. As security for the guaranteeing of the bonds, the Local Government has taken a mortgage on the plant, including machinery, etc. The Commissioner of Agriculture is a member of the Board of Directors, and a sinking fund is provided for. The bill was opposed by the Opposition, on the ground that it was giving the Davis & Fraser Company, who have a pork-packing plant in connection with the cold-storage plant an unfair advantage, that would ultimately lead to their monopolizing the pork business of the whole Province. They claimed, too, that it would be of little value unless a system of cold storage was provided on the railway and steam-boats. It was carried on a straight party vote. It should be of service to the dairy, fruit and poultry industries.

The amendment to the Tax Act consisted in the appointing of valuers, whose duty it would be to value the farm lands in their several precincts for the purpose of taxation. Up to the present time, each man has been allowed to value his own farm, and, although his valuation was in the form of a declaration, many abuses crept in that made the burden of taxation very unfair. It is expected that from 40 to 50 per cent. more revenue will be obtained from the land tax without the rate of taxation being increased, through the revaluation.

Several other bills relating to agriculture were prepared, but their introduction was deferred for further consideration by the Farmers' Institutes.

**Rural Telephone System.**

Editor "The Farmer's Advocate":

In your issue of March 24th appears an article under the caption, "Bell Telephone System," written by H. J. Davis, exploiting his own line of telephone service. It is all well and fairly put forth, until the second paragraph, when he begins to belittle the rural-telephone system to which his neighbors and the surrounding district belong.

Now, we are glad to hear that H. J. D. is getting such efficient and satisfactory service from this line of his own, but we of the Rural would take exception to his latter remarks, inasmuch as they are most unfair and prejudiced.

H. J. D. lives in close proximity to Woodstock, therefore Woodstock is his shipping station and place of business, and connection with Woodstock and Woodstock's telephone system is the most desirable thing for himself. But of what possible advantage would free connection with Woodstock (though the rural line may get that in time, as well as H. J. D.'s line) be to those living ten or twenty miles away, whose shipping stations are, say, Hickson, Innerkip or Bright? With all these the Rural system has free connections, since its line of 50 miles or more stretches like a network all around these various shipping stations. Even at present, it only costs 10 cents to communicate with Woodstock, and for all practical purposes it is really cheaper than the \$5 switching privileges that H. J. D.'s line enjoys; whereas Woodstock and H. J. D.'s line, inclusive, have to pay 25 cents to communicate with the surrounding district of 50 miles or more of Rural 'phone, even though it be with nearest neighbors.

It is true the Rural 'phone rent is \$10 per year, but a portion, at least, of that is returned, since the farmers own their line, and are, as H. J. D. puts it, "independent."

Of course, this system is far from perfect, but in time, no doubt, it will compare even with the ancient and honorable Bell system. But, as for having 24 'phones on a line, I am afraid that is an exaggeration, or at least an exception. The average is perhaps about 15; some more, some a great deal less. But, as far as the line reaches—east, west, north, south—the 'phone-holders can

talk to each and every other 'phone-holder; and very few but what take advantage of the privilege of owning a 'phone; whereas, without paying 25 cents fee, H. J. D. cannot speak to his next-door neighbors, who have, surely, the best opportunity of judging between the two services, and have had Rural 'phones installed, rather than have the H. J. D. line extended to their doors.

The Rural line is a farmers' line; it is owned by the farmers, and is built for the accommodation of farmers. If it were not taking up too much space, I might refer to the advantages to a farmer of free connection with all his neighbors at threshing and other times where outside help is required, not to speak of the advantages to the wives and daughters of the home, enabling them to exchange notes on prices of butter, eggs, etc., as well as to the social life of a farming community.

I have no desire to enter into controversy with our friend and neighbor H. J. D., but leave the reader to judge from these facts whether the Rural 'phone is such a "way-back" affair as he would lead us to believe.

If any who are more conversant with the workings of both systems care to enter into discussion over their respective merits, it might be of benefit to those not enjoying the privilege of either.

Oxford Co., Ont.

A RURALER.

### Registration of Factories and Certification of Makers in Quebec.

The law providing for registration of cheese and butter factories, and certification of head makers, passed by the Ontario Legislature in 1909, and slightly amended at the recent session, have been accepted as a model for Quebec by the Hon. D. Caron, Minister of Agriculture, who has framed a law which proposes to place all cheese and butter factories under the direct control of the Government. According to his bill, on and after January 1st, 1912, all proprietors of creameries, cheese factories, or factories for the manufacture of condensed or powdered milk, would have to present a certificate from a Government inspector declaring that their building is sanitary and well equipped, in order to receive from the Minister permission to continue business, and all new factories would have to secure a permit from the Minister before commencing operations. All head makers would also have to show a certificate from the St. Hyacinthe Dairy School, or from an inspector, in order to retain their positions. During a somewhat critical consideration of the bill in the Legislature last week, an amendment was made to the bill, providing that only the two chief Provincial inspectors could issue certificates or reports on the strength of which the Minister might grant permits or close insanitary factories.

### Favorable Spring for Market Gardeners.

"I think we cut asparagus this spring two weeks earlier than ever before," remarked a leading market gardener living near London, the other day. "It has been an excellent spring, also, for working the land. It has pulverized in fine shape, and the recent rains were just what we needed to start the seed."

"We have cleared out the last of our celery, and are now taking off a crop of spinach. We have contracted ten tons of spinach, and are cutting it small. Our celery is planted year after year on the same ground, owing to lack of the right kind of soil to permit of rotation. Last year we had about as good a crop as ever. We manure heavily, however, a big cartload of manure being put on each 25 square yards. We have taken as high as \$800 worth of celery off an acre in a year."

The business and professional men of Illinois are being invited, with farmers, to the number of probably 2,000, to join in a great gathering at the State University, Urbana, on August 16th, 17th and 18th, to view the plot crops and demonstrations at the sources of exact information.

### TRADE TOPIC.

MAPLE LEAF MILLING COMPANY.— Ontario seems certain to play a very prominent part in the future of the milling industry in Canada. According to leading milling interests, it is only a matter of time when all the largest mills in the country will be situated at different points about the lakes that surround the Province, mainly because such sites seem to have some advantage over any others that may be selected in any other part of the country. It may be that for the small local market that surrounds a mill there may be other points just as attractive, but when it comes to building a great big mill that must look to the export as well as the home mar-

ket, in order to be able to dispose of its large output, officials of a number of companies are practically agreed that these Ontario points are the most advantageous of all. And so it is that we find that the new big Ontario milling concern which will be known as the Maple Leaf Milling Co., Limited, and will absorb the Maple Leaf Flour Mills Co., Ltd., and with it the Hedley Shaw Milling Co., has already under way the construction of a 6,000-barrel mill, a million-bushel elevator and storage warehouses out on the new piers that have been constructed at Port Colborne. The men who are at the head of the new company, including Cawthra Mulock, of Toronto, Hedley Shaw, founder and head of the Hedley Shaw Milling Co., and D. C.

Cameron, the Western lumberman who organized the Maple Leaf Flour Mills Co., Ltd., have supplied \$1,000,000 of additional cash capital, which, besides permitting of the completion of the entire new plant already under way at Port Colborne, and the construction of some 15 new elevators throughout the West, will provide the new company with further working capital to go right ahead and get its full share of the larger business that is offering, not only throughout Canada, but more especially in Great Britain and various foreign markets. How our elevator capacity is going to increase, may be gathered from the remark of Wm. White, the Vice-President of the Canadian Pacific Railway, to the effect that while the Western country was

now producing at the rate of about 135,000,000 of wheat, by the end of 1915 it would have increased to over five hundred million bushels, and that it would not be very long after that before Canada is producing even more wheat than all of the United States, which last year produced somewhat over seven hundred million bushels. Incidentally, Toronto will benefit by the organization of the new big milling company, as it will have its head office in that city, while all the mills, with one exception, are situated within the Province of Ontario, in addition to the Port Colborne mill, the locations being at St. Catharines, Thorold, Welland and Kenora. The only mill at present outside the Province is the one at Brandon, Manitoba.

### Benning's Ayrshire Sale.

The auction sale, on April 20th, of 81 head from the old-established herd of Ayrshires belonging to Wm. Benning, at Williamstown, Ont., attracted a very large attendance of breeders and dairymen from a very wide territory in Canada and the United States. The bidding was exceedingly brisk, and very good prices were realized, as the sale list shows. The cattle were a business class, the cows showing fine udders and teats, together with desirable conformation and type. The highest price was \$590, for the cow White Floss of Glenhurst, purchased by Ed. Ryan, Brewster, N. Y. The imported bull, Drongan Mains Guarantee, sold for \$400 to W. G. Trethewey, Toronto. Four others sold for \$400 to \$475, and 44 head brought an average of \$220. Following is the list of sales of \$100 and upwards:

#### FEMALES.

Silver Lass of Glenhurst; Ontario Agricultural College, Guelph	\$325
Flo 2nd of Glenhurst; W. J. Trethewey, Toronto	300
Floss 5th of Glenhurst; O. A. C., Guelph	375
Kilbowe 2nd of Glenhurst; E. Ryan, Brewster, N. Y.	375
Belle 2nd of Glenhurst; J. P. Graham, Spokane, Wash., U. S. A.	200
Floss 3rd of Glenhurst; Hector Gordon, Howie, Que.	300
Rose 4th of Glenhurst; W. G. Trethewey	135
May 3rd of Glenhurst; Ed. Maxwell, Ste. Anne de Bellevue, Que.	130
Floss of Glenhurst; R. Hunter & Sons, Maxville	150
Glenhurst Fay; Ed. Ryan	475
Rose of Glenhurst; W. J. Walker, Winchester	145
Primrose 3rd of Glenhurst; Ed. Maxwell	200
Ruth of Glenhurst; W. G. Trethewey	170
Rose 3rd of Glenhurst; O. A. C., Guelph	130
Bud 2nd of Glenhurst; O. A. C., Guelph	400
Ruth 2nd of Glenhurst; W. G. Trethewey	140
Brownie of Glenhurst; W. G. Trethewey	125
Primrose 2nd of Glenhurst; Ed. Maxwell	200
White Floss of Glenhurst; Ed. Ryan	590
Glenhurst Cherry; O. A. C., Guelph	400
Floss 6th of Glenhurst; W. G. Trethewey	380
Glenhurst Alice; D. Ness, Howick, Que.	100
Glenhurst Pippin; Ed. Ryan	225
Glenhurst Violet; R. Hunter & Sons	115
Glenhurst Blossom; R. Hunter & Sons	110
Glenhurst Floss; A. W. MacIntyre, Newington, Ont.	275
Glenhurst Kilbowe Maid; A. W. MacIntyre	350
Glenhurst Cinderella; R. Hunter & Sons	130
White Ada of Glenhurst; A. W. MacIntyre	425
Madeline; R. Hunter & Sons	100
Adeline of Glenhurst; R. Hunter & Sons	175
Queen Floss of Glenhurst; D. M. Watt	180
Floss Gem of Glenhurst; R. Hunter & Sons	150
White Leda of Glenhurst; W. Leitch	100
White Ruth of Glenhurst; R. Hunter & Sons	120
Blue Belle of Glenhurst; R. Hunter & Sons	110
Glenhurst Jean; R. Hunter & Sons	145
White Molly of Glenhurst; A. W. MacIntyre	200
White Rose of Glenhurst; A. W. MacIntyre	100
Glenhurst Queen Floss; A. W. MacIntyre	200

#### MALES.

Drongan Mains Guarantee; W. G. Trethewey	\$400
Knoekdon 3rd of Glenhurst; James Irving, Ventnor, Ont.	125
Glenhurst Guarantee; G. H. McGillivray, Williamstown	110
Floss Guarantee of Glenhurst; William Paul, Peterboro, Ont.	110
Bud's Guarantee of Glenhurst; O. A. C.	100
Rose's Guarantee of Glenhurst; J. A. Major, North Lancaster	100

Eighty-one head, all but one bred in the herd, including 16 young calves, sold for an average of \$150.

J. S. Larke, since 1891 Canadian Trade Commissioner at Sydney, New South Wales, Canada's first trade agent, and one of the most capable men in this branch of the public service, has died in Sydney, at the age of 70 years.

### Phenomenally Early Spring.

An extraordinarily early spring is reported from widely-varying localities. In Western Ontario, the season of growth must be almost three weeks ahead of the usual. April weather in March, and May weather in April, has been the experience over a considerable part, at least, of the Republic to the south, interrupted in certain areas, however, by cold-waves and March storms in the month now concluding. Early seeding was reported from the West, while an unprecedentedly early break-up in the rivers and lakes in the Peace River region of Northern Alberta has left many pioneers stranded hundreds of miles from their destination. From England, too, comes word in our exchanges that March dust was unusually abundant for a fortnight, dense clouds of it enveloping the wayfarer after meeting a motor car.

### A Thousand a Day.

The total immigration into Canada for March was 33,065, as compared with 16,464 for March last year. During the fiscal year ending March 31st, 208,794 immigrants arrived in Canada, an increase of 42 per cent. Of the 208,794 immigrants, 103,798 came from the United States, and 104,996 came in by ocean ports. For the previous fiscal year (1908-09), 146,908 came to Canada, 59,832 from the United States and 87,076 by ocean ports. The immigration for March last was the largest in the history of Canadian immigration.

Being an interested reader of "The Farmer's Advocate," and seeing reports from some of the counties, I thought someone might be wondering what had become of Kent Co. Spring wheat, barley, oats and peas are in most districts looking very fine; fall wheat and clover is the best in years. The corn land is being prepared, and many are expecting to plant first week in May, if conditions are favorable. The plum trees are out in bloom (April 15th), and have the appearance of a heavy crop. Farmers are rejoicing over their fine herds of swine, also the ones just arriving.

KENT FOR MINE.

Tables compiled by A. D. McIntosh, of the Department of Agriculture, at Collingwood, Ont., show that, since 1881, the rural population of Simcoe County has been declining (from 59,582 to 48,539 in 1908), while that of the towns and villages has increased about 9,000. This means fewer farmers to feed the towns, fewer rural customers for the merchants, and higher-priced foods.

Commenting on the refusal of the Dominion Government to disallow the Ontario hydro-electric power legislation of 1909, Sir James Whitney, Premier of Ontario, remarks that, "It is now certain that in the future there will be no further attempts—at any rate, no successful attempts—to minimize or destroy the powers of a Provincial Legislature acting within the limits of its jurisdiction."

A despatch last week from New York asserted that retail prices in that city were following a downward trend of food-commodity values in Chicago's wholesale markets. This moderation in retail prices of foods did not, however, apply to meats. One wholesale dealer was quoted as predicting that "By the middle of the summer food prices will have returned to a normal level."

American papers report that the governing board of the Oklahoma Experiment Station have asked for the resignation of Prof. John A. Craig, the eminent Canadian livestock authority, experimenter and educator. Political manipulation is hinted at as the cause of the action.

**SAVINGS DEPOSITS**

**THE Bank of Toronto**

receives Savings Deposits of \$1.00 and upwards, and adds interest to all balances twice a year.

**Safe  
Convenient  
Profitable**

**ASSETS - \$46,000,000**

**Incorporated  
1855**

**MARKETS.**

**Toronto.**

**LIVE STOCK.**

At West Toronto, on Monday, April 25th, receipts of live stock numbered 117 cars, comprising 2,176 cattle, 49 hogs, 92 sheep, 148 calves. Quality of cattle was good; trade brisk; prices very firm. Prime picked butchers', \$7 to \$7.25; loads of good, \$6.75 to \$7; medium, \$6 to \$6.50; common, \$5.25 to \$5.75; cows, \$4 to \$6.25; milkers, \$40 to \$65; calves, \$3 to \$7.50. Sheep—Ewes, \$6.50 to \$7.25 per cwt.; rams, \$5 to \$6; yearling lambs, \$4 to \$9.50 per cwt.; spring lambs, \$4 to \$9 each. Hogs—Prices lower, dealers quoting \$8.90, fed and watered, and \$8.65, f. o. b. cars.

**REVIEW OF LAST WEEK'S MARKET.**

The total receipts of live stock at the City and Union Stock-yards last week were:

	City.	Union.	Total.
Cars	199	170	369
Cattle	2,969	3,246	6,215
Hogs	3,789	1,633	5,422
Sheep	229	66	295
Calves	1,200	312	1,512
Horses	2	62	64

The total receipts for the corresponding week of 1909 were:

	City.	Union.	Total.
Cars	226	89	315
Cattle	3,658	1,464	5,122
Hogs	4,656	1,183	5,839
Sheep	536	138	674
Calves	842	111	953
Horses	—	173	173

The above figures show that there was a total increase at the two yards over the corresponding week of 1909 of 54 carloads, 1,093 cattle, 559 calves, but a decrease of 417 hogs, 379 sheep, and 109 horses.

Receipts of cattle were larger than for the previous week, but not nearly large enough to supply the demand. Trade was never better on any market previously held at either of the Toronto yards. Dealers who have been doing business at the Toronto market for the past thirty years, stated that they had never seen anything like it before. Prices for light butchers' cattle were from 20c. to 30c. per cwt. higher than reported in our last letter, while exporters, as a rule, were very firm, and in some instances higher. Fully one-half of the receipts were young heifers and steers, many of them two years old, and some only one year, that ought to have been kept on the farms twelve months longer. The quality of the cattle, as a rule, was better than for some time past. At the Union yards on Monday, there were nearly 2,500 cattle on sale, and as soon as the market bell was rung at 8 o'clock, there was a rush for the different alleys by the many dealers present. These dealers represented all of the leading abattoirs and whole-

sale butchers of the city, as well as some from Montreal, Ottawa, Kingston, Hamilton, and Chicago, besides many smaller towns of Ontario.

To say that trade was brisk is putting it mildly, as at noon over 1,600 cattle had been bought and weighed, and fully 300 more had been sold, but had not passed over the scale. At the close of the market there were only 193 cattle left, and these could have been sold many times over, but the owners preferred to wait for Tuesday's market. The succeeding markets during the week, at both the City and Union, although the receipts were not as large, trade and prices were just as good, and, in fact, some of the buyers stated that prices were 10c. to 15c. per cwt. higher than at the commencement of the week. One thing is certain, that there never were so many high-priced cattle sold at the Toronto livestock markets in one week in their past history.

Exporters.—E. L. Woodward bought on Tuesday for Swifts, of Chicago, one lot of 189 export steers, 1,176 lbs. each, at \$7.35; 17 exporters, 1,250 lbs., at \$7.25; 17 exporters, 1,150 lbs., \$7.20; 34 exporters, 1,206 lbs., \$7.15; 17 exporters, 1,200 lbs., \$7.10; 16, 1,150 lbs., at \$6.85; 16 heifers, 1,070 lbs., \$7.10; 59 exporters, 1,096 lbs., \$7.05; 11 exporters, 1,100 lbs., at \$6.70; 17 exporters, 1,300 lbs., \$6.85.

George Campbell bought for Morris & Co. on Monday, 619 exporters, 1,000 to 1,300 lbs. each, at \$6.50 to \$7.50. On Tuesday, Mr. Campbell bought 85 exporters, 1,150 to 1,250 lbs., \$6.75 to \$7.25. Export bulls sold from \$5.50 to \$6.25, with a few very choice at \$6.50.

Butchers'.—Prime picked lots, \$7 to \$7.25; loads of good, \$6.75 to \$7; medium to good, \$6 to \$6.50; common, \$5 to \$6, and they were very common at that, and should have been sold as feeders; cows, \$4 to \$6.25, and some choice cows, \$6.50. There were two prime-quality cows sold at \$7 and \$7.50 per cwt.

Stockers and Feeders.—Both stockers and feeders are hard to be got, owing to the high prices of beef cattle. Prices for them ruled as follows: Steers, 900 to 1,100 lbs., \$5.50 to \$6.25; steers, 800 to 900 lbs. each, \$5 to \$5.50; steers, 600 to 800 lbs., \$4.50 to \$5.10; common, ill-bred mongrel stockers, \$3 to \$4 per cwt.

Milkers and Springers.—Trade in milkers and springers remains steady, at prices ranging from \$35 to \$60 each, with an odd cow now and again, of prime quality, at \$70.

Veal Calves.—Receipts were the largest of the season thus far, and many of them were of common to inferior quality. Prices were easier, but still high, \$3 to \$7.50 per cwt. with prime, new-milk fed calves at \$8 to \$9 per cwt.

Sheep and Lambs.—Receipts were light, the smallest of the season. Prices were very high. Ewes, \$6 to \$7.12½; rams, \$5.50 to \$6.12½ per cwt.; yearling lambs, \$8.50 to \$9.50 per cwt.; spring lambs, \$5 to \$8 each.

Hogs.—The bulk of the hogs sold as follows: \$9.35, fed and watered at the market, and \$9.15, f. o. b. cars at country points. There were several car lots sold at \$9.70, fed cars.

Horses.—Receipts of horses at the Union Horse Exchange were light the past week; dealers report farmers as having raised prices from \$15 to \$20 per head. Not only have they increased the prices, but they positively refuse to sell until the spring rush of work is over. There was a good demand for all high-class horses. A few high-class drafters sold at \$275 to \$280 each; one pair of high-class harness horses, sold to W. J. Chaplin, of St. Catharines, for \$800. The general run of prices were as follows: Drafters, \$190 to \$230; expressers, \$180 to \$225; drivers, \$125 to \$250; general-purpose horses, \$180 to \$220; serviceably sound horses, \$45 to \$95.

**BREADSTUFFS.**

Wheat—No. 2 white winter, or mixed, \$1.06 to \$1.07, outside. Manitoba—No. 1 northern, \$1.08; No. 2 northern, \$1.04, on track, at lake ports. Rye—No. 2, 67c. to 68c. Peas—No. 2, 75c. to 76c.; outside. Barley—No. 2, 52c. to 53c.; No. 3X, 51c.; No. 3, 47c., outside. Buckwheat—No. 2, 51c. Corn—American kiln-dried yellow, 66c. to 66½c.; No. 3 yellow, 65½c.; Canadian corn, 60c. to 61c., low, 65½c.; Canadian corn, 60c. to 61c., at Toronto. Oats—No. 2 white, 36c. to 36½c., outside, and 34c. on track, To-

ronto. Flour—Ontario wheat patents, for export, \$4.05 to \$4.10; Manitoba first patents, \$5.70; second patents, \$5.20; strong bakers', \$5.

**HAY AND MILLFEED.**

Hay.—Baled, in car lots, unchanged, at \$15 to \$15.50 for No. 1, and \$14 to \$14.50, track, Toronto, for No. 2.

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

Bran.—Ontario bran, in bags, \$22. Shorts, \$1 more.

**COUNTRY PRODUCE.**

Butter.—Receipts of choice creamery and dairy not equal to the demand. Prices are reported as follows: Creamery pound rolls, 32c. to 33c.; creamery solids, 29c.; separator dairy, 28c. to 29c.; store lots, 26c. to 27c.

Eggs.—Prices are very firm, on account of speculators buying for storage purposes. Case lots are worth 22c. per dozen.

Cheese.—Market unchanged. Large, 13c.; twins, 13½c.

Potatoes.—Ontarios are worth 30c. to 35c. per bag, for car lots, on track, Toronto; New Brunswick Delawares are worth 43c. to 45c. per bag.

Honey.—Prices remain unchanged, at 10½c. for extracted, and \$2.50 to \$3 per dozen for combs.

Beans.—Trade remains steady, supplies being about equal to demand. Primes, \$2 to \$2.10; hand-picked, \$2.15 to \$2.20.

Poultry.—Receipts light, prices very firm. Turkeys, per lb., 18c. to 25c.; last year's chickens, 20c. to 23c.; fowl, 15c. to 17c. Spring chickens sold on the farmer's market at 50c. per lb.

**HIDES AND WOOL.**

E. T. Carter & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows, 11½c.; No. 2 inspected steers and cows, 10½c.; No. 3 inspected steers, cows and bulls, 9½c.; country hides, 9c. to 10c.; calf skins, 13c. to 15c.; horse hides, No. 1, \$3.00; horse hair, per lb., 32c.; tallow, per lb., 5½c. to 6½c.; sheep skins, 90c. to \$1.10 each. Wool and raw-fur prices given on request.

**SEED MARKET.**

Following are the prices at which Toronto dealers are selling re-cleaned seed to farmers: Red clover, best, per bushel, \$10 to \$11; red clover, choice, \$8.50 to \$9.50 per bushel; alsike, best, per bushel, \$8.75 to \$9.50; alsike, choice, per bushel, \$8 to \$8.50; alsike, good, per bushel, \$6.50 to \$7.50; alfalfa, best, per bushel, \$14 to \$15; alfalfa, choice, \$13 to \$14; timothy, best, per bushel, \$3.25 to \$3.50; timothy, choice, \$2.75 to \$3.

**FRUITS AND VEGETABLES.**

Apples, the bulk of which are seconds and worse, are very plentiful, and cheaper, at \$1 to \$2, and \$2.50. No. 1 Spies are easy, at \$3 per barrel; onions, \$1.35 to \$1.60 per bag; carrots, 40c. to 50c. per bag; parsnips, bag, 50c. to 60c.; beets, bag, 65c.; cabbage, per barrel, \$1.75 to \$2; turnips, \$6 to \$6.50 per ton.

**Buffalo.**

Cattle.—Prime steers, \$8 to \$8.50. Veals.—\$6 to \$9.25. Hogs.—Heavy and mixed, \$9.65 to \$9.75; Yorkers, \$9.65 to \$9.80; pigs, \$9.65 to \$9.75; roughs, \$8.60 to \$8.80; stags, \$7 to \$8; dairies, \$9.50 to \$9.75. Sheep and Lambs.—Sheep, active; wethers, 15c. lower; lambs, slow, and 20c. lower; lambs, \$7.25 to \$9; yearlings, \$7.75 to \$8.25; wethers, \$7.50 to \$7.75.

**Chicago.**

Cattle.—Steers, \$6.25 to \$8.60; cows, \$4.85 to \$7.25; heifers, \$4.25 to \$7.30; bulls, \$4.50 to \$6.50; calves, \$3 to \$8.40; stockers and feeders, \$4.75 to \$7. Hogs.—Choice heavy, \$9.40 to \$9.50; butchers', \$9.30 to \$9.40; light mixed, \$9.20 to \$9.25; choice light, \$9.10 to \$9.20; packing, \$9.25 to \$9.35; pigs, \$8.70 to \$9; bulk of sales, \$9.30 to \$9.35. Sheep and Lambs.—Sheep, \$6.85 to \$8.40; lambs, \$7 to \$9.50; yearlings, \$7 to \$8.50.

**British Cattle Markets.**

London and Liverpool cables quote live cattle (American) at 14c. to 15c., dressed weight; refrigerator beef, 11c. to 11½c. per pound.

**Montreal.**

Live Stock.—The local market for cattle was stronger than ever last week. Quite a quantity of stock is being taken out of Western Ontario, it is claimed, by Americans, thus aggravating the existing scarcity. Offerings on the local market were very light, and the market was proportionately firm. No choice steers could be had under 7c., and the best brought fractionally more. Fine stock sold at 6½c. to 6¼c., good stock at 5¼c. to 6¼c., medium at 5c. to 5¼c., and common down to 4c. Receipts of sheep and lambs continue light, with prices firm, at 6c. to 7c. for sheep, according to quality, while spring lambs ranged from \$4 to \$8 each, according to quality and size. Calves ranged around high figures, in sympathy with cattle, being \$3 to \$6 for ordinary, and \$7 to \$12 for best, each. In sympathy with the rest of the market for live stock, hogs were firm in price, and fractional advances were recorded. There was a very fair supply, and trade was good. Sales of select lots of hogs were made at around 10½c., weighed off cars, some brought a fraction more and some a fraction less.

Horses.—Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$250 to \$325 each; light draft, 1,400 to 1,500 lbs., \$200 to \$250; light horses, 1,000 to 1,100 lbs., \$100 to \$175; inferior, broken-down animals, \$50 to \$100 each, and choice saddle or carriage horses, \$350 to \$500 each.

Potatoes.—Market fairly active and supplies plentiful. The cost of Green Mountains, on track here, was about 37c. to 40c. per 90 lbs., these being turned over at 38c. to 45c. Considerable quantities of inferior stock were also to be had.

Apples.—Quality of stock offering gradually becoming poorer, the bulk being re-packed stuff. Prices hold around former figures, sales taking place, at auction, at \$2 to \$2.50 per barrel for No. 2 Spies, and at \$1.75 to \$2.10 for No. 3. Ben Davis and Baldwins sell at \$1.75 to \$2 for No. 2, and \$1.50 to \$1.60 for No. 3.

Eggs.—Straight receipts of stock were selling last week at 21c. per dozen, in a wholesale way, and at 22c. in single cases, purchases being made at 19½c. to 20c., in the country. It is claimed that the high prices are due to competition among some of the larger packers.

Butter.—New creamery was selling last week at 29c. to 30c. Little old left; receipts of new light as yet; market, consequently, firm.

Cheese.—Season opening; sales made on country boards at 11½c. to 12c.

Grain.—Market for oats declined, prices being 4½c. to 42c. per bushel for No. 2 Canadian Western; 40½c. to 41c. for No. 3; 40c. for No. 2 white Ontario; 1c. less for No. 3, and yet a cent less for No. 4, carloads, store.

Flour.—Market unchanged, at \$5.80 per barrel for Manitoba first patents; \$5.30 for seconds; \$5.10 for strong bakers'; \$5.50 to \$5.60 for Ontario winter wheat patents, and \$5.10 to \$5.25 for straight rollers.

Feed.—Prices for feed steady, at \$21 per ton for Manitoba bran; \$21 to \$22 for shorts; \$20.50 to \$21 for Ontario bran; \$22 to \$23 for middlings; \$32 to \$33 for pure grain mouille, and \$25 to \$28 for mixed. Cotton-seed meal sells at \$35 to \$40 per ton.

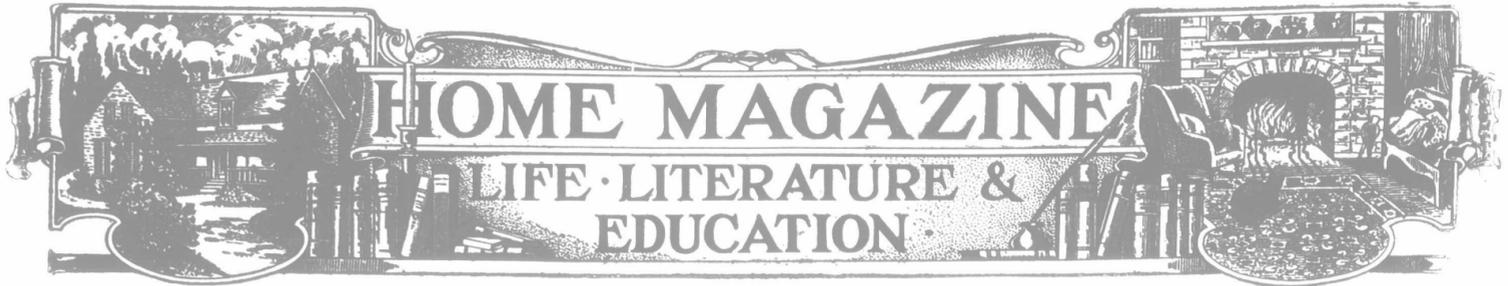
Hay.—Prices steady, at \$15 to \$15.50 for No. 1 hay; \$14 to \$14.50 for No. 2 extra; \$12.50 to \$13 for No. 2; \$11.50 to \$12 for clover mixed, and \$10.50 to \$11.50 for clover.

Seeds.—Good demand reported, prices steady, at \$17.50 to \$19 per 100 lbs., Montreal, for red clover; \$13 to \$17 for alsike, and \$5.25 to \$7.25 for timothy. Alfalfa still sells at 23c. to 25c. per lb.

Hides.—Demand for hides good, and for tallow poor. Dealers paying 10c. per lb. for uninspected hides, 10½c., 11½c. and 12½c. per lb., respectively, for Nos. 3, 2 and 1 country hides, and 4c. over these prices for city hides. Sheep skins steady, at \$1 to \$1.25 each, and lambs 10c. each. Horse hides unchanged, at \$1.75 each for No. 2, and \$2.50 for No. 1. Tallow, 1½c. to 5c. per lb. for rough, and 5c. to 6c. for rendered.

**Cheese Markets.**

Belleville, Ont., 11 9-16c. Kingston, Ont., 11½c. Brockville, Ont., 11 9-16c. Bid. Iroquois, Ont., 11½c. Cornwall, Ont., 11 9-16c.



David Lloyd-George.

Chancellor of the Exchequer, and framer of the famous "Budget."

### The Windrow.

In Bosnia, the ballot has just been granted to women with a property qualification.

William R. Hearst has issued a statement warning the American people against a renewal of Roosevelt rule.

Jewels valued at half a million dollars were stolen from the Uspenski Cathedral, in the Kremlin, Russia, last week.

If conditions are normal, Halley's comet will be visible after sundown about May 10th, possible a day or two before or after.

Mark Twain, dearly-beloved humorist of the world, died at his home, Redding, Conn., on April 21st, at the age of seventy-five. He never recovered from the shock of the death of his daughter, last fall.

Over 80,000 packages of seeds are being sent out by the floral department of the Canadian Pacific Railway Company this year for planting on the Company's property. Each package contains 32 varieties of flower seeds.

The bulletin of the Art Institute of Chicago announces that Mrs. Potter Palmer intends to establish a gold medal, carrying with it a prize of \$1,000, to be conferred at the annual exhibition of American paintings and sculpture, at the Institute, for the best work of art by a living American artist. To quote the bulletin: "There is no limitation as between painting and sculpture, no limitation as to subject, and no limitation as to the time in which the work may be executed."

From a citizen constitutionally denied the right to vote, Mrs. Ella Flagg Young, superintendent of schools, there came a lesson in civic duty which might well be emulated by employers of labor and others having charge of workers. Mrs. Young made the rounds of her office, inquiring of the men employees whether they had voted. She refuses to say how many delinquent electors she found, but it is safe to say that

none of those under her charge neglected to cast his vote during the day. By her act she performed a duty for which every citizen will respect her, and which is worth much more than all the noise made by the shrieking sisterhood of suffragettes.—[Chicago Tribune.

Upton Sinclair's disgust toward the packing concerns, and all that in them is, evidently continues. "For the past year he has taken to a vegetarian diet, living principally on nuts, bananas, dried fruits, raw fruits, lettuce, tomatoes and celery, with soaked whole wheat and breakfast foods for variety. He believes that he is healthier and better for the change. "I believe," he says, "that our monkey ancestors lived on raw food, and that our alimentary canal is designed for it; and that when we refine, concentrate and soften our food, as we do, we not only take in three times as much nutriment as we can use, but we deprive our food of all the rough particles and the waste which is necessary to fill the colon and stimulate peristaltic action." Incidentally, he is saving money. At New York winter prices, his living averages \$2 per week; but, if he wished to economize, he says he would not go above 20 cents a day.

### Our English Letter.

VIII.

COMPARISONS OR CONTRASTS — WHICH?

Notwithstanding the large amount of space necessarily occupied in the columns of the daily press of every shade of political opinion at this crisis of our Empire's history, seldom does a day pass without a mention of the subject of emigration to one or other of the colonies of Great Britain. In these mentions, Canada continues easily to take the lead, under such inviting captions as: "Alberta's Future; Gate of a Land of Gold"; "Rush to Canada; Better Class of Emigrants; England's Lost Sinew and Capital"; "The Prospects for Emigrants; A Record Demand," etc.; but within the last few days some vivid contrasts have been drawn between the prospects offered to intending emigrants by the two larger colonies overseas. Canada invites families, the larger the better, for she has room and occupation for all but, according to the Australian correspondent of "The Times," in what has been called an indictment rather than a mere statement of facts, Australia is no place for children. He says:—

"While the Government of Australia spends large sums of money and uses every effort to attract white immigrants, squatters and other large employers of labor in the country insist on conditions that tend directly to encourage that race suicide which is one of the gravest problems of the Commonwealth. The embargo on married people with children is a danger to the whole community. It leads to congestion in the cities, and deprives the country of the real sources of wealth, and must end by crippling the development of Australia as well as robbing her of those means of defence which become more urgent every day."

By way of illustration, he tells of two cases in point—both literally true and mere types of many others.

The writer of the first letter is an ex-British soldier, a good all-round farm hand, his wife, a good cook and

laundress. There is plenty of employment awaiting him and his wife, if they go alone, but if they bring their children, there is none. This is what he reports:—

"As the prospects of my obtaining employment do not seem very hopeful, I am writing to ask if you could see your way to pay our passages to another State, where work may be more readily got. . . . I fully realize the difficulty there is for married people in securing situations if they have what is known out here as "encumbrances." For during the past nineteen days I have called myself at many places in search of work, but invariably have been told that with two children there is no chance for us."

No. II. is a good farm hand, who can drive and repair motor cars, and his wife a good cook and laundress, but their only chance of getting employment is to leave their child with someone else. He writes:

"Mr. and Mrs. — were both thoroughly satisfied with our capabilities and references, and I quite thought that at last we were about to start work; but I am very sorry to have to tell you that our little boy has proved an obstacle. While Mr. — appeared to sympathize, Mrs. — would not for a moment entertain the idea of engaging married people with an "encumbrance." It would seem that as long as we have our child with us there is not much chance of our getting a situation; could you assist us by getting our child taken care of for a few months in order that we may be free to earn some money?"

The best registry offices in the State have been offered a bonus of £3 to find these people employment; their answer is: "If you gave us £10 we could not do it." The State Immigration Bureau, when applied to, simply said: "We told you so; we cannot place married couples with children, and therefore we do not assist them to come out."

The Australian correspondent from whom I quote, then asks: "What has all this to do with you in London? It touches you in two ways. In the first place, until the New South Wales farmer and squatter mend their ways, it is cruelty to send out to this State married couples with young children—or married couples who are not past child-bearing. Nothing short of bald statements, made as public as possible throughout Great Britain, will shame some of our local employers into due regard for the country's interests. In the second place, a great many stations and large farms are owned either by men who prefer to live in England, or by financial institutions (banks and others) whose headquarters are in London. Nothing short of direct orders from these owners or institutions will suffice to remove the scandal as far as their properties are concerned. Will they give the requisite orders?"

The clergy of all denominations are taking the matter up. The Prime Minister is going to denounce it. Will not you in England do your share?"

Seeing that the huge tide of emigration to Canada consists largely of men of some capital, of courage and resolution eager and hopeful, of men bound to succeed, whose children are an asset and no drawback to their parents, it is evident even to the most indifferent that what is Canada's gain is England's loss. No wonder, then, that we hear said in tones pessimistic and from the point

of view of the Old Land, "The mere numbers leaving our shores speak with a tragic eloquence, and who knows when or how the depletion may be stopped? Nevertheless, let it be remembered that in leaving England our emigrants place themselves beneath the shield of Protection. They go where they are allowed to gather the full fruit of their exertions. In Canada they are not crushed beneath the weight of free imports. For the first time in their lives they start in the race of industry without a fatal handicap. It is idle to affect surprise that 30,000 cross the sea in a single month, not from lack of patriotism, but of necessity. The one ray of comfort that we may admit into our souls is that they go to enrich a British Colony, not to increase the strength of a hostile power."

But I have reached my space limit, and am getting perilously near the political aspect of the subject, with which I do not presume to meddle. I will only say that England seems to heartily appreciate the independent attitude taken by Canada in relation to the mutual concessions and negotiations which promise so well for its future commercial relations with our next-door neighbors, the citizens of the United States. "Canada is independent by reason of her tariff; whereas the mother country has no tariff to use as an argument, and must be content with vain appeals and supplications"; which statement I quote from the Daily Mail of the 2nd April, and is not offered as an opinion of my own. H. A. B.

H. A. B., as a warm personal friend and in a small degree a co-worker of Mrs. John Hoodless, the news of whose tragic death has reached her from many sources across the Atlantic, asks permission to record her sincere sympathy with the bereaved family, and her sorrowful sense of the loss entailed, not only upon the Province of Ontario, but upon very many educational centers of the Dominion, by the passing away, in the "fullness of her days," and in the midst of her usefulness, of this most able and devoted woman. It must always be a joy and consolation to those who loved and honored her, that she was permitted to see the fruition of much of the seed sown and nurtured by her patient hand during her many years of service on behalf of the young womanhood of Canada.

### Early Ripe, Early !

As unusual as a comet, and in the educational world attracting more attention, has been the meteor-like



William James Sidis.

progress of William James Sidis, the eleven-year-old boy who graduated into Harvard University last September. At six years of age he entered the grammar school, and at eight he was studying the calculus, and surprising the high-school teachers with original observations on the mathematics of the obstruse fourth dimension. He was reported to be also proficient in history, astronomy and the languages.

Prodigies are always curious; but what makes this particular case more interesting than curious is the claim made by his father, Dr. Boris Sidis, of Brookline, Mass., a medical psychologist, that he is a normal boy, whose remarkable development is due not to innate talent, but to the training he has received. Taking Dr. Sidis at his word, the natural inference is that all children of good average ability might be trained so as to graduate into the university with high honors at eleven or twelve years of age, and that the blame for their incompetence to do so rests upon the schools. One editor puts it thus: "When so many are complaining that the children in the schools are overworked, it affords some measure of relief to turn to the case of William James Sidis."

People who take such comments seriously proceed to condemn the schools and to do injustice to both teachers and normal children; and teachers who take them seriously may feel it a duty or make it an excuse for increasing the book-burden on children who are probably already overlaid. The truth is that the unusual natural aptitudes of this boy were skillfully exploited by both father and mother along the lines in which he has excelled. Even under these circumstances, we are not surprised to read the newspaper reports of the day, "that young Sidis has collapsed from overwork." J. D.

### Hope's Quiet Hour.

Editor "Hope's Quiet Hour":

I see so many inspiring thoughts in your columns on different subjects, I thought I would like to hear an essay on "Our Lord's Teachings About Prayer." Matt. 6: 5-15; Luke 11: 1-13; 18: 9-14; John 14: 13-14.

"CHARITY."

#### Prayer.

The busy fingers fly, the eyes may see  
Only the glancing needle which they hold,  
But all my life is blossoming inwardly,  
And every breath is like a litany;  
While through each labor like a thread of gold,  
Is woven the sweet consciousness of  
'Thee!'

—Susan Coolidge.

Our correspondent—in asking for an essay on "Our Lord's Teachings About Prayer"—has drawn our attention to a treasury of glowing gems. If we could make those living words of Christ our own—learning them really "by heart," instead of simply by rote—we should walk with God, like Enoch, having our eyes open to the heaven of His perpetual Presence here in this workaday world.

As Susan Coolidge declares, in the verse quoted above, the consciousness of the Divine nearness is like a thread of gold causing a life to blossom secretly and quietly, until the beauty of holiness within shines out in beauty which is visible to men as well as to God.

The first reference (S. Matt. vi: 5-15) reminds us that our prayers are worthless unless they are sincere and loving. The world must be first shut out and then drawn in. We must go into the secret place, alone with our Father, until we can see His face. Then—having caught something of the inspiration of His love—we must reach out to our brothers and clasp hands with them in tenderest comradeship. We are one family, pleading together before our Father. If we are unloving and unfeeling, He cannot hold us near His heart, cannot

cleanse us by His miracle of forgiveness while we blacken and poison our souls by refusing to be in charity with His other children. Prayer, then, must be the natural expression of love, fellowship with our Father and our brothers. If we are looking up, in the wonderful consciousness of God's nearness, the words used cannot be wilful. We will not insist on having our own way when we realize that His perfect love and wisdom can be trusted to give what is really best—our Father knoweth what things we

the child to be ruined by indulgence in foolish desires. So it is with our Father. Prayer would be the deadliest power we could use if God were to give us exactly the thing we asked for the moment the prayer was offered. We only dare to ask for anything because—underlying every petition—we place the proviso: "Not my will, but Thine, be done." Our Father loves us too deeply to give us anything which can drag down our souls through worldliness or love of comfort. We want to grow strong and

9-14) reminds us that we must come to God humbly—as sinners—not priding ourselves on our righteousness. The Pharisee made the great mistake of comparing himself with other sinners, instead of looking up to the awful purity of God and placing his life in the light of His face so that it might be honestly examined. The publican was not justified, because he was a sinner. He did not say—as many, who claim to be like him, are constantly saying—"I thank God that I am no hypocrite, like this Pharisee—who thinks himself so good." Those who pride themselves on "making no profession of sanctity" are not only standing proudly on a pillar, like the Pharisee, looking down on their neighbors, but are worse than the Pharisee. He prided himself on his righteousness, but they pride themselves on their unrighteousness. How can they gain the grace of Holiness if they do not admire and care to win it. And these self-styled "publicans" make the same mistake as the Pharisee of comparing and measuring themselves with their fellow-sinners, instead of comparing their lives with the Pattern Life of the one perfect Man. Humility is one of the first essentials of real prayer. We must feel our weakness and need, before we can ask honestly and earnestly for strength and help. The message sent by the Lord of the Church to self-satisfied members is as searching as when it was delivered to the Laodiceans: "Because thou sayest, I am rich, and increased with goods, and have need of nothing; and knowest not that thou art wretched, and miserable, and poor, and blind, and naked; I counsel thee to buy of the gold tried in the fire, that thou mayest be rich; and white raiment, that thou mayest be clothed, and that the shame of thy nakedness do not appear; and anoint thine eyes with eyesalve, that thou mayest see." The more we study God's holiness, the more eagerly we shall desire to be like Him, and the more earnestly we shall covet the best gifts. Those who are praying for the Holy Spirit's power to sanctify and beautify their lives, can safely trust the Father to supply all things that are necessary for earthly happiness.

The last reference (S. John xiv: 13, 14) is "whatsoever ye shall ask in My Name, that will I do . . . if ye shall ask anything in My Name, I will do it." The same thought is, you see, twice repeated. Plenty of people will say that they have asked something, over and over again, in Christ's Name, and have not received it. Has He then failed to keep His promise? Let us look again at the text and the context. This promise was made to disciples—true and loving, though weak, disciples. Judas had already left them. So, one who has the right to claim the promise, is only a disciple who loves his Master and is pledged to accept obediently whatever is His will. Then it is only a promise to give whatever is asked in His Name. That does not mean only the use of the familiar words, "through Jesus Christ our Lord," it places the petition absolutely in Christ's hands to deal with entirely as He sees best. It is His business then, not ours. He will only undertake it if we trust Him to send the answer when and how He sees to be best.

The prayer we have offered earnestly for years, is very precious in the eyes of our Elder Brother, and the answer is absolutely certain. The more trustfully we leave the matter in His hands, the more perfectly He can and will answer it. Indeed, He is answering it now, though we may not be clear-sighted enough to recognize the answer. He gives us beautiful proof of His faith in our loyal love, when He gives us the privilege and opportunity of trusting where we cannot see. If we could see, we should have no chance to trust. Let us prepare ourselves, and hold our hands and hearts to receive the gift—it will be far more splendid than we expect. "This is the confidence we have in Him, that, if we ask anything according to His will, He heareth us. And if we know that He hear us, whatsoever we ask, we know that we have the petitions that we desired of Him" (1 S. John v: 14, 15); but they must be "according to His will," asked "in His Name." And they must not be presumptuous. It is useless to sow weeds and pray God to send a harvest of grain, to choose an evil course—like Balaam—and pray to "die the death of the righteous." Someone has said: "What men usually ask



From the Bayeux Tapestry.

The section of tapestry embroidered by Queen Matilda and her ladies at the time of the Norman Conquest, 1066 A. D., showing Halley's Comet. "Istimirant stella" means, "They see a star." The tapestry is now at Bayeux, France.

have need of before we ask Him. Then the quiet majesty of the Lord's prayer is put before us as a pattern, in which God's glory and the increase of His royal power over the hearts of men come first, and our own needs (never separated from those of our brothers) are laid in simple trustfulness before Him. We ask for daily food, strength and forgiveness from One who has infinite power to uphold us all through life.

Then the second reference (S. Luke xi: 1-13) is an encouragement to wait in undaunted hope and sure confidence for the answer to our prayer. We are asking a Father for needful food, and can

noble, patient and brave. If we seem to get no answer to our prayers, let us look up and thank our Father that He is giving us a chance to grow patient and trustful. We can only win the grace of Patience by enduring patiently. We can only win the grace of Trust by accepting trustfully from our Father's hand many gifts which we cannot understand—we may not learn their value until death has given us wisdom; but, because they come from our Father, we know they are just what we need most. We cannot gain the grace of Courage except by facing danger, nor Fortitude except by enduring hard things.



The Franz Hals Family Group.

This painting, by the famous Dutch artist, Franz Hals, was for many years in possession of an old English family, but was recently bought by a New York banker, Otto Kahn, for \$500,000, the highest price ever given for a painting. The painting represents the artist, his wife, son, daughter, and little black

trust Him not to disappoint us. "If a son ask bread of any of you that is a father, will he give him a stone; or if he ask a fish, will he for a fish give him a serpent?" A wise and loving earthly father does not immediately give everything his child asks for. The child may beg for rich food, and his father—just because he loves him—may give bitter medicine instead. The child may ask for holidays, and be sent regularly to school, may plead to be allowed to sit up late and be sent to bed. A kind father is one who does for his child what his own wisdom sees to be best, never allowing

"Father, I do not ask  
That Thou would'st choose some other  
task,  
And make it mine. I pray  
But this; let every day  
Be moulded still  
By Thine own hand; my will  
Be only Thine, however deep  
I have to bend, my hand to keep.  
Let me not simply do, but be content,  
Sure that the little crosses each are sent,  
And no mistake can ever be  
With Thine own hand to choose for me."

The next reference (S. Luke xviii:

for when they pray to God, is that two and two shall not make four." Consequences are painful sometimes, but they teach us valuable lessons.

DORA FARNCOMB.

Resolved!

It is generally our own fault when we get the worst of it, so let us smile at our experience and get ready for the next calamity.—Buster Brown.

## 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 book at school, or age, if you have left school, in each letter sent to the Beaver Circle.]

We are very rich this time,—no fewer than two fairy stories written by our Beavers! This is fine,—so much better than simply a list of your brothers, sisters, cows, sheep and horses. I hope that, this summer, we shall have very interesting letters from you all, about your walks, your games, the birds and flowers you see, your gardening, anything strange or unusual that you find to write about,—stories, too, if you can "make them up" out of your very own heads.

I have been wondering how many of our Beavers live near the sites of old Indian towns or forts. I am particularly interested in this subject, as I am making a collection of Indian pottery, grass work, etc. Surely our Beavers who live near Orillia should be able to tell us some interesting Indian legends of that locality. There are many other points, too, where events in Indian history have taken place. Can't we make a "collection" of these stories, too? P.

### A Strange Old Woman.

Dear Puck and Beavers,—I have written before to this wonderful corner, but when I wrote before "Cousin Dorothy" was the manager, instead of "Puck," who is a mysterious article, and whom nobody belonging to this Circle has seen that I know of. I am going to tell you a make-believe story I wrote the other day; there is not a true word in it that I know of, but it is a story anyhow.

Once upon a time an old woman and her son Samson went out for a walk. It was towards evening, and they were not going far as it would soon be dark. The path they took was on a public highway where many tramps stayed, but they did not come across any tramps, but an old woman nearly doubled with age. She was pushing her way along the road as fast as she could, by the aid of an old stick, which she was using as a cane. Samson's mother took pity on her, and told her son to run home after their old chaise and horse, and they would keep her overnight. He did as he was told and was back in a course of ten minutes. He and his mother lifted her in the chaise and they walked along beside her all the way to their home, where she was carefully lifted out, carried into the old house, and laid on an old couch, where she stayed until late that night. She was given a bowl of warm gruel and some warm milk, after which she fell asleep. Samson and his mother then put the room to some extra order, drew the shades and bolted the doors, and, thinking the doors and everything all right, went to bed in the next room, where they could hear the old woman if she moved. They soon fell asleep, and never awoke until the early dawn of morning, when all things had taken a great change. The bed they went to sleep in the previous night was now a golden one, and the clothes they had taken off the night before as old rags, were now lovely garments of silk and satin. They were very, very much astonished, and wondered who had carried them away from their old home. They got up and dressed, and went to look around at the things, and they came to the conclusion that the old woman they had brought home the night before, who was nowhere to be seen, was a "fairy." Samson now went to do the morning chores at the barn, and, to his surprise, the barn was changed also to

a wonderful one of enormous size, and, instead of no cows, one horse, and one chaise, they now had six cows, four horses, and two beautiful cabs, and everything was beautiful. The house was a beautiful mansion, as lovely as the castle of any king.

No more was seen of the old woman, but everything went well with Samson and his mother ever afterwards. This is the end of my long story, and I am rather afraid it is too long to print. I expect to try the Entrance this summer. Hoping this will escape the w.-p. b., I remain yours, as ever,

CATHERINE McCALLUM.  
(Age 12, Book IV.)

R.-R. No. 2, Iona Station P. O.



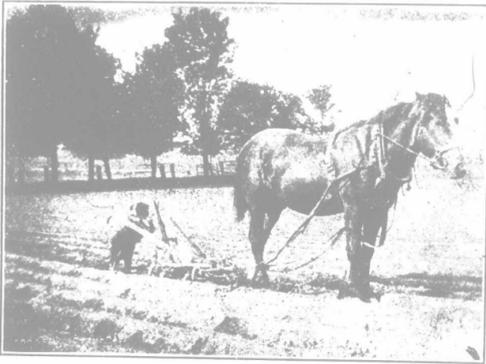
"My Faithful Old Friend, 'Askim.'" Photo taken by one of our Beavers, Kenzie Shurrie, Brussels, Ont.

### The Gradual Fairy.

Dear Puck,—As I saw my letter printed in "The Farmer's Advocate" some time ago, I thought I would have courage enough to try it again, hoping it will escape the w.-p. b.

Sorry to say I have not much news, but will tell you about a little story called "The Gradual Fairy."

Once upon a time there was a Mother Breeze, and she lived, with her seven children, inside a hollow tree. Sometimes they thought of moving, because their house was old and leaky, and there was always a draft; but the Mother



When Farm Help is Scarce in Waterloo County. Photo by J. S. Hilborn, Roseville, Ont.

Breeze put it off, for, she said, when the children were old enough to travel, they could go out West and live with their Grandfather Cyclone, who was very rich, and owned a prairie. As it was, Mother Breeze had to work for a living; and one morning she got up early, and said to the children: "It is going to be very hot to-day." Now, the children knew what that meant, for when it was hot their mother always had work to do, fanning the Sunset Lake.

So they said, "Oh, let us go with you."

"No, my dears," said mother, tying on her work apron and her wings. "If I were going for one or two hours, it would be all right, but a whole day is too much."

So Mother Breeze began looking around for a leaf, which she pasted over the door when she was away so the children couldn't get out. The children shed bitter tears, for they knew it would be very dark, and they could not see to play. The mother said, "If the Green Goblin comes, don't let him in, for it is going to be a hot day, and he would breathe you all up." Then they began asking questions about him, but still the mother warned them.

By this time the mother had found the leaf, and had pasted it over the door, so she left. Gradually the children heard a noise, which they knew must be the Green Goblin, so they began whispering now. One of the little children said, "We are not at home to-day." "Oh, yes, you are, Little Breezes," said he, "for I hear you talk." "You don't hear us at all, for we are very still," said one, "but we know you are the Green Goblin, for you never go about without a noise." "Indeed, I am not," said the visitor, earnestly, "I am a beautiful fairy who has come to call on you." "No, you are not a fairy," said one of them.

Then the Green Goblin turned away grumbling, and went to the Thunder. He then said, "Please take away this noise," so the Thunder took it away. Then he came back again and said, "Little Breezes, are you at home? I have come to call." Now, they became so delighted with the voice, they tore down the leaf and let him in. "I will stay here," said the Gradual Fairy, "till your mother comes, and see that nothing harms you. Have your afternoon nap, Little Breezes, and do not be afraid." Then they dropped off to sleep, and knew no more until, at six o'clock, their mother blew open the leaf and came in. Mother Breeze had their tea ready in a short time, and when they came to tea they found the Fairy was gone. They all grew fine and are married now.

VERNA IRENE WEIR.  
(Age 15, Book IV.)

Maple Grove P. O., Ont.

### Our Letter Box.

Dear Puck and Beavers,—I have been a silent reader of this Circle, and always thought I would write too, but never did it. My father has taken "The Farmer's Advocate" about twenty years. I live in the village of Colpoys Bay, in the County of Bruce. Its population is about two hundred. I am in the Entrance Class. I intend trying the Entrance Exam. next midsummer. The schoolhouse is just across the road from our place. We have a Mason & Rich piano. I have taken over a quarter of music lessons.

The bay here always freezes over in February; then we have fine skating. I learned to skate this winter, and think it is great fun.

Before there is much snow on the ice, we use ice-boats. When the ice gets about a foot thick, the people drive over the ice to the town of Warton. It is three miles away, if you go by land, and about the same on the ice, only you miss two big hills. These hills are fine for sleigh-riding at the first of the winter. There are only a few rods at the bottom of one when the other meets it. They are about half a mile from the village. There is a nice creek that runs through the village, which makes the water handy.

EFFIE M. POST.

(Age 14, Book IV.)

Colpoys Bay, Ont.

Dear Puck and Beavers,—This Circle is my whole interest in "The Farmer's Advocate," although I read other parts also, and this is my third letter to it. My other letter, and the story of "The Little Cloud," both were printed, and I hope this will be also, for I am going

to tell you a story of a little bird that flew into our schoolroom one day.

This little bird got in some way or other and started flying around the room. Perhaps it would settle on the stovepipe or a picture-frame for a minute, but, on examining it, I noticed it had a broad, pale blue tail, a short, stubby, black and white tail, and also wings of the same colors. It had a spot of black on its head, and a white breast. It also had a beak of about one inch and a half long, which it held open all the time. It flew on one of the boys' desks, and he caught it and gave it to the teacher. She put it in a box, but it got out and flew away.

Now, friends, I will tell you why I told you that story; it was because I want you to tell me what kind it is.

Will some of the Beavers kindly correspond with me?

A few riddles:

What word is nearly worn out? Ans.—Stares; because it has a tare in the middle of it.

What is the longest word? Ans.—Smiles; because it has a mile between the first and last letters.

Why is a bad boy like a dose of medicine? Ans.—Because the boy you take before you shake, and the medicine you shake before you take.

What is it that the more you take away from it, the larger it gets. Ans.—A hole.

LOTTIE HOWIE.  
(Age 11, Book III.)

Massie, Ont.

Was the bird a blue jay? But then the tail of the jay is chiefly blue, with black bars and a few white feathers. It also has a crest, which you did not mention. Has anyone else an idea?

### Note of Thanks.

Little Bernice Breeze got so many letters while she was in the hospital that she cannot answer all by mail, so she sends thanks to all the Beavers who were so kind as to write to her. She says to tell you that the letters helped to pass away the weary time while she was lying on her back. Perhaps she will write a letter to you all in the Beaver Circle before long.

## The Ingle Nook.

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

### Effect of Home Influence on National Life.

[Paper given at Ospringe Women's Institute, Centre Wellington, by Miss Mary Hindley.]

The subject assigned me seems particularly suitable for a society with "For Home and Country" as its motto. In fact, it seems like paraphrasing our motto and making it the subject of an essay. Without presuming to tell all that the Women's Institute stands for, I shall try to deal with this subject as it relates to woman's position in the world.

We all know that during the last fifty years woman has, so to speak, come to the front. Previous to that time her sphere had been almost exclusively in the home. This half century has produced a revolution in public sentiment in regard to woman's position, until now she is educated alongside man, and almost every known vocation is opened to her. She competes with man in business life, farming, the various professions, literary work, and she even enters the pulpit in spite of the teaching of the great apostle, who said, "It is a shame for women to speak in the churches." In these various callings she has shown remarkable talent, and has proven her ability to grapple with all sorts of situations. Women's clubs and organizations have repeatedly contended that woman is man's equal in intellect and executive ability. That they should next ask for a voice in government should not alarm us, considering the trend of the times, certain classes of women demanding the franchise is no cause for amazement.

ment. We do wonder, though, that they should adopt the methods of street rioters and mobs. We have a right to look for statesmanlike conduct in those that aspire to be statesmen (or stateswomen). Who would think a person who would break a bottle of corrosive acid over a ballot box, or one who horsewhipped a government official, or threw stones from a roof into the midst of a ministerial banquet, fit to have a voice in government? Surely no one.

These are not the only women, however, who have brought down the world's contempt on themselves by their ridiculous conduct in public positions and their contempt for home life. It really looks as if woman, as far as public life is concerned, has, to use an everyday expression, reached the end of her string. An eminent professor says, "The most disquieting feature of the times is the revolt of woman against her motherhood, and her claim to be on an equality with man, and to compete with him in every way."

Now, what is the cause of all this? Not education surely, but the fact that the education of woman is still in an evolutionary state. She has, in trying to rival man and set up a war between the sexes, lost her greatest power in the world. I think I can best explain what I mean in the words of a New York lawyer, who was asked at a banquet to respond to the toast "The Ladies." He said, "I rise to do honor to woman, once our SUPERIOR, now our EQUAL." He meant that in stepping out of her natural kingdom, the home, and attempting to compete with man in his legitimate work, she had lost her wonderful power over him and the chivalrous deference which he formerly paid her.

That is man's opinion, and woman is fast coming to see that home provides scope for the exercise of the very greatest ability and the very highest intelligence. Through the home, too, she can best influence the world, for there she has the making of the future men, and "the hand that rocks the cradle" is indeed "the hand that rules the world." History is full of examples of the influence of woman in the making and government of nations, but that influence was always exerted through a father, son, brother or husband, who went out into the world and carried out the ideals which his "ladie faire" expected him to exemplify. King Arthur thus stated his charge to his famous Knights of the Round Table:

"I made them lay their hand in mine and swear:  
To ride abroad redressing human wrongs;  
To speak no slander—no, nor listen to it;  
To lead sweet lives in purest chastity;  
To love one maiden only, cleave to her,  
And worship her by years of noble deeds  
Until they won her; for, indeed, I knew  
Of no more subtle master under heaven.  
Than is the maiden passion for a maid.  
Not only to keep down the base in man,  
But teach high thoughts, and amiable  
deeds,  
And courtliness, and the desire for fame,  
And love of truth, and all that makes a  
man."

Literature is full of the praise of the home-keeping woman, and the wonderful influence of home.

Solomon, the wise man, thus, in part, describes the excellent woman:

"Who can find a virtuous woman, for  
her price is above rubies.  
The heart of her husband doth safely  
trust in her, so that he shall have  
no need of spoil.  
She will do him good and not evil all  
the days of her life.  
She seeketh wool and flax, and worketh  
willingly with her hands.  
She riseth up while it is yet night, and  
giveth meat to her household and  
their portion to her maidens.  
She girdeth her loins with strength,  
and strengtheneth her hands.  
She is not afraid of the snow for her  
household, for all her household are  
clothed in scarlet.  
Her husband (not herself) is known in  
the gates, where he sitteth among  
the elders of the land.  
She openeth her mouth with wisdom,  
and in her tongue is the law of  
kindness.

She looketh well to the ways of her household, and eateth not the bread of idleness.  
Her children rise up and call her blessed: her husband also, and he praiseth her.  
Favor is deceitful and beauty is vain, but a woman that feareth the Lord she shall be praised."

Burns, in his most beautiful poem, "The Potter's Saturday Night," after describing the rigid discipline and simple piety of the Scottish peasant's home life, says:



An Attractive Home.

Upper portion shingles stained dull olive. Lower portion might be brick, cement blocks, or stone.

"From scenes like these old Scotia's grandeur springs,  
Which makes her loved at home, revered abroad.  
Princes and lords are but the breath of kings,  
An honest man's the noblest work of God.

Then how'er crowns and coronets be rent,  
A virtuous populace shall rise the while,  
And stand a wall of fire around their much-loved Isle."

The shining steps of Nature, shares with man  
His nights, his days; moves with him to one goal,  
Stays all the fair young planets in her hands—  
If she be small, slight-natured, miserable,  
How shall men grow?

For woman is not undeveloped man,  
But diverse. Could we make her as the man  
Sweet love were slain; his dearest bond is this,

contented and happy, although she is confined so much. I hope she will be able to go out this summer. Please remember me to Forget-me-not and Vera. Dewdrop's buckwheat pancakes are delicious.

Would any of the Ingle Nookers tell me a good way to clean white kid gloves?

I will now close my letter with recipes.  
Farmer's Fruit Cake.—Three cups dried apples (soaked overnight), two cups of molasses. Chop the apple, put in molasses, and simmer on the stove two hours; one cup of sugar, one cup of butter, one cup of buttermilk, four cups of flour, two eggs, one teaspoonful of soda, one heaping teaspoonful of baking powder sifted in the flour, spices to taste.

Buttermilk Cake.—One cup of white sugar, butter or lard size of an egg, one egg, one cup of buttermilk, one nutmeg, one teaspoonful of soda dissolved in buttermilk, half a cup of chopped raisins, flour (not too stiff). If you use lard, add a pinch of salt.

Cake Filling.—Half a pound of figs or dates chopped fine, two-thirds cup of water, half a cup of granulated sugar; cook until it thickens somewhat; put in filling when nearly cool.

BLUE-EYES.

Brant Co., Ont.

To clean white kid gloves or shoes, get a clean white cloth, dip a corner of it in gasoline, then in powdered chalk, and rub the soiled articles until all the dirt is removed, then let them dry in the open air, but not in the sun. Never use gasoline in a room with fire or lights of any kind, nor yet in the direct sunshine, as it is very inflammable. Always keep it tightly corked, and in a cool place.

Flies on Plants.

I saw some time ago in "The Farmer's Advocate," a question asked about house plants affected with little flies and small white worms in the earth. My plants were the very same. I tried a remedy of a good suds, not too strong, made of Life Buoy soap, and put on two applications, wetting the earth well, but not the plants. It has killed both flies and worms, and the plants are looking and doing well. The question was asked if the flies turned into the worms. I think they do.

MRS. W. A. McMULLEN.

N. Renfrew, Ont.

Flies lay eggs, the eggs hatch into "larvae" (worm-like creatures), these in turn are transformed into "pupae," and from the pupa-cases the flies emerge full-grown.—This is the explanation given by scientists. The transformation may be observed by anyone who will take the time.

A Wedding.

A little lady asked a question about a wedding, but forgot to give name and address. It is against our rule to answer questions for anyone except subscribers, or members of subscribers' families, who give full name and address. Will correspondents kindly remember to ask questions at least one month before answers are needed.

Doing Up Strawberries.

Dear Chatterers,—At the earnest request of Lankshire Lass, I draw in my chair once more to your happy Circle. I have been promising her for a long time to write to the Nook, but have felt too sorrowful to do so. I lost my only boy, a dear child, almost five years of age, last winter. He was my first baby; all mothers know what that means. I had only two before he died, and now I have two again, as a tiny little girl arrived in time for breakfast Christmas morning, so there are more than two Ingle Nook babies.

Now, Chatterers, I suppose by the time this letter appears in "The Farmer's Advocate," the house mothers will be thinking about strawberries, so I am going to give you a new recipe for doing them up without cooking. They are lovely through the winter, and keep just as well as if cooked.

Pick good sound strawberries, weigh them, then weigh out the same amount of sugar. Put in large delft or granite basin, mixing berries and sugar well with a spoon, then take a potato-masher and mash the berries all up. Let stand overnight, bottle and seal, and you will have



Farmhouse 300 Years Old.

Mettingham-Ringay, Suffolk, Eng. (Chimneys may add the distinctive touch to a house.)

Tennyson thus summed up the war of the sexes a half a century ago, but the modern woman has been slow to read it:

"The woman's cause is man's, they rise or sink  
Together, dwarfed or godlike, bond or free;  
For she that out of Lothe scales with man

Recipes—Cleaning White Kid.

Dear Baine Durden,—I have never written to your cosy little Nook before, but have enjoyed reading the chats which appear from week to week in the columns of your paper. I am sure I must thank you, dear Dame Durden, for the helpful talks which I have read, also Lankshire Lass, for her sweet letters. She is very

## Before You Buy a Walking Plow, Examine the Cockshutt



Plow No. 11



Plow No. 21

**A**LL walking plows, no matter how carefully constructed, should be thoroughly tested before being placed on the market. We test every plow before leaving the factory and we know that these two draw much lighter than ordinary walking plows and they will clean in any soil.

As regards the quality of the materials and workmanship, both of these plows—in fact, the whole Cockshutt line—are recognized by farmers all over Canada as being far superior to any other make. We strongly advise you to put your money into one of these implements—they represent honest construction.

**No. 11** This plow has been particularly designed for clay land, and it is certainly proving itself a leader in this class of work. The beam is made of very heavy high carbon steel and will stand the strain under all soil conditions. The mold board is made of special soft centre crucible steel and the share of the best grey iron, chilled extremely hard.

This plow is always furnished with knife colter unless otherwise ordered. We can furnish jointer and wheel if desired. An excellent general service plow, that will give you complete satisfaction.

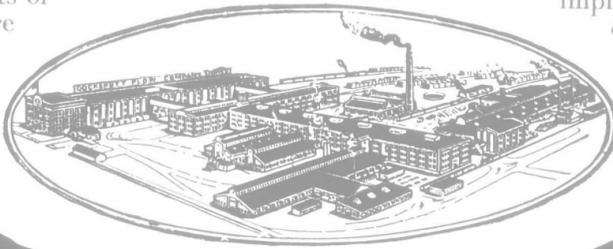
**No. 21** Unquestionably the most popular walking plow in Canada. The extra leverage afforded by the long handles makes the plowman's work very easy.

The mold board and share are made of the same high quality materials as in our No. 11 and the workmanship throughout is the very finest.

This plow turns an excellent furrow from 10 to 12 inches wide and from 4 to 8 inches deep. Shipped with knife colter, or can also furnish jointer and wheel. Let us send you further particulars of this plow and refer you to our dealer, because we know that this plow has merits which will appeal to you at a glance.

We show below an illustration of our plant at Brantford. It is here that we manufacture over 120 different styles of plows and the most complete line of cultivating machinery in Canada.

Our Catalogue describes most of these implements of which there are none as good in the agricultural world.



Every reader requiring farm implements of the finest quality should write for this Catalogue.

If you are interested write for Catalogue

**COCKSHUTT** PLOW COMPANY **BRANTFORD**  
LIMITED

the real strawberry flavor in the winter, and no standing over a hot stove. I have tried it, and been successful.  
Quebec. JAUNITA.

**Bleaching Mull or Muslin.**

I have a mull dress which is faded by the sun. It was light blue. Can you tell me what I can do to make it white?  
Durham Co., Ont. M. M.

Scientific American gives the following bleach: "Boil in strong solution of caustic soda, rinse very thoroughly in clear water, steep for half an hour in a strong, clear solution of chloride of lime in water, wring out, and rinse in water containing three-per-cent. sulphuric acid. Rinse thoroughly in running water." This is for calico. I should think a weaker solution of chloride of lime would do for mull. Remember to have the crystals quite dissolved, as, if any of them remain, they may burn the fabric. I believe I should try a teaspoonful of chloride of lime to three quarts warm water, and let the mull stand in the mixture for about an hour. If not white enough, the solution might be made a little stronger, and process repeated.

**Poultry Lice—Questions.**

Dear Dame Durden,—As I have read so many useful articles in the Nook, I would like to thank you and the editors of "The Farmer's Advocate" for the light you have thrown on so many subjects. It's which will get "The Farmer's Advocate" first when it comes in the house.

I have just read "How to Rid Poultry of Lice." Sulphur is good, but the quickest louse-killer I ever tried is "Quassia Chips." It can be got at any drug store. Boil and strain, and put on with a brush, holding hen by the feet.

Can any of the writers tell me anything about guinea hens, and where can I get peahen's eggs?

Can cement be made a light green color, and how?

Also, what would it cost to have a fountain made, and could water be taken from a cistern to it, a distance of four rods?

A READER OF "THE ADVOCATE,"  
Northumberland Co., Ont.

A small advertisement placed in our "Wants and For Sale" column will quickly bring you information re eggs.

For green color in cement, add half a pound of yellow ochre to 100 lbs. cement. If this does not turn it green enough, add a little Prussian blue. Experiment with the quantity until you have the right proportions for the shade you want.

To have a fountain, you would need either a gasoline engine and force-pump, with a return pipe to carry water back to cistern, or an elevated tank, with windmill.

**Ammonia Cookies.**

Dear Editor,—I saw a request as to how to make ammonia cookies: 1 cup lard, 2½ cups sugar, 5c. worth oil of lemon, 5c. worth baking ammonia, a little salt, 1 pint sweet milk, 2 eggs, flour. Beat lard and sugar, add lemon, dissolve ammonia in warm milk, add eggs, salt and flour. Don't mix too stiff, roll thin, pick with fork, bake quickly.

Wellington Co., Ont. M. H. C.

**Canning Fish and Corn.**

Dear Dame Durden and Ingle Nookers,—In reading the letters, I often thought I would like to write too, and this week there has come an opportunity, as I think perhaps I can help "Farmer's Wife" on the canning fish question. I have never canned suckers in this way, as we always have plenty of whitefish and herring, but am quite satisfied the sucker bones would soften as well as the whitefish bones. We cut the fish in thin slices, through the back, and pack closely in sealers, sprinkling a little salt and pepper on each layer, and seal up tight and boil,—one-quart sealers from five to six hours; then remove and tighten the tops before setting them away, and when wanted for use add the vinegar.

Corn can also be canned in this way by selecting nice young ears. Cut the corn off before being cooked, and pack in sealers and boil three hours.

I would like to write a letter and tell about our Manitoulin Island. If any of

the Nookers are interested in it and would like to ask any questions, I should be glad to try to answer them.

Ammonia Cookies.—3 eggs, 2½ cups sugar, 1 cup butter, 2½ cups sweet milk, 5c. oil lemon, 5c. ammonia.  
GRAYBIRD.

Manitoulin Island.

**The "Farmer's Advocate" Fashions.**



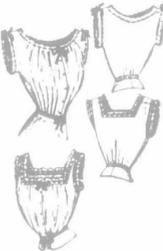
6613 Semi-Princesse Dress, for Misses and Small Women. 14, 16 and 18 years.



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6617 Corset Cover, 32 to 40 bust.

Give age or measurement as required. Price ten cents per number. Order by number. Address: Fashion Dept., "The Farmer's Advocate," London, Ont.

Scott—"I always thought it was tough on Adam to rob him of his rib."

Mott—"Yes, but on the other hand it was the making of Eve."



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You can keep the children in pretty dresses with the aid of Diamond Dyes.

If the little one's dress has become soiled or faded, you can restore its color and freshness with a bath in Diamond Dyes. Or you can change its color just as easily.

A ten-cent package of just the right shade will dye old, faded, soiled clothes so they'll look just like new.

And not only look new, but the chemical action of the dyes will add life to the material and give it longer wear.

**Diamond Dyes For You**

You may have tried dyeing some old material before and were not satisfied. But it wasn't Diamond Dyes you used. Diamond Dyes are far superior to any in the world, and give perfectly splendid results.

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Diamond Dyes are "The Standard of the World," and the only dyes perfect in formula, positive in action, certain in result.

**THE TRUTH ABOUT THE USE OF DYES.**

Diamond Dyes are the standard of the world, and always give perfect results. You must be sure that you get the real Diamond Dyes, and the kind of Diamond Dyes adapted to the article you intend to dye. Beware of imitations of Diamond Dyes. Imitators who make only one kind of dye, claim that their imitations will color Wool, Silk, or Cotton ("all fabrics") equally well. This claim is false, because no dye that will give the finest results on Wool, Silk, or other animal fibres can be used successfully for dyeing Cotton, Linen, or other vegetable fibres. For this reason we make two kinds of Diamond Dyes, namely: Diamond Dyes for Wool, and Diamond Dyes for Cotton.

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

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

**Diamond Dye Annual—Free** Send us your name and address (be sure to mention your dealer's name, and tell us whether he sells Diamond Dyes), and we will send you a copy of the famous Diamond Dye Annual, a copy of the Direction Book, and samples of dyed cloth, all FREE. Address:

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is made from absolutely PURE WOOL navy or black serge, best Indigo Dye, thoroughly shrunk and absolutely guaranteed to keep its color. The workmanship is unexcelled in this country. The pockets are made according to our special process, and will neither sag nor get out of shape. The real value is \$13.50. Our Special Price, PREPAID to any part of Canada... **\$10**

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illustrating New York's latest models, and containing samples of the very newest materials for the present season. This chart, which is so simple and certain to be fitted PERFECTLY. Write NOW! Don't put it off until another time a post card will do—you'll get the Style Book by return mail.

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Both **ASPHALT** and **RUBBER** are made in three thicknesses.

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We spare no expense in the making of Brantford Roofing. It is the highest grade roofing on the market to-day. If you want that kind of a roofing look for rolls bearing the trademark shown below. 20



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BRANTFORD, CANADA

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

## The Roundabout Club

### Results of Competition IV.

In Competition IV., "The Highest Type of Farmer, and How He is Evolved," the prizes are distributed as follows: (1) T. J. Rutherford, Grey Co., Ont. (2) "Honor Bright," Halton Co., Ont. (3) W. J. Way, Kent Co., Ont. Mr. Rutherford's essay was considered the most original; that of "Honor Bright," comprehensive, though a little too long; Mr. Way's, perhaps the most succinct.

Many other good essays were submitted, and some of them will probably be published later. The Honor Roll is as follows: "L. A. C.," O. A. C., Guelph; "A Lesser Spark," Bruce Co., Ont.; Nova Scotian, Cumberland Co., N. S.; G. H. S., Middlesex Co., Ont.; K. C. McDiarmid; A. McKim, Colchester Co., N. S.; Mrs. W. H. S., Dufferin Co., Ont.

### THE PRIZE ESSAYS.

#### "The Highest Type of Farmer, and How He is Evolved."

Essay I.

Punch has somewhere caricatured the ideal farmer as a huge monster, almost like the proverbial John Bull, sitting in a large, padded arm-chair, with a glass of champagne on the table at one hand, and on the wall at the other an electric switch-board, by which he was managing his whole farm, simply by pressing buttons. Others bring him out as an elegantly-dressed gentleman with a plug hat and gold-headed cane, and a general do-nothing air. But these are only the ideas of dreamers, and how revolting they are to the farmer of to-day, who loves a little work, and finds himself very much at home and very comfortable in his brogues and overalls! The day for discarding these has never yet come, and never can, so long as there are sods to turn and crops to gather, and a hungry multitude to be fed. No, they cannot be discarded; but that fact shall never stand in the way of our having here in this country the very highest type of farmers possible—farmers who will be a credit to their great calling, and the pride of the nation, industrious, educated, patriotic, well-to-do and contented men, up-to-date in their methods, united for the furtherance of their social and business interests, and proud of their responsible and productive calling, as well as their healthful country homes, into which they will seek to bring all the comfort and beauty possible.

And how is this type of farmer to be evolved? The farmers of this country have developed themselves into a strong, rugged, and healthy race, and how was it done? Not by lying around, was it? No; farming has always been a calling which demanded much muscular labor; but the times are changing, machinery is taking the place of hand labor, and scientific methods are dispensing with much unnecessary labor, and greatly increasing the yield per acre, and the farmer is no longer being judged by his size and strength, but by his knowledge and his ability to use it to the best advantage for himself and his fellow-farmers. And to acquire this knowledge he must study, he must work with his brain, for it, like muscle, can only be developed by use. The farmers of Ontario have much to be thankful for in the way of educational advantages, for even although our public and secondary schools have many disadvantages from the farmer's standpoint, it can at least be said that they are as good as can be found anywhere else. And then we have here in the heart of this Province, and separated by the Provincial Government, the greatest agricultural college in the world, which is thrown open to residents at rates which put it within the reach of all. These, together with the agricultural literature published by the Government and our agricultural journals, the farmer must avail himself of. And this, with the more practical knowledge obtained by experimenting on his own land, will make him a master of his business, a man who, if industrious, cannot help but succeed, and live the most independent and most respected man in the land.

And now, with more education and more leisure, the farmer will find himself

seeking for some recreation, and what will this be? He has very little use for the more-fatiguing out-door sports, as his work furnishes quite enough for him in that line, and, anyway, there is not enough in them to appeal to the average farmer, who likes to "see something" for everything he does. He looks with somewhat of an envious eye upon the culture and social advantages of the city people, and he sees what a control they exercise over him by their superior organization and their almost complete control of the Government. And it appears to him that here, in the improving of the social conditions in the country, and the developing of the financial and political powers of the rural population, is something that differs enough from his regular work to make it very agreeable, and yet will be of great and lasting good to the farmers as a class. But this cannot be done by the work of one farmer, nor a dozen, nor a hundred. It must be the aim and ambition of all, for mutual and persistent work only will make it successful. But, of course, there must be leaders, men of ability, who will be willing to devote much time and thought to this great work. And how must it be begun, or, rather, carried out?—for it has already been begun. Many farmers have already seen the necessity of study along other lines than agriculture, if they are to keep pace with the social and political advancement of the times, and not drift back into the peasantry conditions of the old land. They have seen the advantage of study, embracing the best of English literature, the elements of political economy, the past history of the Dominion and the Empire, and the current political and industrial questions. This must be attained by the use of books, periodicals and newspapers, and what a boon it would be if a good public library was within the reach of every farmer. This, for the present, however, is not to be, and so the farmer must content himself with what books he can buy or borrow; yet, even in this way, if a wise selection is made, he may keep himself always supplied with the best of reading at a very small outlay.

But, this private study, although altogether essential, is only a part of the work. There must be organization. The farmers must unite, and the first step towards this will be in the establishment of rural clubs throughout the country. These will serve two ends: Their meetings will afford a splendid opportunity for social intercourse, and they may also serve as a kind of rehearsal in the way of speeches and debates, regarding what the members of the club have found out by reading and observation. Each of these clubs would perhaps cover a school section, or perhaps more, if convenient, but, to secure any degree of political and industrial power, there must be a larger unit, and this would most conveniently be the electoral district. Thus united, the farmers of each district would be able to put up a candidate to represent themselves at the Dominion and Provincial elections. Then, by the power of all the districts uniting into a great national farmers' union, with an advanced progressive and reform policy which would aim to lift the farmers as a class financially, educationally and socially, to a place equal with any other class in the land, and still give equal privileges to all, they could secure control of the Government, which is their right as the majority. And when this has been accomplished, when the farmer has come to his own, when he is the great ruling, as well as the great producing power of the land, the ideal type of farmer will be possible, perhaps common, and, may I say, perhaps universal.

T. J. RUTHERFORD.

Grey Co., Ont.

### Essay II.

"A calling is judged by the men engaged in it, and, while the farmer has no reason to be ashamed of his calling, he has every reason to be careful that his calling has no cause to be ashamed of him."

This remark was the concluding thought in an advisory article addressed to agricultural students from the pen of Professor Day, of the Ontario Agricultural College. A slight reflection upon the subject which we have under consideration, readily reveals the assimilation of ideas. It is not necessary, however, to dwell further upon the theme of the

# SEED CORN

We offer you the very best that can be got. You cannot afford to take chances. We have tested it.

We offer the varieties that are used extensively in Ontario. They are all good. However, one variety may be particularly adaptable to your wants and land.

**Leaming Corn.**—Splendid for the silo. Cobs well and gives a good supply of fodder. Bush. \$1.25.

**White Cap Yellow Dent.**—Men who have grown this grand variety for years will have no other, they are perfectly satisfied. Like the Leaming, it gives a good percentage of cobs and makes very sweet ensilage. Bush. \$1.25.

**Pride of the North.**—If you want cobs in your ensilage this is the variety to grow. It is early, the stock is not large, but very nutritious. Bush \$1.25.

**Mammoth Southern Sweet.**—If you are not particular about the cobs, but like plenty of fodder, this is the variety for you. The stocks are very large and foliage heavy. Bush \$1.15.

**Red Cob.**—Like the Mammoth Southern Sweet, is grown for the sweet fodder. Bush. \$1.25; 5 bush, lots, \$1.25.

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These varieties will rip in almost any part of Canada, under favorable circumstances. Many growers use the flint corns along with the dent in equal proportions. This gives, they claim, a richer and sweeter ensilage.

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**Automatic Hand Corn Planter** (the best made) \$1.75 each.

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Established 1892.

When Writing Mention The Advocate

dignity of agriculture as a calling. Unquestionably, it is worthy of the best that is in men, but whether agriculture attains and holds its high place depends, as has been stated, on the men who engage in the occupation. Are they men of sordid ideals? Then their calling is degraded. Do they cultivate the mercenary spirit, value all things from the standpoint of dollars and cents, regard anything approaching culture as unnecessary to their business? Then they fail to realize the importance of equipping themselves for the high duties of citizenship, nor is it any wonder that the community at large is not impressed with respect for the agricultural calling and is inclined to regard it, indeed, as a business rather beneath the dignity of a person of any degree of social standing or culture. Yet, we assuredly believe that the men engaged in the farming occupation, as a class, compare favorably, aye, to a decided advantage, with the followers of other occupations. By virtue of their calling—the life of toil lived in close contact with nature—they are physically stronger and more healthful, possessed of a moral wholesomeness and an independence and intelligence of thought which cannot be cultivated elsewhere as well as out in God's abundant pure air, beautiful sunlight, and great stretches of earth and sky.

But let us more particularly consider the highest type of farmer. A concise definition of him might be: he, who, with forethought, diligently and intelligently cultivating the soil, thereby wresting from it a good measure of health and a fair measure of wealth, does not forget that which he owes to the country of which he is a citizen, to the community in which he lives, and to himself. He is, above all, a man of broad thought and observation. Along those lines which relate to his business, he has considerable knowledge, born of experience, or accumulated by his habit of observing the result of other men's experiences, and profiting thereby. Nor is he, in his turn, chary of giving a fellow-farmer the benefit of his deductions. He studies his work from the theoretical, as well as the practical standpoint. He is a man who is not too indifferent or egotistical to quietly note and profit by the tests and experiments carried on at or by the agricultural colleges for the general benefit of the farmer. He is a contributor also to a good agricultural journal, and not skeptical either, as to the veracity and intelligence of the person who wields the pen. Nor, on the other hand, is he such a slave to his political principles as to believe and digest everything published by the organ which his particular party patronizes. The market report, however, receives his thoughtful and daily attention. This is essential to the conducting of a profitable and intelligent business. As a true farmer, he keeps ever in his mind's eye the farmers' best interests, and uses his vote and influence to support the political aspirant who will best uphold and promote the agricultural interests. He takes a keen interest in municipal affairs, and, should he be an office-holder, is in public life the same man of fine honor and high principle as in private life. Also, he is an enthusiastic member of a flourishing Farmers' Institute or rural club. If his voice is not often heard in discussion, his thoughts are not idle; he listens to both sides of the questions of the day, and calmly draws his own conclusions. Always he exhibits the student's willingness to learn—a trait which promises well to mature to a well-informed, broad-viewed mind.

Then, too, the highest type of farmer is always progressive—progressive in thought. He gets out of the narrow, egotistical groove, by finding time to accomplish considerable reading, or by coming into contact with people. If possible, he leaves for a short time his quiet country home and takes a holiday. He realizes that unremitting toil is not good for a man. "It cramps and weakens the muscles, indurates the fibre of his being, narrows his outlook, contracts his views, and renders him unresponsive to sublime thoughts and new ideas." So he goes to the city and tries urban life for a short time. What is the result? He may or may not particularly enjoy his visit, but he comes back refreshed and invigorated, and, oh! best of all, he has a new courage for his work, and he now perceives that which he scarcely realized

before,—the blessings with which he is surrounded. If a holiday is not feasible, he substitutes a hobby or recreation, only something along mental lines, for it is the physical which requires relaxation. It may be music, the study of astronomy, or standard literature, which is his favorite pursuit. Whatever it is, he finds interest and pleasure in cultivating it, and, incidentally, derives considerable mental culture and information.

It is right that this high type of farmer be progressive in ideas. He must keep pace with the times. He invests in up-to-date machinery, which will help him to better do his work and economize in time. With a generous hand, he provides for his household those conveniences which save labor and strength, counting the money thus expended well spent. Alas, although his home life is simple and unostentatious, he gladly adds those little extras, those touches of the beautiful and artistic, which help to make the home and surroundings so attractive. The highest type of farmer strives toward culture, and as surely as he develops those intrinsic qualities of self-reverence, self-knowledge, self-control, he attains it. The badinage of the irrepressible jest columns of the newspaper concerning Farmer Cornstassel, his ignorance and uncouth appearance, is dying out, for the best type of farmer does not drive into town in a disreputable conveyance and careless attire. Respect for his calling and for himself demands that he make a consideration of these things.

Industry, intelligence and integrity, is a motto which the life of the highest type of farmer unconsciously exemplifies. Of necessity, because he is of the farming population, he finds plenty of scope for industry. And it is a good thing, thanks to the vigorous climate which creates a necessity for having to work for what he gets, thus developing energy and strength of manhood. But much toil is apt to lead to an apathetic mental state unless it is coupled with intelligence. The highest type of farmer is not a human machine, a slave to toil. No; he pauses to consider how he shall do this thing or that, and thus develops intelligence. But best of all, this high type of farmer stands for integrity, that great national asset,—the strong pillar upon which our national greatness rests. The salutary influence of environment in the country is not conducive to any other than a pure life, for crime hastens to hide itself in the densely-populated cities. In certain rural districts, there is a term applied to express contempt. It is, "gentleman-farmer," and intimates that the person to whom it is applied considers actual manual labor as something incompatible with dignity, or, at any rate, to be performed with gloved hands, and who immeasurably prefers to superintend the performance of the objectionable task from a viewpoint safely removed from the soil of toil. Now, the type of farmer with whom we are dealing has appropriated that title howbeit with a reversal, and an added proposition, and would be known, not without a touch of pride, as a "farmer and gentleman."

Now, we may well ask how the development or evolution of this splendid type of farmer is brought about. The answer, brief as it is comprehensive, is, by education. But let us not misunderstand the term. Dr. Falconer, President of the University of Toronto, defines education thus: "That you and I have studied what we can do, and have bent all our energies to do it, and are growing more able to do it every day." There are different kinds of education; one brings out one type of man. There is the educated lawyer and the educated farmer. In every case, education develops the powers possessed by each. Graver mistake was never made than that oft-repeated one that the lad who, it was thought, did not exhibit sufficient mental brightness to warrant him choosing a profession, would make a farmer. Possibly that same lad possessed the inherent ability to become a capital farmer, but it had not been recognized or encouraged, and at the very outset the dignity and honor of the agricultural calling had been underestimated to him. If there are types of farmers of whom the agricultural calling has reason to be ashamed, can it be greatly wondered at? But the highest type of farmer—is he the product of the past, the present, or to be of the future?

## GLAD MONDAY

"Mother does not get all tired out on Mondays—and her arms and back never ache—since Father bought a

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"We girls do all the washing, and have lots of fun turning the machine. 'It's so easy that we can wash a tubful of clothes in five minutes.' If your dealer does not handle the 'New Century', write for catalogue.

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Let the children drink all they want. Healthful, nutritious, delightful.

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The Arts course may be taken without attendance, but students desiring to graduate must attend one session. There were 1517 students registered session 1909-10.

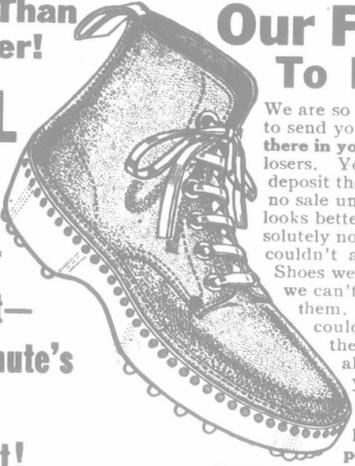
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Please Remember to Mention "The Farmer's Advocate" When Writing

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Could Nowhere Near Realize the Wonderful Advantages of Steel Shoes Until They Actually Tried Them!

Strongest—Easiest—Lightest—Best in Every Way!

The great enthusiasm aroused everywhere by the discovery that Steel Shoes are better for the feet and better for the purse than any leather shoe is attracting so much attention that we give the following for the information of readers:

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Steel Shoes, 6 inches high, \$2.50 a pair; better grade of leather, \$3.00 a pair; extra

grade of leather, black or tan color, \$3.50 a pair; 9 inches high, \$4.00 a pair; extra grade of leather, black or tan color, \$5.00 a pair; 12 inches high, \$5.00 a pair; extra grade of leather, black or tan color, \$6.00 a pair; 16 inches high, \$6.00 a pair; extra grade of leather, black or tan color \$7.00 a pair.

Steel Shoes are the most important discovery for working men in the last 100 years. Any reader desiring to examine them can do so upon deposit of the price he wishes to pay. Just write to The Steel Shoe Co., Dept. 369, Toronto, Canada, state what size shoe you have been wearing and what style you want.

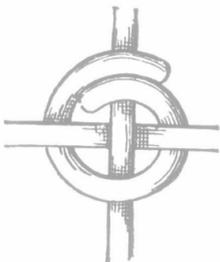
The 6-inch high, at \$3.50 per pair, or the 9-inch, at \$5.00, are the best for ordinary work. The shoes can be returned if not satisfactory, and your money will be refunded. [42]

Don't Delay!

You'll say, "The greatest shoes I ever wore. Don't know how I ever got along without them. No more foot troubles." Every day you wear Steel Shoes you save money, so—

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ROYAL BRAND FENCE

Direct from the manufacturers. No dealers' profits. No agents' commissions. Our plain-printed prices are the standard upon which you should base your purchases of fence. Our direct-to-the-farmer policy has proven a huge success. We are selling thousands of rods daily and receiving many expressions of delight from farmers who were wise enough to order. ROYAL BRAND FENCE is made of all No. 9 Cleveland Hard Steel Wire,

heavily galvanized. The line wires are waived as in coil-spring to allow for expansion and contraction. We guarantee satisfaction, you to be the judge, or money refunded. We are not in any combine. We sell direct to the farmer ROYAL BRAND FENCING on its merits. Compare our prices. They include freight prepaid to old Ontario points.

Number	Line Wires	Inches High	Inches Stays Apart	Size of Wire	SPACING Between Line Wires	Per Rod Freight Paid	SEND FOR A
7-40	7	40	16 1/2	"	9 5.6.6.7.7.8.1	26 1/2 c	FREE
7-40-0	7	40	22	"	9 5.6.6.7.7.8.1	24 c	SAMPLE
7-48	7	48	16 1/2	"	9 5.6.7.9.10.11	27 1/2 c	KNOT.
7-48-0	7	48	22	"	9 5.6.7.9.10.11	25 c	
8-40	8	40	16 1/2	"	9 3.4.5.6.7.7.8	29 c	ORDERS
8-40-0	8	40	22	"	9 3.4.5.6.7.7.8	29 c	SHIPPED
8-48	8	48	16 1/2	"	9 4.5.6.7.8.9.9	30 c	SAME DAY
8-48-0	8	48	22	"	9 4.5.6.7.8.9.9	27 1/2 c	THEY ARE
9-48	9	48	16 1/2	"	9 3.4.5.5.6.8.8.9	32 1/2 c	RECEIVED.
9-48-0	9	48	22	"	9 3.4.5.5.6.8.8.9	30 c	
10-50	10	50	16 1/2	"	9 3.4.4.5.5.7.8.9	35 c	ORDER
10-50-0	10	50	22	"	9 3.4.4.5.5.7.8.9	32 1/2 c	TO-DAY.

We pay the freight on all orders to any station in Old Ontario.

Put up in 20, 30 and 40-rod rolls. REMIT CASH WITH YOUR ORDER by registered letter, post office or express order to

THE SARNIA FENCE COMPANY, Sarnia, Ontario

Delighted Mother (visiting son at preparatory school)—"Well, my darling!"  
Son—"I say, mother, don't look so ghastly pleased before all these fellows."

For Sale: Shire Stallion Bay Prince IX., rising 7 years. Sired by Locking's Forest King. For further particulars apply to: R. D. FERGUSON, Port Stanley, Ont.

Yes, and no; that is, his development is continuous. It began yesterday with the pioneers. Think you their rugged life, filled with hardships, self-denial and simple pleasures count for naught? What of the healthy body, quickened intellect and moral soundness, which is the best endowment of the highest type of farmer? Assuredly the pioneers laid the foundation upon which he builds for true success. "Someone has said of the pioneer days: "This was a time when strength and endurance were at a premium, and intelligence at a discount. Now, the order is reversed, and thought commands a premium." The conditions prevailing in pioneer days do not exist now, and farming is not the simple, easy art it once was. So the highest type of farmer of to-day finds it necessary to study the science of agriculture, to learn of the wondrous principles with which it is underlain. He is being developed by education—agricultural education—for intelligent farming. Long life, health and prosperity to the highest type of farmer of to-day! The heartiness of the wish is only exceeded by the confidence in its ultimate accomplishment, for it is in the to-morrow that greater, grander things will come to pass. The future, with its glorious possibilities and golden opportunities, belongs to the farmer as surely as the great superstructure of our national welfare depends on agriculture.

There are many types of farmers enlisted in the great agricultural calling, of varying degrees of excellence, but an educative force will lift them to nobler and higher ideals until, unitedly, they form the highest and only type of farmer—a type which stands for industry, intelligence and integrity, a mighty bulwark of a mighty nation.

"HONOR BRIGHT"

Halton Co., Ont.

Essay III.

Among the vital problems of the age, surely this one is paramount. The farmer is an indispensable factor, and a force not to be ignored, individually, in the community, and in the nation; but he has not reached the limit of his power, he has not attained his highest efficiency. How can the problem be

solved? By what means can the desired end be gained?

First, let it be observed that neither Providence nor nature is unkind to the farmer. If he is a back number—and there are back numbers—it is his own fault. As Providence enjoins upon us the best employment of our talents, and censures their nonuse, so nature withholds the amplitudes of her treasures from the indolent, the ignorant, and the bungler.

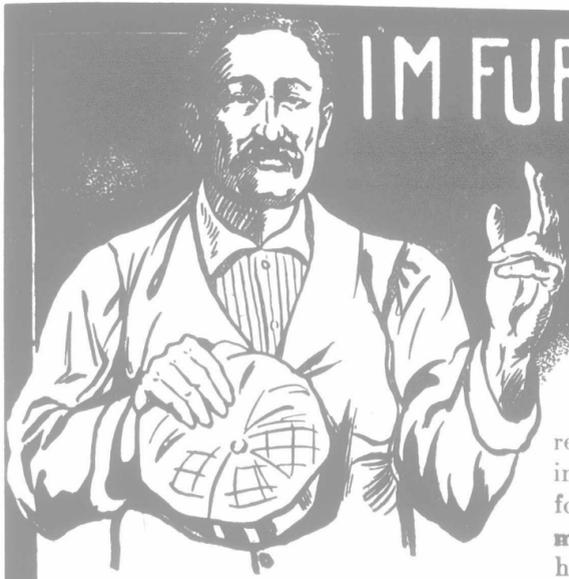
To achieve success, to wield influence under existing strenuous, competitive conditions, the farmer must be at his best. There are no easy by-paths to success, nor are there special helps provided for the man who will not help himself, be he on a farm or elsewhere. The farmer must train his mind as well as his hands. He must forever disabuse his mind of the "anybody-can-farm" idea, which is not yet entirely eradicated. He must dignify his vocation, which is highest of all. He must attain such a perfect type of fully-developed manhood as to command the respect of other orders of men, even to kingly powers, who exalt his vocation by their patronage. There are farmers who seem to regard mere muscular strength as the sine qua non, ignoring trained mind as the chief compelling force. If animal strength or brute force were the prime essential, the red man of the forest, Kaffirs, Hottentots, or Scandinavian giants, might be our superiors,—but what are the facts? The savage, with all his strength and valor, yet lives in a state of nature, or, like the beaver, builds his rude hut on the same simple plan from generation to generation, without change or improvement. In those periods and regions where human intelligence is inoperative, the world is a desert.

Not until his environment becomes changed; not until, by some means, the torch of science has illumined his mind, does primitive man begin to advance or to conceive new ideas. Successive stages in human progress seem also to be in appreciable relation to the exercise and development of the mind. "The man's mind is the man himself," someone has said. The farmer's mind is the farmer himself; therefore, to train the farmer's mind by the best possible means and methods, is to raise him to his highest efficiency and power. If the mind be properly trained and poised, we need not worry about the hands. Hands directed by a well-equipped, intelligent mind, will perform more and better work than those under the command of an untrained mind. But what about the means and methods of training? Some writer has said, "He who reads, rules." Unquestionably, good reading is an important educative factor, as it brings us in touch with other minds and experiences than our own. Another factor is thinking or judging. That which one may read is not always or necessarily sound sense, true science, or correct philosophy. The third factor of mental training is observation—the power to see things, and see them in their true proportions and relations. In strictness, however, these factors constitute both the means and the end of education; for, the greater the amount of our reading, the more intelligently and profitably we should be able to read. The more we reason or think, the better we should be capable of reasoning or thinking. The more we observe, the better we should observe.

Why should the farmer minimize his abilities, or ignore his rights and privileges as a man and as a citizen? Why should he occupy a back seat, or permit men in other vocations to usurp places of honor and trust which of right belong to him? Why, for example, should he send lawyers and doctors to Parliament to make laws for him, or mayhap, against him, when with more culture and more ambition he might be his own law-maker?

The highest type of farmer, then, is the man who reads, thinks, observes—intelligently. Here are a trio or trinity of factors—read, think, observe; or, observe, think, read; for in the final analysis they become one. He who reads, rules—if he read intelligently. To read intelligently, he must of necessity think intelligently, otherwise he cannot, in strictness, be said to read at all. To read, or rather pretend to read—bunglingly or ignorantly, may be worse than useless, it may mean waste of time or self-deception.

Reading, in the broadest sense of the



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That's why I claim to know something about furnaces. It's my business—to get the best possible results from the different heaters. See how I put the word "possible" before results. There's a reason. With some furnaces satisfactory heating is about impossible. So complicated is their construction they fool even an expert furnaceman. **Complicated construction means furnace trouble.** The house is always cold, no matter how much fuel you burn. Now, the Pease

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is different. It is simplicity itself because it's built right. The "Economy" Furnace is so simple that you, or the boy, or the girl can attend to it. Whether it is thirty above or thirty below zero, you can have an even, summery temperature in every room in the house. I have noticed that folks who own Pease Furnaces are a happy, contented lot, because the "Economy" certainly **does** cut out furnace fuss and bother. It's the perfect construction of the Pease "Economy" Furnace that counts. You want to know more about the "Economy" before investing a dollar in any heating system. Look for my talks. They will interest you.

Send to-day for our free booklet—"The Question of Heating."

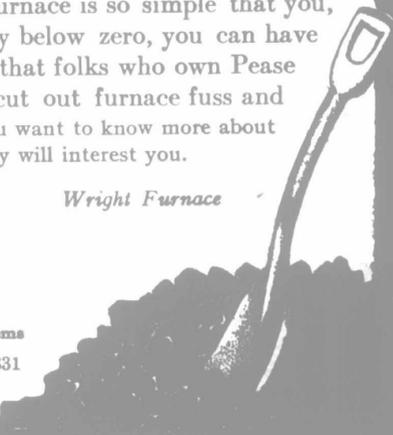
### PEASE FOUNDRY COMPANY

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NOTE—We manufacture exclusively Warm Air, Hot Water, Steam and Combination Heating Systems

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Wright Furnace



term, may and does mean much more than the mere perusal of a printed page—it may and does mean the right observation and interpretation of our own mental processes, as well as those of others; but it means more than this—it means the wise or right choice of themes for observation, thought, perusal. The farmer must correctly interpret nature and her methods—to the extent of his ability. He must live in communion with nature and invoke her aid—by knowledge and obedience of her laws, and the right ordering of his own efforts.  
The highest type of farmer becomes

such, or is evolved by reading—by knowing the signs of the times—by understanding his own powers, developing and using those powers to the fullest. Focus attention upon chosen pursuit, at the same time admit as many side-lights as possible. Endeavor to know something of all subjects; everything of one.  
Kent Co., Ont. W. J. WAY.

Clerk—Revolver; yes, sir. Six-shooter, sir?  
Customer—Better make it a nine-shooter. I want to kill a cat.

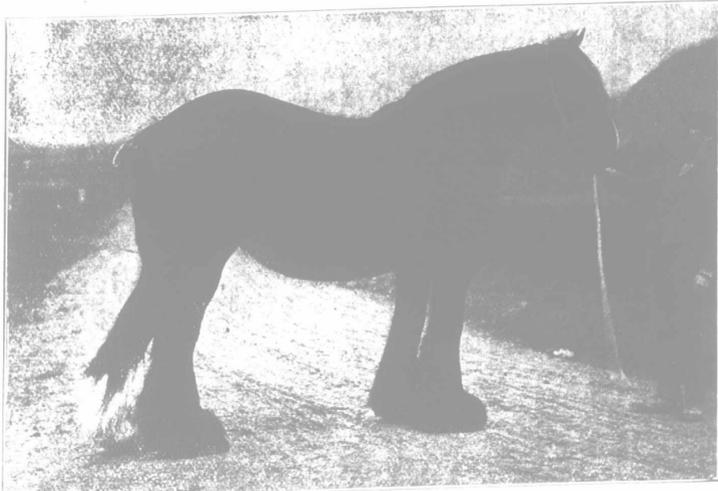
#### GOSSIP.

##### LAST CALL FOR PARDO'S SHORT-HORN SALE.

The high price of beef cattle, and the good demand and bright prospect for improving prices of Shorthorns, both in Britain and America, should serve to encourage the founding of herds and strengthening of existing herds by purchase of desirable breeding stock. The auction sale of the entire herd of T. L. Pardo & Son, of Cedar Springs, Kent Co., Ont., to take place on May 3rd, should attract the attention of lovers of

the red, white and roans, as there are richly-bred Scotch families represented, as well as good milking strains, and the probability is that good bargains may be obtained. Electric cars connect with M. C. R. and P. M. trains, and will be met at Cedar Springs.

Robert Miller, Stouffville, Ont., announces in his advertisement in this issue that he will shortly visit England and Scotland, to import pure-bred stock of various classes, and will undertake to make selections on orders.



## BREEDERS !

Insure your mares and foals against risk of death during foaling. Why take a chance of loss of a valuable mare when a policy in

### The General Animals Insurance Company of Canada

will protect you? If you are shipping horses West, we will insure you against loss while en route, from any cause whatever. Write for particulars to

The GENERAL ANIMALS INSURANCE CO., Limited  
25 Toronto St., TORONTO.

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## CREAM SEPARATORS

For clean, close skimming and durability the MELOTTE has no equal. It costs more, but get the best. Have a MELOTTE sent to your farm and prove this for yourself. \* \* \*

Every machine guaranteed to the customer. Unsolicited testimonials received every day. We will send our Booklet on request. Enquiries invited. \* \* \*

**R. A. Lister & Co., Limited**  
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**B**USINESS houses solicit telephone trade. They realize its importance. It is the consumer's most convenient way of reaching the shop or the store.

When the larder runs low, when the fuel gives out, when an article of furniture is needed—the Bell telephone is a ready help to the housewife. It reaches the sources of supply.

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TELEPHONE CO.  
OF CANADA.**

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**Send your name to-day for copy of this great HORSE BOOK FREE**

**BICKMORE'S GALL CURE**

is guaranteed to cure while horse is under harness or saddle. The great army of dealers who sell it are authorized to return your money if it fails. Buy it and have it on your stable shelf ready for emergencies. It is the standard remedy of leading horsemen, trainers, large stable owners and veterinarians. Sample Bickmore's Gall Cure sent for 6c postage. Address: WINGATE CHEMICAL CO., Ltd., Canadian Distributors, 880 Notre Dame St. W., Montreal, Canada.

### Lucerne Stock Farm FOR SALE.

Containing 175 acres, lot 10, con. II, in the Township of Sombra, County of Lambton. Brick veneer house, nearly new. Two barns 36 x 66; two good poultry houses; new implement shed 20 x 40. Good rock well. One thousand dollars worth of standing timber. 21 acres of alfalfa well established. 20 acres more seeding this spring. Alfalfa cut in 1909 net \$30 per acre. Four miles from River St. Clair and Sombra village. Telephone connection, and free rural mail delivery. Price \$7,000 for a quick sale. Prospective buyers will be met at Sombra station, P. M. R. R. Apply to proprietor.

**J. F. Selman, Wilkesport, Ont.**

**Don't Throw it Away** Does Your Granite Dish or Hot Water Bag Leak?

**USE MENDETS**

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

### GOSSIP.

Cruickston Stock Farm, Galt, Ont., advertises high-class stallions for service, Standard-bred and Clydesdale.

Batters & Mournaham, of Grand Valley, Ont., have lately purchased from Dalgety Bros., the Clydesdale stallion, Sir George McGill (9549) (14931), by the noted sire, Sir Hugo, by Sir Everard, with dam by The Mint, one of the best sons of the H. & A. S. champion, King of the Roses. This colt is a brown, rising three, 17 hands high, and weighs 1,900 lbs., combined with which is ideal draft character, smooth, well-coupled conformation, and splendid quality of underpinning. He will be a decided acquisition to the breeding stock in the neighborhood of Grand Valley, and will, no doubt, be much appreciated by the farmers in that vicinity, as there are few of his kind in Canada.

Alex F. McNiven, St. Thomas, Ont., reports among his recent sales of Clydesdales from Clyde Park Farm, the following: Baron Sim (7019) (imp.), a very neat, stylish four-year-old, by Baron McNeer (12462), to Lorne C. Black, Wilkie, Sask., who also took a few good mares. The good breeding horse, Keir Democrat (7018), goes to Essex County, to head the stud of R. B. Pinkerton. It will be remembered that fillies by this sire have been very successful in the show-rings, both in Scotland and Canada, a filly from him getting sweepstakes at Western Fair, London, last September, for best female exhibited; also first prize in yearlings and two-year-olds. A yearling from him got first at Winter Fair, Guelph. The people of Essex County are to be congratulated in getting such a good individual and sire among them. Keir Gartley, a thick two-year-old stallion, sired by Keir Democrat, was shipped to Petrolia last week, also Hathwa Queen, a big two-year-old filly, to W. H. Ford, Dutton.

# Hear Slezak

sing "Celeste Aida" in the

## Edison Phonograph

The New York Tribune says:

"Mr. Slezak dominated every scene, and his clarion voice rang out superbly in the climaxes. He sang the Celeste Aida with effectiveness, and the Nile scene with fire and passion, yet always with regard for phrase."

The New York American says:

"It is but a trifling with words, of course, to say that he was the greatest Rhadames that ever appeared on the American Stage. The house was crowded and the standees out in force; yet it was Slezak, not Caruso, who sang the principal tenor role."

These comments represent the consensus of opinion of all who heard Slezak at the Metropolitan in the role of Rhadames. Could you ask for better evidence of the fact that Slezak is the greatest lyric tenor since the days of Tamagno?

He sings the "Celeste Aida" and the great arias from Verdi's "Otello" exclusively for the Edison Phonograph. The Slezak Records are Edison Grand Opera Amberols—playing longer than any other Records made.

### The AMBEROLA, the newest and highest type of Edison Phonograph



combines the rich, tonal beauty of the Edison Phonograph with a cabinet that is a masterpiece of craftsmanship. It is charmingly designed and finished and comes in either Mahogany or Oak to harmonize with surroundings in any home. It plays both Standard and Amberol Records. It has drawers for holding 100 Records. The price is \$240. Other types of Edison Phonographs, \$16.50 to \$162.50. See and hear the Amberola at your dealer's—and be sure to hear Slezak sing "Celeste Aida."

- Edison Grand Opera Records..... 85c and \$1.25
- Edison Standard Records..... 40c
- Edison Amberol Records (play twice as long) 65c

National Phonograph Co., 100 Lakeside Ave., Orange, N. J., U. S. A.

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

GOSSIP.

SALE DATES CLAIMED.

April 28th.—Alex. Bryce, Eglinton, Ont.; Holsteins.  
 May 3rd.—T. L. Pardo & Son, Cedar Springs, Ont.; Shorthorns.  
 June 7th.—At Guelph, Harry Smith and others; Shorthorns.  
 June 8th.—E. Jeffs & Son, Bond Head, Ont.; Shorthorns.

The Montreal Horse Show, to be held May 10th to 14th, promises to be a very interesting event. The features of the show will be modelled after London, England, and New York events of the same class; \$8,500 are offered in prizes, and the price list shows an increase of twelve classes, and \$1,000 in prizes over that of last year, and provides liberal cash prizes for breeds of both heavy draft and light horses.

At an auction sale of Aberdeen-Angus cattle on April 12th, by W. W. Andrews and Robinson & Chappell, at Maryville, Mo., 47 head sold for an average of \$220.40. The highest price, \$670, was realized for the three-year-old cow, Elenora, purchased by S. R. Pierce, Creston, Ill. Three other females sold for \$405, \$410 and \$470 each. Robert McEwen, Byron, Ont., secured four cows, three calves, and a yearling bull of the noted Blackbird tribe.

The noted English Shire stallion, Tatton Friar (21953), died recently from a ruptured blood vessel. He was foaled in 1900, his sire being Conquering Harold (15558), by Harold (3708), and his dam was by The Friar (4732). He was a very successful show horse, winning many first prizes and champion honors. At the dispersion sale of the Tatton stud last April he was sold for \$5,410. As a sire his sons and daughters have achieved great honor in the show-yard, and have realized high prices in the sale-ring, six of his get having sold at the dispersal for an average of over 425 guineas each.

At the dispersion sale of Clydesdale horses belonging to the estate of Peter Crawford, Dargavel, Scotland, recently, satisfactory prices were realized. The highest price, 285 gs., was paid by Mr. Watson, Lowfield, Wigton, for the five-year-old, Dunure James, by Baron o' Buchlyvie. Messrs. Montgomery, Netherhall, gave 200 gs. for the two-year-old, Advance Admiral, by Revelanta; Mr. Thomson, Ladybank, Fifeshire, 160 gs. for the six-year-old, Sir Henry, by Prince Thomas; Mr. Clark, Islay, 120 gs. for the three-year-old, Freeman's Fortune; and Mr. Kilpatrick, Craigie Mains, 115 gs. for the three-year-old, Abercainie Squire, by Dunnydeer. The average price of 20 entire horses of three years old and over was £78 9s.; of five two-year-olds, £86 10s.; and of nine younger animals, £40 2s. 6d.

TRADE TOPIC.

THE SCARCITY OF FARM LABOR—In recent years, the glamor of the city has lured so many young men away from the farms that the question of securing sufficient capable help in the field has become a serious problem. But thousands of industrious farmers who were handicapped by this condition have not only overcome the obstacle, but actually turned it to their own advantage. Realizing that something had to be done, they abandoned their old style of farming and took to Planet Jr. farm and garden implements. The practical efficiency and the labor-saving results from their use, were a revelation to thousands of farmers all over the country. The outcome has been that many farmers who depended altogether on help, have been able to work their farms alone, do quicker work, and realize larger profits. Other farmers have extended their operations over acres that, before the use of Planet Jr. implements, seemed impossible. Planet Jr. tools are light, strong and lasting, and are fully guaranteed. A farmer can actually save much time, prepare the ground better, and obtain greater results from their use. Every farmer should have in his possession one of the Planet Jr. illustrated catalogues. It is useful as an almanac, and will be sent on request, by S. L. Allen & Company, Box 1108 F, Philadelphia, Pa., makers.



The "PREMIER" is a Profit Increaser.

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And seven cows will produce as much butter as nine cows with the old setting system, and the labor is reduced one-half.

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If you are thinking of buying a Separator, we would suggest that you see and try the PREMIER, and we know that you will be convinced that "you cannot afford to be without a PREMIER."

WRITE FOR FREE CATALOGUE.

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EASTERN BRANCH: ST. JOHN, N.B.

### Poultry and Eggs.

**ANDALUSIANS**, Blue; S. S. Hamburgs; Buff Leghorns, 15 for \$1.25; 30, \$2. Black Minorcas, 15 for \$1; 30, \$1.75; 60, \$2.50. D. McKay, Cowal, Ontario.

**BLACK LANGSHIANS**—Have flesh like turkeys and are good layers. Eggs, \$3 a doz. Glenloch Farm, 396 Yonge St., Toronto.

**BUFF ORPINGTONS**, Rhode Island Reds, White Wyandottes, Barred Rocks, Houdans, White, Brown and Buff Leghorns, Andalusians, Black-Red Bantams, Aylesbury ducks; settings, \$1. R. Laurie, Inverkip.

**BUFF ORPINGTON EGGS**—From three pens specially selected for good laying and table qualities, headed by strong, vigorous males from one of Canada's best pens; 15 for \$1, fifty for \$3. Orders taken for young stock. Edgar Staples, Bright, Ontario.

**BUFF ORPINGTON EGGS** that hatch; nine chicks guaranteed. Four special pens, \$3 setting. Splendid utility stock, extra heavy layers, \$1 setting. Illustrated catalogue free. Hugh A. Scott, Caledonia, Ont.

**BARRED ROCKS FOR SALE**—Bred from New York prizewinners. My birds won at leading Canadian shows. Eggs, two, three, and five dollars per fifteen. Thos. Andrew, Pickering.

**BLACK MINORCAS**—S. C., pure-bred, from heavy-laying strains. Eggs in Morgan baskets, one dollar per thirteen. A few cockerels for sale. Oscar Eaman, Wales.

**BARRED ROCK EGGS**—From a pen of the "National Strain." Selected for their choice barring, and persistent layers of perfect colored eggs, and mated with choice cockerels. Vigorous, blocky, barred to the skin. Price, \$1.00 per 13, or \$2.00 for 32. W. C. Shearer, Bright P.O., Ontario.

**BARGAINS**—Famous Pride of Ontario strain of Rose-comb Rhode Island Reds, White and Partridge Wyandottes; are prizewinners, record-breaking layers, large, strong, healthy, quick-growers. Circular free. Eggs, special bargain price only \$1.00 per 15. Quantity prices lower; guaranteed satisfaction. Pride of Ontario Poultry-yards, Colville, Ontario.

**BARRED ROCK EGGS**—From grand matings. Write for mating list. W. W. Dods, Alton, Ontario.

**BARRED ROCK EGGS**, safely packed in Morgan B baskets, \$1.00 per 15. C. H. Chalmers, Smith's Falls, Ont.

**BARRED and White Rock eggs**, \$1 per 15; \$4 per 100. S. L. Jayne, Grafton, Ont.

**CANADA'S best Anconas**. Winter layers. Very profitable. Free circulars. Tells all about Anconas and Leghorns. Edmund Carlyle Apps, Box 224, Vice-President International Ancona Club, Brantford, Ontario.

**EGGS**—Barred Rock, Buff Orpington. Best laying strains, \$1.00 per setting; \$4.00 per 100. Wilbur Bennett, Box 938, Peterboro.

**EGGS FOR HATCHING**—From pure-bred Pekin ducks, bred from prizewinning fowl. One dollar for eleven eggs. Apply: Miss Jennie Quinn, Wick, Ont.

**EGGS FOR HATCHING**—From heavy-laying strain of pure-bred Black Minorcas. One dollar for thirteen. Ed. Hacker, Beachville, Ontario.

**EGGS for hatching**—From prizewinning Single-comb White and Rose-comb Brown Leghorns. Extra good layers. Eggs guaranteed fertile. One dollar per fifteen. James Snyder, Wales, Ontario.

**EGGS** from pure Indian Runner ducks, 10c. each. Single-comb Rhode Island Reds, \$1 per 15. Frank Baldwin, Gleanworth, Ont.

**KELLERSTRASS-Cook Strain White Orpingtons**. Heliyer's strain Buffa. Eggs, \$1 and \$2 setting. Stock for sale. H. Ferns, 715 William Street, London, Canada.

**LOCHABAR Poultry-yards** offer eggs from 15 choice pens of Barred P. Rocks; \$1 per 15. Pekin and Rouen duck eggs, \$1 per 9. D. A. Graham, Wanstead, Ontario.

**MY BIRDS** won over five hundred first prizes at eleven shows. Barred and White Rocks, White and Brown Leghorns, Black and Spangled Hamburgs, Buff Orpingtons, Black Javas, White-crested Black Polands, White and Silver-laced Wyandottes, Rose and Single Combed R. I. Reds; Blue Andalusians; two pens of each breed; No. 1, \$2.00; No. 2, \$1.00, per 15 eggs. Black Orpingtons, Houdans, Light Brahams, Partridge and Buff Cochins, Silver Pencilled and Columbia Wyandottes, Buff Rocks, Anconas, Golden Sebright Bantams; one pen only; \$2.00 for fifteen eggs. F. W. Krouse, Guelph, Ontario.

**PURE-BRED Barred Rocks and Buff Leghorns**, good color, excellent layers; \$1.00 per 15. William Facey, Tavistock, Ont.

**RHODE ISLAND REDS**, Rose-comb; bred eleven years from carefully-selected heavy winter layers of large brown eggs. Fifteen eggs, \$1.50. Satisfaction guaranteed. Jno. Luscombe, Merton, Ont.

**ROUEN DUCKS**—Eggs for hatching from prizewinning stock. \$1 for 7; \$2 for 15. J. H. Rutherford, Caledonia East, Ont.

**RHODE ISLAND REDS**—Rose-comb. Best general-purpose fowl in the market. Eggs for hatching from imported heavy-laying strain. Two dollars for fifteen from number one pen, or one fifty from number two. B. Colwell, Box fifty, Cookeville, Ont.

**RHODE ISLAND RED EGGS**—One and two dollars a setting. "Ontario," "Western Fair," "London Show" and "Detroit" winners. Circular free. Red Feather Yards, London, Canada.

**SINGLE-COMB Black Minorcas** exclusively. Eggs, \$1.50 per 15. Satisfaction guaranteed. A. B. Warden, Spry, Ontario.

**SINGLE-COMB Black Minorcas**—Stock and eggs for sale. Ontario winners and great layers. Satisfaction guaranteed. For particulars write: H. Dunning, Thornton, Ont.

**S. C. W. LEGHORNS**—Prizewinning and great laying stock. Eggs, \$1.00 per 15. A hatch guaranteed. Geo. D. Fletcher, Binkham P.O., Ontario.

**SILVER-LACED WYANDOTTES**—Eggs for hatching, one dollar for thirteen. Geo. N. Harris, Lynden, Ontario.

**SINGLE-COMB Brown Leghorn eggs** from prizewinners, \$1.00 for 15. H. Weston Parry, Princeton, Ont.

**S. C. W. LEGHORNS**—Good laying strain. Eggs, \$1 per 15. H. McKellar, Tavi stock, Ontario.

**WHITE Wyandottes** Exclusively—Bred for heavy eggs production and standard points. Eggs, \$1.00 per 15. Good hatch guaranteed. Thos. F. Pirie, Banner, Ont.

**WANTED**—A few private farmers to ship me Poultry, Eggs, Dairy Butter, Syrup, and all other farm produce. Will pay highest market price. W. J. Falle, Prince Albert Ave., Westmount, Montreal.

**WHITE Wyandottes** (Martin and Russell strain), Rose-comb Rhode Island Reds. Eggs, fifteen, \$1.25; thirty, \$2.00. Hatch guaranteed. A. & D. McTavish, Chesley, Ont.

**WHITE WYANDOTTES**—Exclusively, standard shape, vigorous layers. Eggs, \$1 per 15. W. W. Meredith, Caledonia, Ontario.

**WHITE Wyandottes**. Eggs, \$1.25 per setting. O. W. Beaven, Prescott, Ont.

**WHITE Wyandotte eggs**—From choice matings, \$1.50 per 30 in Morgan crates. W. A. Bryant, Cairngorm, Ont.

**WHITE ROCK EGGS** at \$1.50 per setting; R.O. Rhode Island Red eggs at \$2; also some choice cockerels of both breeds for sale. Howard Smith, Winona, Ont.

**WHITE Rocks**—Big, pure white layers, \$1 per setting. O. B. Holden, Beamsville, Ontario.

**Pleasant Valley Farm offers WHITE WYANDOTTE EGGS** for hatching from 2 pens of grand winter layers. Large white birds. \$1.00 and \$1.50 per 15, \$4.00 and \$5.00 per 100.

**G. AMOS & SONS**, Moffat, Ont.

**Imported Indian Runner Ducks**

A few choice Indian Runner Ducks and Drakes for sale. The original fawn and white strain, and very select. Also eggs for setting. Prices on application. H. R. HARRISON, importer and breeder, Ridgeway, Ont.

**SPRING BANK FARM** Offers S.-C. Brown Leghorn eggs at \$1 per 15, \$4 per 100. Excellent layers from prizewinning strain. Satisfaction guaranteed. Wm. Barnett & Sons, Fergus P. O., Ont.

### Wants and For Sale

Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted, and Pet Stock. TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

**ANGORA GOATS FOR SALE**—Some with registered numbers—all ages and sexes—to dispose of at all times. Apply Vosburgh, Bradford Ranch, R.M.D. No. 1, Calgary.

**FARM TO RENT**—On Blackstone Lake, Parry Sound District; good land and buildings; will rent cheap to good tenant. For particulars apply to J. P. Weeks, Parry Sound, Ont.

**FOR SALE**—New Woven Wire Fencing, all sizes and lengths, at half price. Write quick to Imperial Waste & Metal Co., 7 Queen St., Montreal.

**GOVERNMENT STANDARD SEEDS**—Red Clover, \$9.00; Manchester Barley, 75c.; Silver Mine, White Siberian, Scottish Chief oats, 50c.; Golden Vine Peas, \$1.00; bags extra. Ask for samples. The Caledonia Milling Co., Ltd., Caledonia, Ontario.

**IF interested in growing strawberries** send for my catalogue; it's free. Tells you how to grow them. Jno. Downham, Strathroy, Ontario.

**WE** have on hand at present twenty thousand 3-in. tile and a quantity of 4-in. and 6-in., which we wish to dispose of in car-load lots. Correspondence solicited. Bechtels, Limited, Waterloo, Ont.

### WE HAVE FARMS

of all sizes and suitable for all kinds of farming in every county in Western Ontario. Send for our catalogue. The Western Real-estate Exchange, Ltd., 78 Dundas St., London, Ont.

THE SUBSCRIPTION LIST OPENS AT THE OFFICE OF THE GUARDIAN TRUST COMPANY, LTD., TORONTO, ON MONDAY, APRIL 25th, 1910, AND WILL BE CLOSED ON OR BEFORE MONDAY, THE 9th DAY OF MAY, 1910, AT 3 P. M.

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The dividends on the preferred stock, accrue from April 5th, 1910.

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90 per cent. on Allotment.

100 per cent. or

In Instalments as follows, in which case interest at the rate of 6 per cent. will be charged.

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25 per cent. on 1st August, 1910.

100 per cent.

The right is reserved to allot only such subscriptions and for such amounts as may be approved and to close the subscription book without notice.

Application will be made for the listing of the securities of the Company on The Toronto Stock Exchange.

### BANKERS OF COMPANY—Imperial Bank of Canada and Bank of Montreal.

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#### NEW COMPANY A GOING CONCERN.

Maple Leaf Milling Company, Limited, is a new Company which has taken over the whole undertaking as a going concern of the Maple Leaf Flour Mills Company, Limited, including therein that of the Hedley Shaw Milling Company, Limited. The Company has mills at Kenora, Thorold, St. Catharines, Welland, and Port Colborne (the last named in course of construction) in the Province of Ontario, and at Brandon, in the Province of Manitoba. When the construction at present under way at Port Colborne is completed, the company will have a total milling capacity of 12,800 barrels per day. The company has at present thirty-five elevators situated throughout the Western Wheat Belt, and fifteen additional ones are being added at the present time. A million-bushel elevator is being constructed next to the new mill at Port Colborne. The company has also warehouses and offices at Toronto, Winnipeg, Kingston, Ottawa, and Montreal.

**SECURITY AND EARNING POWER:** The assets of the old Companies taken over as above stand in excess of all liabilities and without any allowance for goodwill, trade marks, etc., at \$3,770,524.11, this amount being ascertained on the basis of an appraisal by the Canadian-American Appraisal Company, Limited, as of March 17th, 1910, of the capital assets taken over, and the certificate of Messrs. Price, Waterhouse & Company, as of February 28th, 1910, as to current assets and current liabilities, with a liberal allowance for all contingencies. There has also been placed in the Treasury \$1,000,000 of additional cash, which, besides permitting of the completion of a 6,000-barrel mill and a million-bushel elevator and storage warehouse at Port Colborne, and of fifteen additional elevators in the West, will provide the new Company with further working capital. As per certificate of Messrs. Price, Waterhouse & Company, of London, quoted below, the earnings of the old Company on the present plant amounted from September 25th, 1908, to August 20th, 1909, to \$218,843.38 and from August 21st, 1909, to February 28th, 1910, to \$166,793.29 being for the latter period at a rate equal to over 13 per cent. on the preferred stock of the Company.

#### LOCATION OF MILLS AND MANAGEMENT.

Mr. Hedley Shaw and Mr. D. C. Cameron, under whose direction the properties of the old companies have been developed, will retain large interests in and be actively identified with the new Company, Mr. Hedley Shaw as Managing Director.

The location of the new 6,000-barrel mill at Port Colborne is, without exception, the best in Canada.

A complete report on the advantages of the Port Colborne site, prepared by Mr. Hedley Shaw, will be found in the prospectus.

Prospectuses and forms of application may be obtained at any branch of the Imperial Bank of Canada, or The Royal Bank of Canada, from Guardian Trust Company, Limited, Toronto, and from Cawthra Mulock and Company, Toronto.

APPLICATIONS FOR SHARES SHOULD BE MADE UPON THE FORM ACCOMPANYING THE PROSPECTUS, AND SHOULD BE SENT TOGETHER WITH THE REMITTANCE DUE ON APPLICATION TO:

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**ROYAL BANK OF CANADA.**

**GUARDIAN TRUST COMPANY, Ltd., Toronto**  
 OR TO  
**CAWTHRA MULOCK & CO.,**  
 Members Toronto Stock Exchange,  
 ROYAL BANK BLDG., TORONTO, ONT.

#### TRADE TOPICS.

J. F. Selman, Wilkesport P. O., Ont., advertises for sale in this issue, price \$40 per acre, a farm containing 175 acres, in Sombra Township, Lambton Co., Ont., with good buildings, 40 acres in alfalfa. Telephone connection and rural mail delivery.

**HORSES' SKINS ARE TENDER IN THE EARLY SPRING.**—Every successful farmer knows how highly important it is to have all his work horses in working condition every day during spring and summer, the time when he needs them most. A difficult thing to do, it is admitted. In the early spring horses' skins blister and gull easily and badly; during the winter months they have become tender. In the summer, when the weather is aggravatingly hot and insects are bad, their skins are apt to scald and chafe and become bitten. Owing to these conditions, many an otherwise good horse is laid up when his services are most needed—most valuable. To provide against just such occurrences, many horse-owners have discovered and provided themselves with the only sure, safe, quick remedy, Bickmore's Gall Cure. Invaluable and convenient, it cures while the horse works. Satisfactory—the hair grows in again of the original color. For quickly healing cows' sore, chafed or fly-bitten teats, it certainly has no equal. "Ninety thousand horsemen and dairymen who use it, and keep it in their stables the year round," say the proprietors, "admit that for surface sores of horses, cattle, and all other stock, no other cure is so sure, so safe, so quick, and so satisfactory." Try it for harness or saddle galls, chafe, rope burns, cuts, scratches, grease heel, etc. It is offered under a guarantee. Thousands of dealers sell Bickmore's Gall Cure. Ask yours for it, or send 6c. postage for free sample box, and Bickmore's Horse Book—it's free, too. A practical, valuable horse book, every horse-owner should have. Address, Wingate Chemical Co., Ltd., Canadian Distributors, 800 Notre Dame St., W., Montreal, Canada.

#### GOSSIP.

That Ayrshires are rapidly gaining in popularity, and are in active demand, the report in this issue of the Benning sale, at Williamstown, Ont., last week, amply attests, 81 head, all but one bred in the herd, including 16 of them being calves from two days to three weeks old, having sold for an average of close to \$150, and 47 making an average price of \$220.

The Thoroughbred Show at Islington, London, England, had larger entries than for several years, and the horses were of good class. Some excellent candidates were forward for the King's premiums in the stallion classes. The entries in the saddle classes for Hunters were fairly numerous, and many well-known horses were shown. The champion honors fell to a middle-weight, Simpson Hinchcliffe's Broadwood, and the reserve to a light-weight, H. Walton's Restless.

Official records of 158 cows have been accepted by the American Holstein Association, from March 31st to April 4th. This herd of 158 animals, of which over one-half were heifers with first or second calves, produced in seven consecutive days 64,477.9 lbs. of milk, containing 22 1/2 lbs. of butter-fat, thus showing an average of 3.50 per cent. fat. The average production for each animal was 408.1 lbs. milk, containing 14.283 lbs. of butter-fat; equivalent to 58.3 lbs. or 28 quarts of milk per day, and 16 1/2 lbs. of the best commercial butter per week.

As an instance of the boom prices prevailing for pork in the Chicago market, the Breeders' Gazette reports the recent sale of a stag in that market that weighed alive 970 pounds, and dressed 787 pounds. A speculator offered \$100 for the animal, but the owner decided to have it dressed for his own account on a live-weight appraisal of \$10.50 per cwt. The net proceeds were \$26.63. Sausage-makers, it is said, clamor for stag meat, showing the same preference for bull beef, by reason of its faculty for absorbing the filling material so largely used in sausage preparation.

## The only Shingles guaranteed lightning-proof

The farmers of Canada each year lose thousands of dollars by lightning. In future they, or you, need not lose another cent from this cause. Simply roof your buildings with PRESTON Safe-Lock Shingles. They are guaranteed proof against lightning.

Our Lightning Guarantee is legal. Send for a copy. Let your lawyer read it. He will tell you it fully protects you against loss by lightning.

We don't charge you a cent for this Lightning Guarantee. Yet you couldn't even buy a lightning guarantee from the makers of wooden shingles or prepared roofing.

# PRESTON SAFE-LOCK SHINGLES

You don't get a Lightning Guarantee with any other roofing. Neither do you get shingles galvanized according to British Government Specifications. Nor Shingles SAFE-LOCKED on all FOUR sides.

Send for the new and improved edition of "Truth About Roofing." It gives roofing facts you would be willing to pay for. We will send you a copy free provided you fill in and send the coupon promptly.

Branch Office and Factory at Montreal, Que.

Queen Street Factory Please send your booklet, "Truth About Roofing." I am interested in roofing and would like complete information about PRESTON Shingles.

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 County \_\_\_\_\_ Prov. \_\_\_\_\_

*Metal Shingle & Siding Co. Limited, Preston, Ont.*

# Ewing's

## PROFIT-MAKING SEEDS.

Do you realize that the little things in life often upset your most carefully-laid plans and turn what looked like success into failure?

The Seeds you sow are little things, but think what depends upon their quality.

Your land may be excellent, the weather ideal, and prospects bright and rosy, but where do you stand if your Seeds refuse to grow?

You can't tell the strength and growing ability of Seeds by looking at them, and by trying to save a few cents on the purchase price, you run the risk of getting an inferior grade that will cut down your profit at the end of the year by many dollars.

Ewing's Seeds are reliable. They are grown from the strongest, healthiest and most perfect plants that can be produced. They are carefully selected, and will grow crops that will repay you for your work.

When you buy your seeds this year, specify "Ewing's" and be sure that you are right. Don't accept substitutes. If your dealer can't supply you, write us.

WRITE ANYWAY FOR OUR BIG ILLUSTRATED CATALOGUE. IT'S FREE, AND YOU WILL APPRECIATE IT.

WM. EWING & CO., Seedsmen, McGill St., Montreal.

# Seeds

### GOSSIP.

Wm. Ische, Sebringville, Ont., near Stratford, advertises for sale Aberdeen-Angus cows and heifers of high-class breeding and quality.

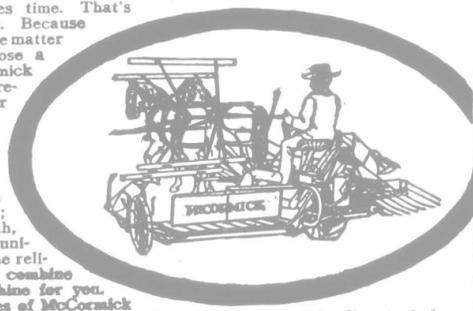
### FAIRMOUNT HOLSTEINS.

Another enthusiastic and somewhat extensive breeder of Holstein cattle is C. R. Gies, of Heidelberg, Ont., whose beautiful farm, "Fairmount," lies in the County of Waterloo, four and one-half miles from St. Jacob's station, on the Berlin-Elmira branch of the G. T. R. Mr. Gies' herd is just now about forty strong, at the head of which is the richly-bred bull, Aaggie Grace Cornucopia Lad, sired by Beauty Cornucopia Lad, whose half-brother sold for \$10,000, whose service fee is \$100, whose dam's sire is a brother to the 29.57-lb. record cow, Aaggie Topsy De Kol, and whose dam, grandam and great-grandam are all in the official records. The dam of Aaggie Grace Cornucopia Lad was Aaggie Grace Manor Josephine, whose one-day milk record is 77 lbs., and seven-day butter record 20.93 lbs., as a five-year-old, and her dam, Manor Star's Josephine, has a three-year-old record of 20.87 lbs., and, again, her dam, Aaggie Grace 2nd Pietertje, has a record of 23.51 lbs., and the fourth dam, Brookside Maid, has to her credit 20 lbs. in seven days. Thus, for four generations, the seven-day butter records averaged 21.30 lbs.; most intensive breeding, and breeding that is sure to tell in his get. Among the females are fourteen yearling heifers and about a dozen two-year-olds, a number of which are sired by that great bull, Johanna Rue 4th's Lad, whose four nearest dams have records that average 22.86 lbs. in seven days, and whose daughters in the Record of Merit are "legion." Others are sired by Sir Johanna Mercedes, whose six nearest dams have records that average 84 1/2 lbs. milk in one day and 22.31 lbs. butter in seven days. Only one of the developed cows in the herd has ever been officially tested, Winnie R.'s Countess, whose three-year-old record is 17.5 lbs. Anything in the herd is for sale, and some exceptionally-choice heifers are among the lot. There are also for sale two bull calves, got by the stock bull. Mr. Gies has also the honor and distinction of being the first man in Canada to receive a Certificate of Registration for seed wheat, the variety being Dawson's Golden Chaff, which he has selected and grown for ten years, receiving the highest praise for the record he was able to show.

## START TODAY TO GET READY FOR HARVEST TIME

**D**ON'T put it off any longer. From now on 'till harvest you are going to be busier every day. Your grain is likely to ripen all at once. Then you'll want to cut it quickly. You can't do it unless you are prepared with the best harvesting machines—in proper condition.

To be sure of getting the best machine for your needs—you must make a careful selection. That takes time. That's why we say start today. Because we know if you go into the matter carefully you will choose a McCormick. The McCormick Binder will meet your requirements as no other machine will. It is built to meet the conditions encountered on the Canadian farm. It has stood the test of years. Its capacity to handle grain that is tangled or down; its simplicity, strength, durability, light draft, uniform, good work and the reliable work of its knottor, combine to make it the best machine for you.



Other farm machines of McCormick make a long line, are not less valuable than the Binder. The line includes: Harvesting Machines, Binder Twine, Mowers, Toppers, Hay Rakes and Side Delivery Rakes, Hay Loaders, Disk, Shoe and Hoe Drills, Cultivators and Seeders, Smoothing Spring Tooth and Disk Harrows, Land Rollers and Scafflers. McCormick dealers also handle Gasoline Engines, Cream Separators, Hay Presses, Wagons, Sleighs and Manure Spreaders.

Every McCormick everywhere is recognized by farmers as a leader in its class. But we don't ask you to take our word for this. We say—Start today to investigate so you will have time to make a proper decision. For catalogue and specific information on any McCormick machine, call on the local dealer or write direct to nearest branch house.

CANADIAN BRANCHES: International Harvester Company of America at Brandon, Calgary, Edmonton, Hamilton, London, Montreal, Ottawa, Regina, Saskatoon, St. John, Winnipeg, Yorkton.

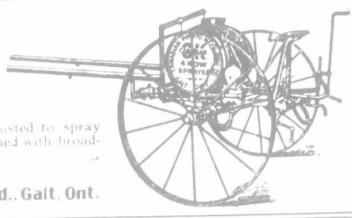
INTERNATIONAL HARVESTER COMPANY OF AMERICA  
 (Incorporated)  
 Chicago U S A



### O.K. CANADIAN 4-ROW SPRAYER

Sprays 4 rows while you drive. No hand pumping to do. Wheels and nozzles adjustable for wide and narrow rows. Can be adjusted to spray vines 6 inches to 2 1/2 feet high. Can be furnished with broadcast vineyard and tree-spraying attachments.

Write for particulars:  
 Canadian Potato Machinery Co., Ltd., Galt, Ont.



Dr. J. Lindsay, Limehouse, Ont., has sold the two Hereford bulls recently advertised in "The Farmer's Advocate," namely, Cherry Lad, to S. Millson, of Eramosa, and Wilton Peel, to E. McCracken, of Everett.

O. Sorby, Guelph, Ont., in his advertisement in this issue, offers for sale an imported Clydesdale stallion that weighs a ton, is full of quality, and is a sire of prizewinning stock; also two imported Hackney stallions that are show horses, one a Toronto winner.

### BIG HORSE SHOW AT MITCHELL.

One of the most successful horse shows that ever took place in Perth County was held on April 7th, at Mitchell, Ont., under the auspices of the Hibbert, Fullerton and Logan Agricultural Society. Nearly \$300 was offered in prizes, and over seventy entries were made. The competition in nearly all classes was very keen, and was watched by a very large crowd of interested spectators. In the heavy-draft Clydesdale stallion class, there were ten splendid horses, first prize going to Viscount Adniston, lately imported by Wm. Colquhoun, of Mitchell, being hard pressed by the old-time prizewinner, Mosstrooper Champion. The last class judged was for best sire and four of his get. This was a grand display of horseflesh, as each sire entered the ring followed by four of his progeny, nearly all being prizewinners, as each stallion owner selected his prizewinners out of the different classes.

### BOOK REVIEW.

#### "THE STUDY OF CORN."

Prof. Vernon M. Shoemith, Agronomist at the Michigan State Agricultural College, and formerly Associate Professor of Agronomy at the Ohio State University, has given corn-growers a useful little volume bearing the above title, published by the Orange Judd Co. It was prepared as a laboratory guide in corn judging in agricultural colleges and high schools, and as a guide to farmers in the modern study of corn. It will appeal to members of the Ontario Corn-growers' Association, particularly those who are making a specialty of dent corn-seed growing. Some kinds very popular in Canada are not described in the chapter on varieties, and little reference is made to the flint corns. The numerous engravings are admirable and instructive, as are the portions on selection of seed corn, judging, and the use of score-cards. The book may be ordered through this office at 50 cents, plus 6 cents postage.

### GET THE WASHER RUN BY GRAVITY!

We have harnessed the Power of Gravity to the 1900 Washer. It is the Greatest Combination known for quick, clean, easy washing.



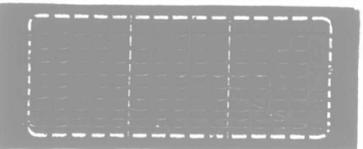
The Washer almost runs itself! In just six minutes it washes a tubful of clothes spotlessly clean. Over half a million housewives have tested this and proved it. So can you, without spending one cent! Here is the offer!

**WASHERS SHIPPED FREE FOR 30 DAYS' TEST**

We make this offer to any reliable man or woman anywhere. We send the Washer by freight, at our expense and risk. That's because we absolutely know you will be as delighted with the Washer as the thousands who have tried it. Get one of these wonderful Washers and say "good-bye" to the washboard forever. Good-bye to backaches, worry and washday drudgery! Let Gravity Power do the hard work! Let the Washer clean the clothes! We sell the Washer on little payments—only 50 cents a week. It pays for itself in a hurry. Then works for you—free for a lifetime! Drop us a postal card for the Free Washer Book and tell us your nearest freight station. Send to-day. Address me personally for this offer.

F. A. E. BACON, Manager  
The "1900" Washer Co., 357 Yonge St.  
TORONTO, CANADA

The above offer is not good in Toronto or Montreal and suburbs. Special arrangements are made for these districts.



### 12' x 48' DRIVE AND FARM GATE \$4.25

From factory to user, freight prepaid in old Ontario on orders of six or more: Quebec and New Ontario, \$4.50; Maritime Provinces, \$4.65. Constructed of best material; frames 1 3/8 tubular steel welded. No splice plug or coupling at joints to break. Braces, 3/4 tubular, diagonal brace and filling all heavy No. 9 wire throughout. "Send 'em back if they're not as represented," is my guarantee. Money refunded—no argument. Order to-day or write for booklet. If it's a fence—iron or wire—write

**FENCE MAN**  
M. T. Crown Fence and Supply Co., Toronto  
He saves you money—buy direct. 4 B

## Importation of Stock

Space in the Association cars will be reserved for all stock coming from the East to B. C., providing the owners or importers make application for definite space before April 30th, to

R. W. HODSON,  
Live-stock Commissioner,  
Victoria, B.C.

The B.C. Stock-breeders' and B.C. Dairy-men's Associations pay half the transportation expenses.

## Seed Potatoes!

**EXTRA FIRST EARLY.**—Victor.  
**FIRST EARLY** Expre s, Early Rose and Bovee.  
**SECOND EARLY.**—Duchess of Cornwall and Ideal

**MAIN CROP.**—Windsor Castle, Eldorado, Delaware, Rural New Yorker, Carman No. 3, Goodfellow, Sir Walter Raleigh, Up-to-Date.

All from seed imported last season from England, Scotland and United States.

Low prices. Address:  
**W. P. Niles Seedsman,**  
WELLINGTON, ONT.

Now gentle spring with balmy days. Has burst cold winter's shackles; The hens break forth in joyful lays. Succeeded by loud cackles.

### BOOK REVIEW.

#### "SOIL FERTILITY AND PERMANENT AGRICULTURE."

The first business of every farmer is to reduce the fertility of the soil he works by removing the largest crops of which it is capable, and, in the next place, to pursue a system that will preserve him from failure and make his land better. This seeming paradox is possible, but it requires a high order of intelligence. In response to the needs of the times, publishers of foresight and authors of discernment and knowledge are issuing agricultural literature with great rapidity. Recalling most of the books that have come under our notice during the past couple of years, we are inclined to say, that, while admirable as compendiums of facts relating to farm practice, the time would now seem opportune for a greater thoroughness of assimilation and deductions, clothed with a compelling finish of expression that will invest the thought with the habiliments of a literature to inspire. Not every treatise lends itself readily to this treatment, but in some measure it is not beyond achievement. It is gratifying, therefore, to find inscribed upon the title page of a series of volumes being published by Ginn & Co., Boston, Mass., the words, "Country Life Education Series." The one under review is in keeping with the repute of the house, and its author, Cyril G. Hopkins, Ph. D., of the University and Experiment Station of Illinois, ranks easily among the foremost of American agronomists. "To use the land without abusing it," is the motto of the book, which is aptly dedicated to the Association of American Agricultural Colleges and Experiment Stations, the "rightful guardians of American soils." The book we must commend as an arsenal of facts in regard to soil fertility and permanent agriculture. Its conclusions are lucidly given in the introduction, and the quotations of agricultural teachings in two periods of history twenty centuries apart, show us that successive generations have to learn their lessons afresh. Dr. Hopkins gives the reader a glimpse of the greatness of farming simply by citing the -ix positive factors and one negative factor in crop production; seed, home for the plant, the food of which it is made (just as important for plants as animals), moisture, heat and light, with protection from weeds, insects and disease. The least appreciated and most neglected is plant food, and yet (except the seed) it is most largely under the farmer's control. Phosphorus and decaying organic matter, Dr. Hopkins designates as the two substances which constitute the key to profitable systems of permanent farming on most American soils. Phosphorus is the only one of these that must be purchased and returned to the soil. Considerable attention is paid to the value of lime applications to sour or acid soils. In the chapter on "Theories Concerning Soil Fertility," he scores with great severity the revival by Prof. Whitney and Dr. Cameron, of the U. S. Bureau of Soils, of the vicious theories that soils do not wear out or become depleted by cultivation and cropping. The book is most comprehensive in its recital of the results of the investigative work at Rothamstead, and on the Dominion Experimental Farms, by Dr. Wm. Saunders and Prof. F. T. Shutt, though he questions one conclusion of the former that non-acidulated mineral phosphate is of no value as a fertilizer. The findings of the American stations are cited at length and with clarity. The book is stimulating as well as informing, and ought to be on the table of every earnest student of the soil. It is listed by the New York office of Ginn & Co., at \$2.25 per copy, and may be ordered through "The Farmer's Advocate" at that price, plus postage, 20 cents.

### TRADE TOPIC.

**POTATO SPRAYER.**—Potato machinery of the most modern types is coming increasingly into vogue among Canadian farmers. The O. K. Canadian four-row sprayer for potato-spraying is advertised in "The Farmer's Advocate" by the Canadian Potato Machinery Company, Limited, Galt, Ont., whose illustrated price list and telegraphic code of repair parts is before us. The price list also contains many testimonials from Canadian users. Write for it, mentioning this paper.

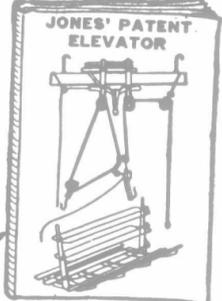
## For Farmers' Use Only—Jones Patent Hay and Grain Elevator

The Only SLING OUTFIT on the market that can LOWER its load in the mow. This SLING-OUTFIT will unload your whole harvest of Hay and Grain bound or unbound, such as Hay, short dry Clover, loose Barley, Peas, Sheaves, Seed, Clover and Cornstalks. And the beauty of it is, it places its load in the mow in such nice shape. The sling load don't have to fall all the way from the track, in the peak of the barn, down to the mow, as with all other Horse-forks or Sling-outfits. The JONES PATENT ELEVATOR LOWERS its load from the track right down to the man in the mow—then he can take his fork and swing load to any part of mow and trip it. In this way mow is kept level at all times, saving nearly all the work of mowing away, besides doing away with old time packing down of hay and grain in centre of mow. The JONES PATENT ELEVATOR has many other new and important improvements, all of which are explained in our FREE catalogue.

THE JONES PATENT ELEVATOR is made of finest malleable iron and steel of double weight and strength. It is the strongest elevator, and unloads any load of hay or grain in three lifts.

There are THOUSANDS giving EXCELLENT SATISFACTION. We will ship you a JONES PATENT ELEVATOR ON TRIAL. After you use it, if you are not pleased, ship it back to us and we will cancel your order. This ELEVATOR is sold on EASY TERMS, and will pay for itself first season. Drop us a card and we'll send booklet FREE.

The Hamilton Incubator Co., Ltd.  
5 Hamilton, Ont.



## Make a big profit from every Cow

Do you know what your cows are doing? Do you know which ones are profitable—which ones are eating their heads off? It will pay you to get rid of the robber cows.

**The Automatic Milk Scale and The Facile Jr. Babcock Tester** will show you in a short time which cows in your herd are paying a profit.

**The Automatic Scale** is made especially for weighing milk in the pail. There is a loose indicator on the dial that can be set at 0 by a thumb screw when the pail is on the hook. Then when the pail of milk is placed on the hook this indicator gives the exact net weight of the milk. It has another indicator that reports—larger sizes weigh up to 120 pounds.

**The Facile Jr. Babcock Tester** is designed especially for use in the dairy in construction and operation. The working parts consist of but two cut gears and they are enclosed in a cast iron case to keep them free from dirt and to prevent their catching clothing, towels, etc. It turns easily without vibration or jar. It is sent complete with glassware, bottle brush, acid and full directions for use. It will pay you to have this scale and tester whether you milk three or thirty cows.

Our free catalog shows everything for milk dealers and dairymen at lowest prices.

**W.A. DRUMMOND & Co.**  
175 KING STREET E TORONTO, ONT

**STANDARD WOVEN WIRE FENCE**

Hard draws steel running wires and "The Tie That Binds", give a strength that resists every strain. Heavy galvanizing protects against rust. Patent Posts are made of No. 12 gauge steel, bent at right angle, to give the maximum strength at reasonable cost. No staples required to put fence on posts—we've attended to that.

13 The Standard Wire Fence Co. of Woodstock Limited, Woodstock, Ont. & Brandon, Man.

**Planet Jr.**

The greatest time-savers and labor-savers ever invented for the farm and garden. They frequently do six men's work, and do it better than by ordinary methods. Over two million farmers and gardeners have found this out by actual use. You can't afford to be without a Planet Jr.

No. 17 Planet Jr. Single-Wheel Hoe is a most handy and effective tool for garden cultivation. A fine tool for working close to crops.

New No. 81 Planet Jr. Horse-Hoe, Cultivator and Furrower is a great implement for cultivating and hilling crops up to 4 feet apart. Compact, strong, and steady running. Get the Planet Jr. 56-page catalogue for 1910. It's free. Write today.

S. L. Allen & Co. Box 1108F Philada Pa

Write for the Name of Our Nearest Agency.

**Imported Clyde and Hackney Stallions**

One imported Clyde stallion, a ton in weight; smooth and full of quality all over. A sire of prize stock. Also two imported Hackney stallions—show horses, one of them second at Toronto.

For further particulars write:  
**O. Sorby, Guelph, Ont.**

**It Won't Rub Off**

**VISIT the finest hotels, the costliest homes, and you will find Alabastined walls. Alabastine is used in these palatial places, not because it is the most expensive wall decoration, but because it is the most artistic and effective. An Alabastined wall is a delight to the eye—so soft, velvety and beautiful. It will not rub off or fade. Alabastine is cement and hardens with age. Its beauty is permanent. It is the most sanitary and inexpensive wall coating known. Alabastined walls are now the general vogue, in cottage and mansion alike. Wall Paper is out of fashion. The sales of Alabastine in Canada have doubled in two years.**

**CHURCH'S COLD WATER Alabastine**  
None Genuine without Little Church on Label

**FREE STENCILS**

To still further popularize Alabastine and again double its sales, we have organized a Decorative Department, and are prepared to offer **FREE COLOR SCHEMES** and **FREE STENCILS** to users of Alabastine. Write today for particulars. Our advice is free. Let us help you to beautify your home at a moderate cost.

Please send free particulars of your Color Scheme and Free Stencil offer to

Name.....  
Street.....  
City.....Prov.....

The Alabastine Co., Ltd., 31 Willow St., Paris, Ont.

**As handsome as the best iron fence at less than the cost of cheap wood**

Here's a neat, strong, durable fence that will add to the appearance of the handsomest city lawn and is cheap enough, close enough and strong enough for the farm. The

**Peerless Lawn Fence**

is made of heavy No. 9 steel spring wire, so it can never sag. It is carefully galvanized and coated with white enamel paint. No investment you can make will add so much to the appearance of your property.

**THE BANWELL HOXIE WIRE FENCE CO., LTD., Dept. B, HAMILTON, ONT., WINNIPEG, MAN.**

**HORSE - POWER Spramotor**

High Pressure 100 to 200 lbs., for 1 or 2 Horses. Over 500 in use. Automatic Regulator (no Safety Valve) Nozzle Protector, 12-gallon Air Tank, largest capacity. Can be hand operated. Nozzle controlled automatically, as to height, width and direction. Also for orchard, melons, potatoes, etc. The largest line of spraying machines in the world. Guaranteed against all defects for 1 year. Particulars free—NOW. This ad. will not appear again in this paper.

**SPRAMOTOR, LIMITED, 1361 King St., London, Ont.**

**BOOK REVIEW.**

**THE REFERENDUM.**

What is called The Referendum is a popular vote of the people on legal proposals which have already been considered by Parliament. A plebiscite, on the other hand, is a method of obtaining, in advance of legislation, an opinion of the people on a certain point. For example, Canada had a plebiscite in regard to the prohibition of intoxicants, and Ontario had a referendum on that subject after the Privy Council had defined the legislative powers of the Province. "Popular Initiative," a corollary of The Referendum, is a request from a certain number of the electors asking that some new law be adopted, or some old one be abolished, or amended. Hodder & Stoughton, of London, England, have published at a penny, a pamphlet of a series of articles which appeared in the British Weekly Against the Referendum. The subject was brought to the front in Great Britain through the House of Lords throwing out the Budget enacted by the House of Commons, virtually compelling a referendum. The Liberal party in Manitoba lately approved of the Referendum principle as a plank in their platform. The author of this pamphlet opposes the referendum plan, claiming that it is not as democratic as it looks; as it would tend to parsimony in progressive public expenditures; because it would enable reactionaries to defeat progressive measures by appeals to sectional animosities; that the public would grow weary and indifferent because of frequent votings; that it is not applicable on questions of

**O. K. Canadian Potato Planter**

With or without fertilizer attachment, opens the trench, drops the seed, covers it, and marks for the next row all in one operation. Does not bruise or mar the seed in any way. One man and team can plant from 4 to 6 acres per day.

Write for catalogue.

**Canadian Potato Machinery Co., Ltd.,**  
145 Stone Road, Galt, Ont.

**Mica Roofing**

For steep or flat roofs, waterproof, fire-proof; easily laid; cheaper than other roofing. Send stamp for sample, and mention this paper.

**HAMILTON MICA ROOFING COMPANY,**  
101 REBECCA STREET, HAMILTON, CANADA.

foreign policy; that it would encourage timid, arm-chair politicians; and most serious of all, would do away with representative government; would reduce Parliament to the position of a mere machine, undermine its authority and responsibility, and take away high incentive from statesmen of courage and foresight as leaders of the masses who are often ill-informed and sluggish; or, on the other hand, are swayed by rushes of feeling. Switzerland has worked the Referendum (since 1874) with conclusive and excellent results, but it is objected that it would not work in a large electorate like Britain, under conditions very different from those that prevail in the little European Republic.

**GOSSIP.**

**PEDIGREE OF PRINCE IMPERIAL.**  
Please give pedigree and particulars of the breeding of the Shorthorn bull, Prince Imperial, recently sold at auction for \$10,000, at Aurora, Illinois. J. S. Prince Imperial =72511=, roan, calved January 2nd, 1907; breeders, John McKenzie & Son, Columbus, Ont. Second owner, W. A. Dryden, Brooklin, Ont. Sire, Prince Gloster =40988=; dam, Helen 21st (imp.) =48704=; bred by Wm. Anderson, Old Meldrum, Aberdeenshire, imported in dam by John McKenzie & Son, sire Archer's Pride (70038). Prince Gloster, sire of Prince Imperial, is a scion of the Sittyton Duchess of Gloster tribe, tracing to Duchess of Gloster 12th =138=, bred by Amos Cruickshank, imported by the late Hon. John Dryden in 1871, and sired by Champion of England (17526).

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

**MAGIC PUMP No. 9.**  
Easiest-running hand pump ever made. Largest capacity. Highest pressure.

**Challenge Power Sprayer.**  
Will spray 400 gallons an hour at a pressure of 200 pounds.

**LITTLE GIANT No. 70.**  
High-powered barrel pump.

These pumps are made for DURABILITY, EFFICIENCY and POWER.

WRITE FOR CATALOGUES.

**Summer Spray**

**NIAGARA BRAND LIME-SULPHUR ARSENATE OF LEAD.**

**NIAGARA** is the only absolutely reliable Lime-Sulphur Spray, because it is made right. It is a permanent solution of highest insecticidal and fungicidal power. Analysis is stamped on every package, and it is guaranteed by a strong CANADIAN COMPANY.

**ARSENATE OF LEAD** is the one poison that kills all kinds of chewing insects. It is endorsed by all leading Entomologists and Horticulturists. It will not burn fruit or foliage. It sticks to the leaves. It mixes easily and stays mixed.

**FARMERS AND FRUIT-GROWERS**, with these sprays you can grow Apples and Pears free of scab and worm; Potatoes free of blight and bugs; Cherries and Plums free of rot and curculio.

**COMBINE** these TWO SPRAYS in ONE. This saves time and money. **SPRAYING** is investment, not expense.

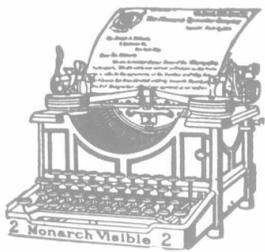
Order now. Be ready when blossoms fall.

Write for our Book: "SPRAYS AND HOW TO USE THEM."

**NIAGARA BRAND SPRAY COMPANY, Limited, Burlington, Ont.**

NIAGARA SPRAYS ARE ALSO MADE BY:  
Niagara Sprayer Co., Middleport, N.Y. Oregon Spray Co., Portland, Oregon.  
Bean Spray Pump Co., Cleveland, Ohio. Medford Spray Co., Medford, Oregon.  
Hood River Spray Mfg. Co., Hood River, Oregon.

MAGIC No. 9



## MONARCH

The name in the typewriter-using world that stands for honesty of manufacture, perfection of mechanical principles, uncompromising durability, enjoyable ease of operation, and marvellous adaptability to all nature of office detail.

The Monarch Typewriter Company, Limited,  
98 King St. West, Toronto, Ont.

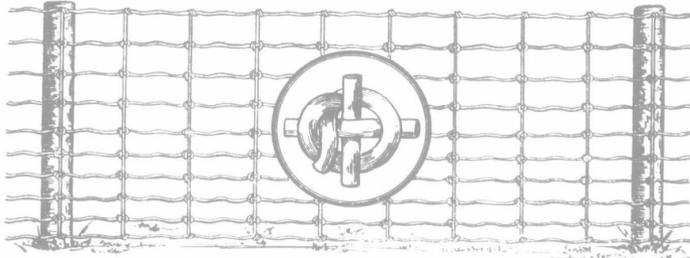
## 60,000 Acres

OF CHOICE FARM LAND  
WESTERN CANADA.

Excellent selections within a few miles of main line of railway. Prices and terms very reasonable. Call and see us, or write for literature.

The Union Trust Co., Ltd.,  
Real-estate Dept.  
174-176 Bay St. Toronto, Ont.

## This is the easy fence to erect



You don't have to be an expert to erect LEADER fence. It is the easy fence to erect.

We use a positive measuring device, so that all cross wires measure exactly the same length. So do all the uprights.

With fencing containing wires of uneven length you waste a lot of time trying to stretch the fence up evenly. And no matter how hard you try you cannot make the slack wires tight.

But the LEADER stretches out beautifully even and presents a very attractive appearance to the eye. You'll be proud of your wire fence, if it is the LEADER.

The LEADER double-grip lock ties the cross and lateral wires securely together, and in such a way that the fence conforms to uneven as well as level ground.

This double-grip lock is an immense improvement over any other lock. The ends curve in such a manner that the lock practically interlocks itself. It is impossible to spring the ends of the LEADER lock.

You cannot purchase a stronger, better galvanized or more lasting fence than the LEADER. So write us for booklet and see the different styles.

## Leader fence

If you are open to represent a good, live fence company in an unrepresented district, write us for our attractive proposition. Our agency includes a complete line of farm and ornamental fence and gates. For those who will order in carload lots we've a special proposition, which includes sending an expert salesman to help close orders and show how to erect LEADER fence properly. Write us to-day and get further particulars.

Frame & Hay Fence Co., Ltd., Stratford, Ont.

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

## Don't Judge a Roofing by its Looks

Most ready roofings look the same. The weather alone finds the hidden weakness.

You can't tell by looks which roofing will last or which will go to pieces in a season.

But you **can** do this. You can identify from its 300 substitutes the **only** roofing which **has lasted**.



Beware Imitations

## Ruberoid Roofing

(TRADE MARK REGISTERED)

Fac-simile of the "RUBEROID MAN" on the wrapper and the word "RUBEROID" is stamped every few feet on the underside of the fabric.

Write us for a copy of our **FREE Book**, which gives you valuable information about all Roofings.

**WRITE TO-DAY.**

The Standard Paint Co. of Canada, Limited,

Manufacturers.

MONTREAL.

Dealers Everywhere.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### CEMENT FOR WALK AND GUTTERS.

How much cement will it take to make two cement gutters in cow stable, 24 feet long, 15 inches wide and 7 inches deep, with cement walk between five feet wide, the remainder of floor to be plank?

A.H.

Ans.—If concrete for walk and gutters is laid four inches thick, and the body mixed 1 to 8, with a half-inch surface of 1 to 3, about 15 barrels of cement would be required.

#### WHITEWASH FOR OUTDOOR USE

Will you kindly give recipe for a lime-and-sulphate-of-zinc mixture for whitewashing buildings and fences; also give the names of inexpensive approved types of pumps for applying the same?

C. S. N.

Ans.—The following is probably what you have in mind: Quicklime, 1 peck; slake, add  $\frac{1}{2}$  lb. common salt;  $\frac{1}{2}$  lb. sulphate of zinc (white vitriol); 2 quarts sweet milk. Dissolve the salt and white vitriol before adding. Mix with sufficient water to give the proper consistency. Apply as soon as possible.

For information on spray pumps consult our advertising columns.

#### PROBABLY SUN-SCALD—WHO PAYS FOR DRAIN?

1. I have a large Spy apple tree, and the bark on the south side is loosened from the trunk. What is the cause, and is there any help for it, as it is a fine tree?

2. I have an open ditch running across my place up to the west line, and would like to put in tile. Will I have to put in tile large enough to carry the water off my neighbors' land, and off the road, or should they help bear the cost? There is a lot of water that comes off the road. Should the council help bear the expense?

BRANT COUNTY.

Ans.—Sun-scall has probably been the cause of bark loosening on the south side, though it may have been caused by some other form of injury. Sun-scall takes place when nights are frosty and days bright. The theory is that the sun suddenly thaws the frozen bark and wood on the south side, to be again frozen. It is doubtful whether anything can be done to save the tree. It may be allowed to live as long as it will.

2. The neighbors and the council, who would be benefited by the drain, should help to bear the extra expense of the large tile. If an agreement cannot be reached, however, the municipal engineer, if called in, will settle the whole matter, and apportion the share of expense each has to pay.

#### GOSSIP.

##### RE CONSTRUCTION OF REFRIGERATOR.

The manager of a cold-storage company, commenting on homemade refrigerators, says that it is doubtful whether a satisfactory one for butchers' purposes can be constructed at a cost that will make the investment profitable. He suggests some guiding principles in the construction of refrigerators. 1st. That ice must be in upper part, as cooled air is heavy, and descends. 2nd. Water formed by melting ice must be drained off, but the outlet pipe must have a trap to hinder cooled air from being drained off also. 3rd. Shavings rammed hard are the best non-conductor for walls. Must be absolutely dry. 4th. Refrigerator should be little larger than the absolute requirements of its work.

#### TRADE TOPIC.

That much of the success in gardening depends upon the quality of the seeds sown goes without saying. The illustrated catalogue of Wm. Ewing & Co., Seedsmen, Montreal, which is mailed free to applicants, throws much light upon the importance of sowing reliable seeds, such as this firm is prepared to supply. Look up their advertisement in this paper, and send for the catalogue, or for the seeds you want.

QUESTIONS AND ANSWERS.  
Miscellaneous.

POPULATION OF CANADA.

Kindly inform me, through the medium of your valuable paper, as to the population of Canada.

J. C. M.

Ans.—An estimate of the Census Bureau at Ottawa, placed the population of Canada on March 31st, 1909, at 7,181,741 souls.

SEED MIXTURE FOR PERMANENT PASTURE.

I have about forty acres which I wish to seed down to permanent pasture; it is mostly all light land, and very poor, some of it being high and dry, while other parts of it are lower, and inclined to be wet. Alfalfa will grow on the higher parts fairly well, but I do not wish to sow it, as I intend to pasture mostly sheep, and they nip alfalfa so low down that it is killed out in too short a time.

1. What mixture would you advise me to sow, and at what rate per acre for the higher ground, it being poor and light?

2. What mixture would you advise me to sow, and at what rate per acre, on the lower ground, it being also poor?

H. J. V.

Ans.—I would advise you to manure your high land and underdrain your low land as soon as possible if you hope to get satisfactory results.

1. For your high land, I would suggest a mixture somewhat as follows: Orchard grass, 5 lbs.; meadow fescue, 5 lbs.; tall oat grass, 2 lbs.; meadow fescue, 2 lbs.; alfalfa, 5 lbs.; white clover, 3 lbs.; red clover, 1 lb., per acre. Even in spite of what you state, I would advise you to sow some alfalfa. It is one of the best deep-rooted plants for high land, and is a luxuriant grower. Should the sheep kill out the plants, the decay of the roots would greatly assist the growth of the grasses. You should aim to not pasture the crop too closely, or you will get poor results from all the grasses, as well as kill out the alfalfa plants.

2. For your low land, I would suggest the following mixture: Orchard grass, 4 lbs.; meadow fescue, 4 lbs.; meadow fescue, 2 lbs.; red top, 4 lbs.; timothy, 2 lbs.; alsike clover, 3 lbs.; white clover, 2 lbs.

C. A. ZAVITZ.

TRADE TOPICS.

A farm wagon is used much more than most implements. Its season of service is not for a few days only, but extends to three-fourths or more of each year, and it is expected to last for many years. It is therefore important that material and workmanship be of the best. Price is not the chief thing to be considered. Paint will cover many defects. It is what is under the paint that counts. The Petrolia and Chatham wagons have built up a reputation for excellence which is well known to Canadian farmers generally. These wagons are now sold by the International Harvester Company, from whose local dealers or branch houses you may get a catalogue telling about the kind of wagon that will suit you best. Branches at Hamilton, Ont.; London, Ont.; Ottawa, Quebec, and St. John, N. B.

Farm cream separators have become very common. There is no doubt there are differences in them, some being eminently satisfactory, and others less so. A good separator should, first of all, skim to a trace. Second, it must be easy to clean. Third, it must be easy to turn, and fourth, it must be simple and strong in construction. Most separators claim all of these advantages. The buyer is obliged to look considerably to the reputation of the manufacturer, as it is impossible for him to judge accurately from appearances alone. In this line of machinery, as in many others, the International Harvester Company, Chicago, is now a competitor. They claim for their separators all the standard qualities, and, in addition, dust-proof and milk-proof bearings; a perfect straining device, and a flexible top bearing that prevents vibration and keeps the bowl steady. Their advertisement appears in this issue. If interested, see local dealer, or write for catalogue.



**Think Only of Permanency**

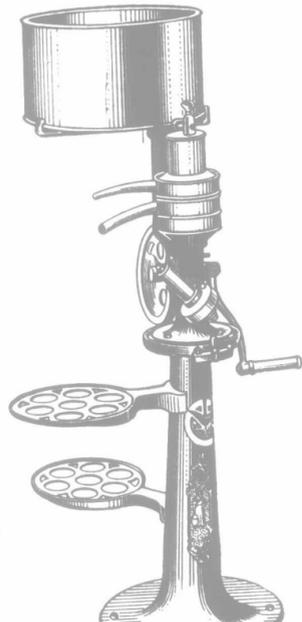
When buying fencing FORGET about the NOW cost. Do as the railways. Think only of PERMANENCY. Select the fence with the quality, weight, stiffness and strength to give longest service. And three or four years from now you will shake hands with yourself because you were shrewd enough to see eye to eye with the railways and buy IDEAL woven Wire Fence.

This Lock makes "IDEAL" FENCE Strongest in Existence

No fence has a simpler lock than the IDEAL. Yet the railways have proven to their entire satisfaction that the IDEAL lock has the greatest gripping-tenacity. Other things being equal, the impossible-to-release grip of this simple lock makes IDEAL fence strongest in existence. But other things are not equal. IDEAL Woven Wire Fence has the best quality of hard drawn elastic steel wire laterals. It has the stiffest uprights. The galvanizing is the smoothest and heaviest—most rust-proof. The scales prove IDEAL the weightiest woven fence. What further reason do you need to prompt you to buy IDEAL fence? Well, here is another: IDEAL Fence will cost you no more than other fences that you will not buy if you think only of permanency. Our fence and gate booklet shows different styles for horses, cattle, hogs, etc. Write for your copy.

**JOIN OUR STAFF OF AGENTS** and increase your income. The weight, quality and strength of IDEAL fence make it easiest to sell.

THE MCGREGOR-BANWELL FENCE CO., LIMITED, WALKERVILLE, ONT.



**The CAPITAL is the Cream Separator that will "Buy Itself" For You.**

As soon as you have read this advertisement, sit down and write a post card for The Capital book—the book that not only tells the story of the easy-running, cream-saving separator, but that tells how you can put The Capital in your own dairy practically without costing you a cent.

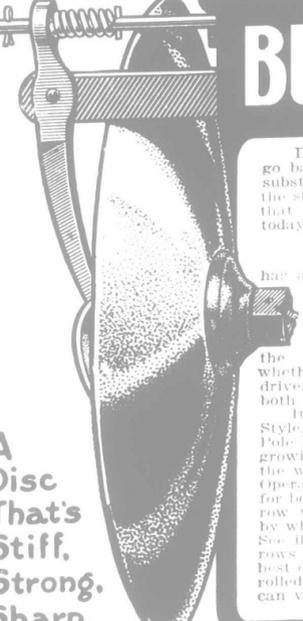
The book also tells all about the wonderful Capital gears, about their perfect meshing and non-wearing qualities—how they run in oil—how an automatic clutch stops them running the minute you let go of the handle—and about how they give the light, three-and-a-half-pound bowl, 7,000 revolutions a minute.

It tells how and why The Capital skims closer—why The Capital wastes less than one-fifth the cream that other separators waste—and then explains how the machine can be made sweet and clean in two minutes after you are through using it.

This book is full of hard-and-fast facts—separator facts—which every dairyman owes it to himself to know; facts which will prove a revelation to the dairyman who is not familiar with The Capital.

Write for the book to-day—NOW.

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Head Office: Ottawa. Factories: Ottawa and Brockville.  
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**BUILT FOR HARD WORK**

Don't fear for a WINDSOR DISC HARROW. Don't worry for a second that it will go back on you when you have a hard piece of work for it to do. The Windsor is so substantial, so well braced at every angle, that no matter what it strikes, it withstands the shock. Put it into whatever kind of land you have, and it will cultivate and pulverize that land to your entire satisfaction. It is doing so for thousands of satisfied farmers today.

**FROST & WOOD DISC HARROW**

has an all-steel frame, strongly protected at all angles with rigid braces. It is built on the out-throw principle. The two levers in front of driver, very conveniently located—control the two separate gangs of discs, which can be set at any angle necessary. This is a rigid Harrow, but does most excellent work on any kind of land. On knolly ground it has a tendency to level the field, because of its rigid sections. But whether on side hill or level wherever driven—it will cut uniformly the length of both gangs.

It is built in two styles: the Front Truck Style, as shown in illustration, and also as a Pole Harrow. The demand for Truck Harrows is growing very rapidly, because by its use you make the work of the horses infinitely more comfortable. Operating a Windsor Truck Harrow is solid comfort for both man and beast. We also build a Pole Harrow with a patented adjustable Pole Attachment, by which the pole can be instantly set for 2, 3 or 4 horses. See illustration of this in catalogue. Both of these Harrows are substantially built. The discs are made of the best quality of steel we can buy for the purpose—they are rolled, sharpened and tempered in our own factory, so we can vouch for them. Ask us or our agent for further information and catalogue. F 53

**A Disc That's Stiff, Strong, Sharp.**

SQUARE STEEL AXLE.

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Write to-day for "Veterinary Experience"—a book that will enable you to be your own veterinarian. It is an invaluable treatise on the horse, horse diseases, and the treatments and remedies which cure. Among other things of vital importance to every horse owner, it tells how and why

**TUTTLE'S ELIXIR**

cures Curb, Splint, Spavin Lameness, Bony Growths, Sprains, Swellings, Shoe Boils and Founder, Distemper and Colic. Also makes the

**Best Leg and Body Wash.**

Tuttle's Elixir has for many years been the main stay of veterinarians and operators of large stables everywhere.

It is quick and sure in action, non-poisonous, cannot injure, pain or bluish the horse. Write for the proofs of our claims. If your dealer doesn't keep Tuttle's, send us his name and 90 cents in stamps, and we will send a large size bottle prepaid. Don't experiment. Get Tuttle's and be sure. Ask also for Tuttle's American Worm and Condition Powders and Hoof Ointment.

Send us your name, address and 2c. stamp now, so we can mail you the Free Book.

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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 sound. Most cases cured by a single minute application—occasionally two required. Cures Bone Spavin, Ringbone and Bldebone, new and old cases alike. Write for detailed information and a free copy of

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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.

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Wonderful Discovery

"VISIO"



MOON BLINDNESS and all Diseases of the Eye successfully treated with this NEW REMEDY.

Money Back if it fails to cure. \$2.00 per bottle postpaid on receipt of price.

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Always on hand, stallions, colts, mares and fillies. The champion stallion, "Baron Howes" (13847), was purchased from this stud. Apply:

JOHN R. BEATTIE, Annan, Scotland.  
Baurch Farm.

**MESSRS. HICKMAN & SCRUBY**

Court Lodge, Egerton, Kent, England.  
Export pedigree live stock of every description. Owing to rapid increase in business, Mr. L. C. Scruby has been taken into partnership. During the spring months the export of horses will be a specialty. We are at this business all the year round, and can do better for you than you can do for yourself, even if you do come over to do your own business. Send us your orders, and we will do the best we can for you. Nobody can do more.

**NOTICE TO HORSE IMPORTERS**

Gerald Powell, Commission Agent and Interpreter, Nogent Le Rotron, 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.

**Peachblow Clydesdales and Ayrshires!**

CLYDES—2 four-year registered stallions, one imported. AYRSHIRES—3 very choice bull calves, all registered. All good colors, and from good milking dams. Prices right.

R. T. BROWNLEE, HEMMINGFORD, QUE.

**QUESTIONS AND ANSWERS. Veterinary.**

**CHRONIC COUGH.**

Yearling colt had a cough and nasal discharge when she was a month old. She has had a dry cough all winter, but I noticed a nasal discharge only once or twice. She still coughs.

H. C. McL.

Ans.—These chronic coughs are very hard to treat. Give her, every morning, a ball composed of 40 grains powdered opium, 40 grains solid extract of belladonna, 20 grains camphor, and 10 grains digitalis, with sufficient oil of tar to make plastic. Roll in tissue paper and administer, or dissolve in warm water and give as a drench. Improvement will probably be more marked when she gets on grass.

**SEQUEL TO BARBED-WIRE WOUND.**

Mare received several barbed-wire wounds last November; one in front of hock. The weather turned cold, and one wound in front of hock, which was not attended to, healed, but a tumor as large as a man's fist remains, and the leg becomes feverish occasionally.

S. R. G.

Ans.—It is possible this growth could be removed in time by the daily application of butter of antimony, but the process would be very slow, and might not be successful. The better treatment will be to have the tumor carefully dissected off, and the raw surface dressed three times daily, until healed, with a five-percent solution of carbolic acid. No doubt a large scar will remain.

**Miscellaneous.**

**PROBABLY JOINT ILL.**

Have a fine flock of ewes; lambs started to come three weeks ago; they were fine and strong; kept them in a roomy wooden building while the cold weather lasted. Since weather got warm, let them out every day. Lambs did well at first, but after starting to grow nicely, a number have taken a swelling in the knee; this goes up and they die. Please advise.

J. H.

Ans.—What is called joint ill is likely the trouble with the lambs. From 24 hours to three weeks or a month old, is the time when the disease usually appears. It is believed to be a condition of blood poisoning through imperfectly closed or diseased navel opening. All lambs born after the appearance of the disease should have their navels carefully examined and dressed for the first two or three days with a five-percent carbolic or a ten-percent solution of formaldehyde, or other antiseptic solution, and should be folded on clean, dry litter. Foulings of the pens should be carefully guarded against.

**ROOT-SPROUTING IN ORCHARD—KEROSENE EMULSION FOR APHIS.**

1. My orchard is mostly half-grown trees—apples and cherries. They keep continuously sprouting from the roots, especially the cherry trees. Last year I cut them off close to the ground twice; it seemed to make them worse. The orchard is kept plowed between rows, within a distance of five or six feet from trunk of tree, and always plowed the same way, and I mow the grass between trees. Orchard is kept well manured. What ways or means can I adopt to get rid of the sprouting?

2. My Green Gauge plum trees last year were literally covered with small green lice, mostly lodged on the under side of leaf, causing plums to drop before maturity. What can be done to prevent this trouble?

**OLD SUBSCRIBER.**

Ans.—1. The sprouts may be kept down by plowing and cultivation. If you undertake to cut them, do it in June, July and August.

2. Spraying with Keroseine emulsion just before the buds open is the remedy for aphids on plum trees. When the leaves become curled with the lice under, it is difficult to get the spray to touch them, though those it touches will die.

**THIS PAINT**



is made for you. It will pay you to see about it. It has been made in Canada for nearly seventy years with the greatest skill. It is known as

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and it means gain to you when you use it. Remember that you get the high standing durability, test and beauty of tone that you can't get in other paints, and the price is always reasonable—impossible to be in the low grade, but never too high. We issue a lovely Booklet on house painting. Do you want it? Write for Booklet AB. We mail it free.

A. RAMSAY & SON CO., THE PAINT MAKERS, Montreal, Est'd. 1842.



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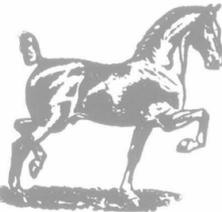
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**UNION STOCK - YARDS Horse Exchange TORONTO, ONT.**

Special Auction Sale **20 Clydesdale Fillies** Imported and Registered

WEDNESDAY, MAY 4th, 1910

We have been favored with instructions from Mr. Jno. Vance, Tavistock, Ont., to sell the above consignment. These fillies are all bred from the best stock in Scotland, and are coming direct from some of the best known breeders. On account of the short space of time between the arrival of the boat and date of sale, catalogues will not be ready till day of sale. Don't forget the date, Wednesday May 4th, 1910.

HERBERT SMITH, Manager.

**CRUICKSTON STOCK FARM, GALT, ONTARIO**

The services of any one of the following high-class stallions can be secured for approved mares by applying to the manager: **Mograzia**, Champion Standard bred stallion; **Bingen Pilot**, by Bingen, 2,064; **Jim Tod**, by Tod, 2,144; also sire of Kentucky Tod; **Crayke Mikado**, Hackney stallion, Champion at Chicago International, and the Canadian National, Toronto; **Baron Howes**, Champion Clydesdale stallion, considered by expert judges to be the best Clydesdale stallion in America. For all particulars, apply to

JAS. WETHERILL, Manager, Galt, Ont.

**WAVERLY CLYDESDALES AND HACKNEYS**

My 1910 importation of Clydesdale stallions and fillies, and Hackney stallions and fillies, are now in my barns. One and two-year-old Clyde fillies of a character and quality never before excelled. My Hackney stud was never so strong in high-class animals. All are for sale and prices right. **ROBT. BEITH, BOWMANVILLE, 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.

**IMPORTED CLYDESDALE FILLIES**

I have still on hand six Clydesdale fillies. They are big, smooth fillies, exceptionally well bred, and their underpinning is the kind Canadians like. I have only one stallion left, a right good one. My prices are as low as any man's in the business. Phone connection.

GEO. G. STEWART, HOWICK, QUEBEC.

**Imported Clydesdales**

My first importation for 1910 has just arrived. Stallions up to a ton in weight, from 1 to 5 years of age. Draft fillies 2 and 3 years of age. **WM. COLQUHOUN, MITCHELL, ONT.** Phone connection.

**SMITH & RICHARDSON'S CLYDESDALES.**

Black Ivory, Commodore, Royal Gretna, Pride of Newmills, Dunure Acknowledgment, Dunure Souter, Captain Vasey, Look Again, Baron Acme, and some younger ones, all sold. **COLUMBUS, ONT.** Myrtle, C. P. R.; Brooklin, G. T. R. Phone.

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In my stables at Ingersoll, Ont., I have always on hand Clydesdale stallions and fillies, and Hackney stallions, personally selected in Scotland for their high-class type, quality and breeding. Let me know your wants.

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I have arranged to make a special importation of yearling and 2-year-old fillies this spring for the benefit of those wishing to obtain pedigreed stock at cost price. Those wishing to co-operate with me in this, should write me at once; the saving will be about one half of the prices charged by agents in Canada. My object is to promote Clyde breeding in Canada.

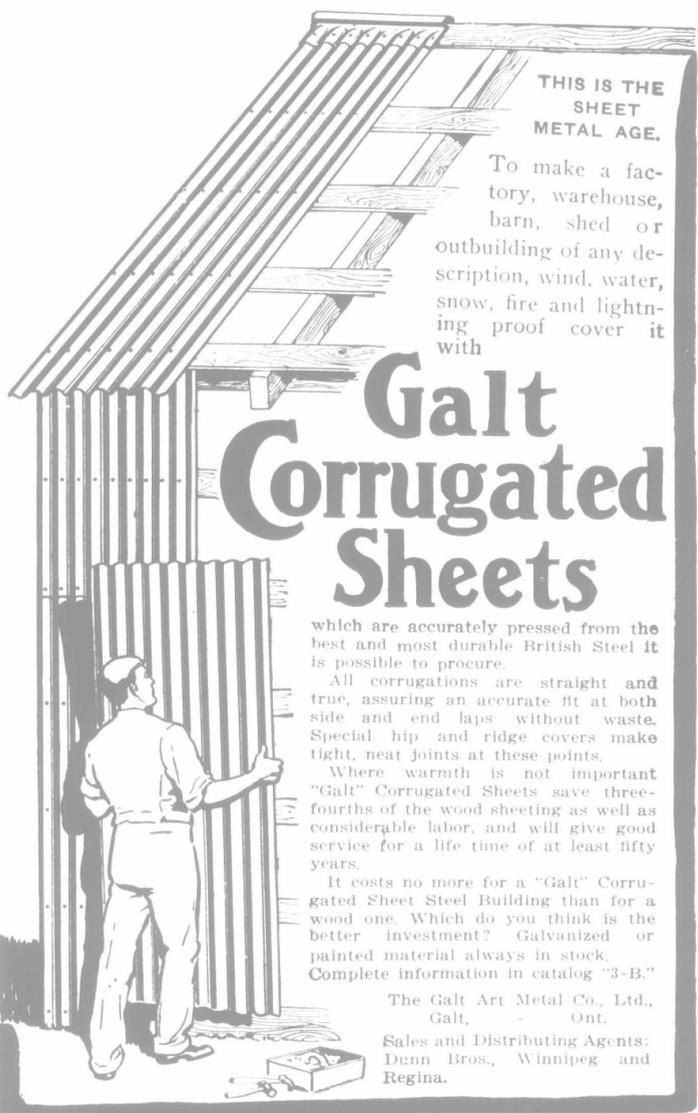
**Duncan McEachran.**

**Imported Clydesdales** Imported and Canadian-bred Clydesdale mares and fillies and young stallions, of most fashionable breeding, up to a big size, with character and quality. Among them are 4 mares in foal. Phone connection. **Alex F. McNIEN, St Thomas Ont.**

When Writing Mention This Paper.

**For Sale: REGISTERED HACKNEY STALLION, COCK ROBIN.**

Three years old; 15 1/2 hands; chestnut; hind feet white. Sire Commodore 3rd, imp., (6695), by Chocolate Jr. (4185). Dam Ada Adair (181), by Robin Adair 2nd, imp., (3907). For description, terms, etc., address: **G. W. CLEMONS, ST. GEORGE, ONT.**



**THIS IS THE SHEET METAL AGE.**

To make a factory, warehouse, barn, shed or outbuilding of any description, wind, water, snow, fire and lightning proof cover it with

# Galt Corrugated Sheets

which are accurately pressed from the best and most durable British Steel it is possible to procure.

All corrugations are straight and true, assuring an accurate fit at both side and end laps without waste. Special hip and ridge covers make tight, neat joints at these points.

Where warmth is not important "Galt" Corrugated Sheets save three-fourths of the wood sheeting as well as considerable labor, and will give good service for a life time of at least fifty years.

It costs no more for a "Galt" Corrugated Sheet Steel Building than for a wood one. Which do you think is the better investment? Galvanized or painted material always in stock. Complete information in catalog "3-B."

The Galt Art Metal Co., Ltd., Galt, Ont.

Sales and Distributing Agents: Dunn Bros., Winnipeg and Regina.

**QUESTIONS AND ANSWERS.**  
Veterinary.

**BUNCH ON HOCK.**

Bull sprained his leg two weeks ago. I bathed it and applied liniment, and the swelling has subsided some. There is a bunch on the inside of his hock which is sore and hard.

A. G. J.

Ans.—Make a lotion of 2 ounces laudanum, ½ ounce acetate of lead and 8 ounces water. Bathe the parts three times daily with hot water, and, after bathing, rub well with lotion. After the soreness disappears, the remaining lump can be reduced by repeatedly blistering.

V.

**CATTLE WITH COUGH.**

Our cattle have had a dry cough for some time. The whole herd is affected. They eat, look and milk well, and have no nasal discharge or other symptoms.

J. I. M.

Ans.—The symptoms indicate pulmonary tuberculosis. No other disease of cattle causes cough without other physical symptoms. As tuberculosis is infectious, the cattle doubtless have contracted it from each other. Nothing can be done to cure. The only means of making a definite diagnosis is to have the herd tested with tuberculin by a veterinarian.

V.

**ENLARGED KNEES.**

Cow's knees are greatly enlarged. She tries to rise with legs outstretched like a horse, in order to prevent pressure on her knees. She is poor in flesh, and walks stiff.

A. L.

Ans.—These enlargements are serous abscesses, caused by the cow lying with pressure on her knees; very liable to occur in cattle that are not kept well bedded. Applications will do no good. Treatment consists in lancing the abscesses and allowing escape of the fluid, then flushing the cavities out well, twice daily, with a five-per-cent solution of carbolic acid, until healed. Keep her in a well-bedded box stall. It will be wise to get a veterinarian to operate, as there is danger of lancing too deeply and injuring the joints.

V.

**SEQUEL TO DEHORNING.**

Had a bull dehorned over a year ago. One horn has not healed. There is a cavity into which a man can insert his little finger, and there is a discharge of white matter, with offensive odor.

H. E.

Ans.—This will be very tedious to treat. Inject into the cavity, twice daily, a warm three-per-cent solution of carbolic acid. Turn his head sideways so that the fluid will run out; inject again; again turn head, etc., etc. If, after a while the fluid escapes through his nostrils, it will indicate a favorable condition, and, of course, the head will not need to be turned. If you have patience and continue treatment, you may be able to effect a cure.

V.

**FATAL MAMMITIS.**

Cow calved in January. In about two months, one hind quarter of her udder swelled. I rubbed it with warm water, but was told to use cold water, and I did so, but she kept getting worse; lost appetite. The whole udder became involved, front teats became loose, teats turned purple, and skin peeled off; milk was little, thick and bloody. I killed her.

W. L.

Ans.—It is hard to say what caused the inflammation of the udder. It occurs from many causes, at any period of lactation. In some cases, even when properly treated, the udder becomes gangrenous, and it may cause death. I do not understand how it affected the teats, but the penis teeth of all cattle are somewhat loose. The proper treatment for mammitis is the administration of a purgative, the application of hot poultices to the udder, rubbing the udder three or four times daily with camphorated oil, and drawing the milk three or four times daily. Follow the purgation with four-dram doses of nitrate of potassium, three times daily, for two days.

V.

**HORSE OWNERS! USE**



**GOMBAULT'S CAUSTIC BALSAM.**

A safe, speedy and positive cure. The safest, most BLISTER ever used. Removes all blisters from Horses. Impossible to produce scar or blemish. Send for descriptive circulars.

THE LAWRENCE-WILLIAMS CO., Toronto, Can.



**Sound as a Dollar**

That's the only way you can afford to keep them, because any lameness means less work and less profit to you.

Spavin, Splint, Curb, Sweeney, Ringbone, Swelling or Lameness need not prevent your horses from working. Simply use Kendall's Spavin Cure.

It works while the horse works—takes away the pain—reduces swellings—makes legs and joints sound and strong—leaves no scars or white hairs because it does not blister.

**Kendall's Spavin Cure**

has been the horseman's standby for 40 years and is used all over the world.

Burns, Ont. Sept. 10th 1909.

"I have used Kendall's Spavin Cure and it cures Old Stubborn Cases."

WILLIAM H. DOUD.

Keep your horses sound as a dollar. Get Kendall's today and you will have it tomorrow if needed. \$1 a bottle—6 for \$5.

When you buy, ask for free copy of our book "A Treatise On The Horse" or write us

Dr. S. J. KENDALL CO., Enochburg Falls, Vt.

**Horse Breeders**



**Artificial MARE IMPREGNATORS**

We GUARANTEE you can get from 2 to 6 mares in foal from one service of stallion or jack. Increase the profits from your breeding stables by using these impregnators. No experience necessary to use them successfully. Prices, \$3.00 to \$5.00 each prepaid.

Popular SAFETY IMPREGNATING OUTFIT, especially recommended for impregnating so-called barren and irregular breeding mares, \$7.50 prepaid.

Write for CATALOGUE which illustrates and describes our Impregnating Devices, Breeding Hobbles, Stallion Brides, Shields, Supports, Service Books, Etc. CRITTENDEN & CO., Dept. 30, Cleveland, Ohio, U.S.A.

**Increase Your Profits**

**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., and  
Brandon, Man.  
W. D. COLBY, Mgr.  
Weston, Ont.



**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 E free.

ABSORBINE, JR., (mankind \$1 and \$2 bottle.) For synovial Strains, Gouty or Rheumatic Depositions, Varicose Veins, Variocele, Hydrocele, Allays pain. Your druggist can supply and give references. Will tell you more if you write. Send for free book and testimonials. Manufactured and sold by W. F. YOUNG, P. O. F. 258 Temple St., Springfield, Mass. Canadian Agents: Lyman's Ltd., Montreal.

**20 Imp. Percheron Stallions 20**

Our 1909 importation of 20 Percheron stallions, from 1 to 5 years of age, are now in our stables. Up to over a ton in weight. Big, stylish, choke-full of flashy quality, and faultless movers. Prizewinners among them. The best lot ever imported to Canada. All are for sale on terms to suit.

HAMILTON & HAWTHORNE,  
Simcoe, - - - Ontario.

**Maher's Horse Exchange**

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

AUCTION SALES of Horses, Carriages, Harness, etc., every MONDAY and THURSDAY at 11 a.m. PRIVATE SALES every day. We have always a large quantity of horses on hand for Auction or Private Sale. We have the biggest and best sale ring and stables in Canada. We hitch and try all horses for out-of-town buyers, and guarantee satisfaction. WE SELL STRICTLY ON COMMISSION.

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

**T. H. HASSARD'S NEW IMPORTATION!**

MY NEW IMPORTATION OF

**Clydesdale Stallions and Fillies**

are now in my stables at Markham, Ont., and, as usual, I have a big range for selection, of a type, breeding and quality seldom equalled, never excelled, by any previous importation. Call and see them. Phone connection.

T. H. HASSARD, Markham, Ont.

**CLYDESDALES AND HACKNEYS**

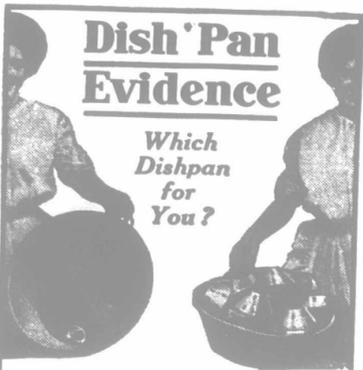
We have still for sale several good Clydesdale Stallions; also our prizewinning Hackney Stallion, Blanch Surprise, and a few good Clydesdale and Hackney Mares. All of which will be sold on reasonable terms. Phone connection.

JOHN A. BOAG & SON, Bayview Farm, Queensville, Ont.

**Imported Clydesdales**

1910 have arrived. They were selected to comply with the Canadian standard, combining size, style, quality and faultless underpinning with Scotland's richest blood. They will be priced right, and on terms to suit. C. W. BARBER, GATINEAU PT., QUEBEC.

**CLYDESDALES, Imported and Canadian-bred.** I have on hand 2 Imported Clydesdale Stallions, one 4, the other 5 yrs. old; 2 Canadian-bred Clydesdale Stallions, one 2, the other 3 yrs. old; one French Coach Stallion, 4 yrs. old; one Shire Stallion, and the noted Hackney Stallion, Chocolate Jr. I will sell these horses cheap for quick sale. T. D. Elliott, Bolton, Ont.



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Which Dishpan for You?

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

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



The manufacture of Tubulars is one of Canada's leading industries. Sales easily exceed most, if not all, others combined. Tubulars probably replace more common separators every year than any one maker of such machines sells. Write for catalog No. 193.

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

**Camphor Ice VASELINE**

FOR CHAPPED SKIN AND LIPS, COLD SORES, WINDBURN.

12 Vaseline Remedies in Tubes Capsicum, Borated, Mentholated, Carbolated, Camphorated, White Oxide of Zinc, etc. Each for special purposes. Write for Free Vaseline Book.

**CHESBROUGH MFG. CO. (Cons'd)**  
379 Craig St. W., Montreal

**Special Notice.**

**BETTER THAN SPANKING.**

Spanking does not cure children of bed-wetting. There is a constitutional cause for this trouble. Mrs. M. Summers, Box 821, Windsor, Ont., will send free to any mother her successful home treatment, with full instructions. Send no money, but write her to-day if your children trouble you in this way. Don't blame the child, the chances are it can't help it. This treatment also cures adults and aged people troubled with urine difficulties by day or night.

**The Maples Herefords**

Canada's Greatest Show Herd  
For sale: 6 young bulls and a number of young females, bred from imported and show stock. None better. Prices right.

**W. H. HUNTER,**  
Orangeville, Ont., P.O. & Sta.

**Homestead Aberdeen - Angus**

Bulls all sold, but must sell a number of cows as I am short of grass. Will be priced low for quick sale. Come and see them before buying.

**Wm. Ische, Springville, Ont.**  
Lo distance phone.

**FOR SALE: SOME NICE YOUNG**

**Aberdeen-Angus Bulls**  
and some females of all ages. Also a first-class Clydesdale stallion. **J. W. Burt, Coningsby, Ont.**

**ABERDEEN - ANGUS**

Will sell both sexes; fair prices. Come and see them before buying. Drumbo station.

**WALTER HALL, Washington, Ont.**

**Aberdeen-Angus Cattle**—Stock all ages, and both sexes, good strains, at reasonable prices. Apply to

**ANDREW DINSMORE, "Grape Grange" Farm**  
Clarksburg, Ont.

**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, Ferguson P. O. and Station.**

**QUESTIONS AND ANSWERS.**  
Miscellaneous.

**LUMP JAW.**

I have a heifer that has lump jaw. May I breed her, or sell her for beef. Would her milk be all right, or her calf likely to be healthy? I saw something in "The Farmer's Advocate" some time ago that gave me the impression that milk from such was used. M. H.

Ans.—You may breed the heifer, but are not legally supposed to sell her for beef while she is affected with the disease, although as a matter of fact the carcass would not be unfit for food, except the parts locally affected. Nor will the disease render the milk unsafe to use, except that possibly it should be discarded during the course of treatment. The calf should be all right.

**GOVERNMENT WHITEWASH — CEMENT PAINT—MOCK MAPLE SYRUP—SILO CAPACITY.**

1. I wish to paint my outbuildings so as to have them look well. If I put on your preparation called Government Whitewash, will I have to put it on every year. Will the rains wash it off annually?

2. Is Government Whitewash more lasting than cement paint, and can I use buttermilk from creamery instead of whole milk?

3. Can you give me recipe for making maple-syrup mixture?

4. Would silo 8 feet in diameter and 20 feet high be large enough for four head of cattle? Does silage lose feeding value near outer edge of silo? C. H. W.

Ans.—1. In our experience, Government Whitewash on wood gets somewhat weatherbeaten in one year on the south side of buildings, but would scarcely need renewal in less than two years.

2. In his experience, the writer found cement paint the more lasting of the two, but rather more liable to peel off. Buttermilk might be used, but would be less valuable than whole milk.

3. Do you mean "mock" maple syrup? Boil corncobs, strain, add sugar and boil to a syrup. Flavor with vanilla.

4. Sixteen feet of settled silage in a round silo 8 feet in diameter, approximately 16 tons, would be sufficient for four full-grown cattle for 64 months, provided there was no waste around the edges. If air-tight there will practically be no waste.

**TESTAMENTARY.**

A dies, leaving as his executors his two eldest sons, B and C. Five years previous to his death, A left his farm and purchased a home in a neighboring village. At time of leaving farm, he took stock of his loose property (which he left on farm), and drew up an agreement between himself and youngest son, D (who was remaining on farm and paying a yearly rental for farm and loose property), concerning said property. A took from D a note for half the estimated value of said loose property. In his will, he does not mention his loose property, nor said note, nor does he mention certain money that his eldest son, B, has borrowed from him, but wills that, after the death of his wife (which took place seventeen days after his own demise), the village property be sold, certain legacies be paid out of it, and, quoting words of will: "All the residue of my estate not hereinbefore disposed of, I give, devise and bequeath to my sons, B, C and D, share and share alike. Now those sons, having kept their three sisters in the dark concerning all transactions, are taking in this note, also borrowed money, as residue, mentioned in will.

1. Do not the daughters, as well as the sons, lawfully inherit their share of this personal property (note and borrowed money)?

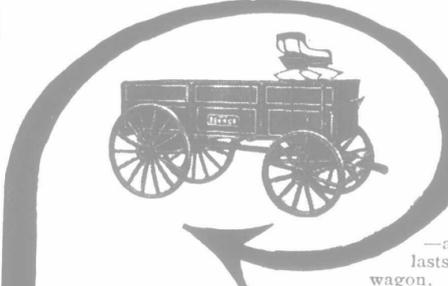
2. I, one of daughters, have asked for and got a copy of my father's will. Can I not lawfully demand a copy of agreement also? We have never known the contents of that agreement.

Ontario.

Ans.—1. No, it goes to the sons as part of the residuary estate.

2. We do not see that you are in a position to do so.

**Buy Your Wagon On An Investment Basis—Choose From The IHC Line**



YOUR wagon must pay you dividends. It should not be a source of trouble and expense. So we say—buy your wagon on an investment basis. It's the most profitable way in the end.

An IHC wagon is a government bond wagon investment. It will last longer—and do better service while it lasts—than any other make of wagon. It pays the biggest dividends.

A cheap wagon is constructed in a cheap way, of cheap materials with cheap machinery, by cheap workmen. Such a wagon is expensive at any price—when you figure up its total cost.

Thousands of business farmers have chosen from the IHC line. It's the surest way of getting the most wagon-service and satisfaction. You will do well to choose one of these styles—

**Petrolia or Chatham**

The greatest wagon value in all Canada. Each is a quality wagon—each is up to the IHC standard—not down to any price. Don't be misled by looks—or first price. For paint covers a multitude of wagon sins—and price is too often the only argument used to sell a cheap, inferior wagon.

The best materials are used in the IHC line of wagons. The wood stock is the finest—air-dried; seasoned and inspected at every step—even after the paint goes on. Spokes, hubs, skeins, box, axles, seat, and in fact every part of the IHC wagon is as good as the widest experience, the best materials, the most skillful workmen and the latest improved machinery can make it. Every part is equally good and equally strong. There are no "weak spots" in the IHC line.

Chatham Wagons have a long record for satisfactory service in Canada. Made with hard maple axles, white oak bolsters, sand boards, rims, spokes and oak or birch hubs—they represent the highest standard of wagon construction.

Petrolia Wagons are especially constructed for Canadian service and have proved their merit to thousands of farmers.

Be sure to call on the local International dealer. Get a pamphlet and let him show you one of these wagons. You will note the vast difference between wagons of the IHC line and all other wagons. If you prefer, write for a booklet or any other information you want to the International Harvester Company of America at nearest branch house.

**EASTERN CANADIAN BRANCHES—International Harvester Company of America at**  
Hamilton, Ont.; London, Ont.; Montreal, Que.; Ottawa, Ont.; St. John, N. B.

**INTERNATIONAL HARVESTER COMPANY OF AMERICA**

CHICAGO (Incorporated) U.S.A.



**Scotch Shorthorns**

At Toronto Exhibition this fall yearling bulls bred by us won 1st and 3rd in class and junior champion. We also bred the sire of these bulls. The grand champion steer at Guelph was sired by a bull of our breeding. We have 10 young bulls for sale now, bred the same. Write for breeding and prices.

**John Miller, Brougham P. O., Ontario.**  
Claremont Stn., C. P. R., 3 miles.

**A. Edward Meyer**

P. O. Box 378, Guelph, Ont.,

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 = 65703 = 283804 A. H. B. Young stock for sale. Long-distance phone in house.

**SHORTHORNS**

Willowdale Stock Farm, Lennoxville, Que., has for sale young stock of both sexes, from his noted herd of 1,600-pound cows, descendants of Joy of Morning, Broad Scotch, etc.

**J. H. M. PARKER, PROPRIETOR.**

**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.**

**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 station.**  
also Waldemar station.

**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.**

**Three Shorthorn Bulls for Sale.**

Show animals, choice breeding. Prices reasonable. Stock bull, Benachie (imp.).  
**Geo. D. Fletcher, Binkham P.O., Erin Station, Ont.**

**Shorthorns and Leicesters.**

For sale: a number of 1 and 2 year-old heifers, all got by Imp. sires, and out of grand milking dams. And Leicester rams and ewes of all ages. **W. A. Douglas, Tuscarora, Ont., Caledonia Station.**

REPEATED

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Is it foresight to waste money on a flimsy Cream Separator because it is a little lower in price? It may skim for a short time, soon gets out of repair and is ready for the scrap heap in a year or two.

"Care for the future" means **MAGNET** Made by the Cream Separator Specialists, The PETRIE MFG. CO., LTD., HAMILTON



Whose great success has been attained by building this Cream Separator superior in every way to all other separators. Do not take our word for it but compare it, point by point, with any or all Cream Separators, and you will find each part in the MAGNET stronger and better adapted for doing the work for years than the parts in any of the others.

Here are the points:

- 1st. The square gear construction.
- 2nd. The strong and rigid frame.
- 3rd. The double supported bowl. MAGNET Patent.
- 4th. The skimmer in one piece, takes out all foreign matter, leaving perfectly pure cream.
- 5th. Perfect skimming, the advertised capacity.
- 6th. Easy turning. Children operate it.
- 7th. Easy cleaning. Clean within five minutes.
- 8th. Change of capacity in the same stand for a few dollars.
- 9th. Perfect brake. Saves time. MAGNET Patent.
- 10th. Sanitary strainer, on each tank. MAGNET Patent.
- 11th. Safety. All parts covered.
- 12th. Skims standing on the ground or any floor.

Our **GUARANTEE** covers each and every point. Send for catalogue. Free to every Dairyman. Dept., E. under the management of a graduate, will answer all enquiries in regard to Dairying, free.

Our 12 years' experience as Dairy Specialists is at your disposal. We can, and will help you.

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Head Office and Factory: HAMILTON, CANADA.  
Winnipeg. St. John, N. B. Regina. Vancouver. Calgary. Montreal.

## Dispersion Sale of Shorthorn Cattle!

The property of T. L. Pardo & Son, three miles west of Cedar Springs, Ont., one of the oldest-established herds in Western Ontario. Positively no reserve. On

**TUESDAY, MAY 3RD, 1910**

Consisting of the entire herd of 23 females and 8 bulls. Several imported, and nearly all from imported sire and dam. The foundation stock for this herd were selected from the very best herds of Scotland and Canada, with a strong view to milking qualities. Electric cars connect with all M. C. R. and P. M. trains, and will be met at Cedar Springs. Terms: Six months' credit will be given on bankable paper, or a discount of 6 per cent. per annum for cash. Lunch at noon. Sale to commence at 1 o'clock. Catalogue on application.

**T. L. PARDO & SON,** CEDAR SPRINGS, ONTARIO  
Capt. T. E. Robson, } Auctioneers.  
McCole & Harrington, }

### 275 BURLINGTON SHORTHORNS 275

3 Choice Imported Scotch Shorthorn Bulls—yearlings.  
1 Imported 2-year-old Bull, red—an extra sire.  
10 Bulls, 9 to 16 months old—all by imported sire.  
30 Choice Young Cows and Heifers—mostly bred or have Calves at foot. Long-distance telephone. Farm 1/4 mile from Burlington Jct. Sta., G. T. R. **J. F. Mitchell, Burlington, Ont.**

**SCOTCH SHORTHORNS**—Eight extra good young bulls, from 10 to 15 months old; 20 choice cows and heifers, forward in calf or with calves at foot. Prices reasonable. Inspection invited. **W. G. PETTIT & SONS, Freeman, Ont.**

Farms close to Burlington Jct., G. T. R.

**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.**

**VALLEY HOME SHORTHORNS AND BERKSHIRES**  
If you want a first class Shorthorn bull or heifer come and see what we have, or if you want a show animal with a choice pedigree we have them. For description of herd see Xmas Number of The Farmer's Advocate, on last page. **S. J. PEARSON, SON & CO., MEADOWVALE, ONT., P. O. AND STATION, C. P. R.**

**CHOICE SCOTCH BULLS**  
FOR SALE. HERD-HEADING QUALITY.  
**H. SMITH R. R. 3, Hay, Huron Co., Ont.** Farm adjoins Exeter, on G. T. R.

**SALEM SHORTHORNS**  
I have generally what you want in choice Shorthorns.  
**Elora Station, G. T. R. and C. P. R. J. A. WATT, SALEM.**

**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., ELORA STATION.**

### QUESTIONS AND ANSWERS. Miscellaneous.

#### ADDRESSES WANTED.

Will you please give Andrew Carnegie's and John D. Rockefeller's addresses? **SUBSCRIBER.**

Huron Co.  
Ans.—The address of Andrew Carnegie is Skibo Castle, Sutherland, North Britain; that of John D. Rockefeller, 4 W. 54th St., New York, or Warwick, Rhode Island.

#### LAMPAS.

I have a mare four years old that I think has lampas. The flesh in the upper part of her mouth hangs down below her front teeth. **F. A. J.**

Ans.—Lampas is simply a congestion of the gums from irritation of teething. Horses over five years old are not troubled. As a rule, it is better left alone. In severe cases, such as the one inquired about, it is well to have a competent veterinarian scarify the swollen parts slightly with an ordinary lancet. The bleeding will relieve the congestion. Do not cut further back than the second bar, else dangerous bleeding may result.

#### CORN FOR SILAGE.

1. I am sowing seven acres of corn for to put in silo. I am going to plant three feet apart in rows, and sow with a drill. Do you think Canadian-grown corn would mature earlier than the American corn we get out of our seed stores? **SUBSCRIBER.**

Ans.—1. Corn from Canadian-grown seed will, generally speaking, ripen earlier than American corn of the same variety, and Canadian seed is nearly all of earlier-ripening varieties than what comes across the line.  
2. White-cap Yellow Dent is a great favorite in Southern Ontario, where it is grown for the grain, which ripens thoroughly. It is one of the earliest-maturing of the Dent varieties. The Bailey Dent is another excellent corn. The flint varieties, such as Compton's Early, King Philip and Longfellow, ripen considerably earlier. Gold King corn is not known to us by that name.

#### WHITE FLIES ON HOUSE PLANTS.

Will you tell me what to do to kill those little "white flies" that infest house plants. I have seen treatment given for them in greenhouses, but could not tell from it how to apply for a few house plants. What will kill green lice on Cinerarias? I have a lot of nice plants blooming, and cannot keep them free from lice; they are on the leaves and among the bloom. **MRS. W. B. F.**

Ans.—There is no insecticide at present in use that will effectually do away with the small white fly that infests house plants which is suitable for amateurs to use. Sprinkling the plants well on the under side of the leaves with strong, soapy water frequently, and dusting the plants with soft-coal soot, wood ashes, or flowers of sulphur, while damp, will help to keep them down, as they do not like moisture. Sulpho tobacco soap, sold at large seed stores, is also a partial remedy. Fumigating with potassium cyanide is the most effectual way of getting rid of this pest, but this cannot be carried out in a dwelling-house on account of the deadly nature of its fumes. Sulpho tobacco soap, or a solution of any of the nicotine preparations sold at seed stores, and spraying the plants with cold water, will keep down the green lice or green fly. It is very difficult to kill green fly on Cinerarias when once the plants are badly infested. Fumigating the plants with tobacco smoke is also a good remedy. Cinerarias are not good house plants. **WM. HUNT.**

First Jack Tar (to shipmates, who have hired a very small cart and a very large horse)—"Ow are ye goin' to see where ye're goin' with that there elephant in front of ye?"  
Second Jack Tar—"That's all right, mate. Bill 'e's goin' to keep a look out to starboard, I'm goin' to look out to port, and the boss 'as got to look out ahead."—Punch.

## BARN ROOFING

The "Eastlake" Steel Shingle is the only absolutely weathertight shingle on the market. Let us tell you why. A shingle to be proof against the severest storms must have at least a three inch overlap. The

### Eastlake Steel Shingle

is the only shingle that has that much. The so-called four-lock shingles have only an inch and a quarter overlap—not enough to keep out the drifting snow and rain, so this proves the "Eastlake" the only waterproof shingle. The roofing problem solved. Our free booklet, "Eastlake Metallic Shingles," tells how.

"Eastlake's shingles can be laid in one quarter the time it takes to lay a four-lock shingle."—The Philosopher of Metal Town.



MANUFACTURERS 2753  
*Metallic Roofing*

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Louisiana.....305 Baronne St., New Orleans  
New York.....62 Stone Street, New York  
Virginia.....Citizens Bank Bldg., Norfolk  
Washington.....603 Oriental Block, Seattle  
Canada.....1103 Temple Bldg., Toronto  
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Address Office Nearest You  
Write for Quotations

### Maple Grange Shorthorns

Am offering an extra choice lot of 1-, 2- and 3-year-old heifers, Scotch and Scotch-topped, Claret, 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.

### 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.**

### SHORTHORNS, Berkshires, Cotswolds.

About 50 Shorthorns on hand, including 9 bulls from 9 to 12 months, also young heifers and cows. No Berkshires or Cotswolds to offer at present. **CHAS E BONNYCASTLE, Station and P. O., CAMPBELLFORD, ONT.**

**Shorthorns, Clydesdales and Oxford**  
horns: Several red bulls 10 months of age, by Protector, imp.; some with imp dams; heifers 2 and 3 years of age. Clydesdale mares and fillies. Lincoln and Oxford sheep. All at reasonable prices. Phone connection. **McFarlane & Ford Dutton, Ont.**

**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 Clydesdale stallion, with size and quality. **Goodfellow Bros., Macville P. O., Ontario.** Bolton station.

### JOHN GARDHOUSE & SONS

Always have for sale a number of first-class Shorthorns, Shires and Lincolns, of both sexes. Drop us a line, or better, come and see for yourself. Weston Sta., G.T.R. & C.P.R. Long-distance phone in house.

### HIGHFIELD P. O., ONTARIO.

**CLOVER DELL SHORTHORNS**  
Present offering: A few females of breeding age, also 1909 young stock, both sexes, at reasonable prices. **L. A. Wakely, Bolton, Ont.** Bolton Junction, on C. P. R., within one-half mile of farm.

**Shorthorns and Oxford Down Sheep**  
Young bulls and heifers of richest Scotch breeding and highest quality. Twelve ewe lambs, two aged rams and two ram lambs. None better. Phone connection. **Duncan Brown, Iona P. O., Ont.**

## Caught Cold By Working In Water.

**A Distressing, Tickling Sensation In The Throat.**

Mr. Albert MacPhee, Chignecto Mines, N.S., writes:—"In Oct., 1908, I caught cold by working in water, and had a very bad cough and that distressing, tickling sensation in my throat so I could not sleep at night, and my lungs were so very sore I had to give up work. Our doctor gave me medicine but it did me no good so I got a bottle of Dr. Wood's Norway Pine Syrup and by the time I had used two bottles I was entirely cured. I am always recommending it to my friends."

Dr. Wood's Norway Pine Syrup combines the potent healing virtues of the Norway pine tree with other absorbent, expectorant and soothing medicines of recognized worth, and is absolutely harmless, prompt and safe for the cure of Coughs, Colds, Bronchitis, Croup, Sore Throat, Pain or Tightness in the Chest, and All Throat and Lung Troubles.

Beware of imitations of Dr. Wood's Norway Pine Syrup. Ask for it and insist on getting what you ask for. It is put up in a yellow wrapper, three pine trees the trade mark, and the price 25 cents.

Manufactured only by The T. Milburn Co., Limited, Toronto, Ont.

A well-known criminologist and superintendent of prisons, recently narrated at a dinner some reminiscences of his interesting work.

"A clever criminal of gluttonous proclivities," he said, "once couched a complaint in rather neat terms. My inspector, entering this man's cell one day, found it very hot and stuffy.

"Why have you got your ventilator closed?" he asked.

"The burly and gluttonous prisoner answered plaintively:

"Well, inspector, yer honor, the last time I had the ventilator open a wisp flew in, you see, and carried off my dinner while my back was turned."

## EVERY DAY BRINGS A FRESH PROOF

**That Dodd's Kidney Pills are  
a Boon to Suffering Women.**

**Mrs. Rousseau tells how they cured  
her after three years of almost  
ceaseless pain.**

Hintonburg, Ont., April 25—(Special).—Every day furnishes fresh proof that the women of Canada can be cured of ailments which have hitherto seemed to be a part of the inheritance of the sex by the use of Dodd's Kidney Pills. And this place has a living proof, in the person of Mrs. William Rousseau, of 37 Merton Street.

"For over three years," Mrs. Rousseau states, "I was very ill. My troubles were painful. I suffered very much with my back. My head ached almost continuously, and I scarcely knew what it was to be free from pain. I was very weak and run down. Occasionally my hands would swell up, and this, too, gave me a great deal of annoyance and discomfort. I began to use Dodd's Kidney Pills, and very soon commenced to improve. Three boxes cured me completely."

Nine-tenths of suffering women's troubles start from diseased kidneys. The natural way to cure them is to take away the cause; that is, to cure the kidneys. Dodd's Kidney Pills always cure diseased kidneys.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### STEEL CURBS FOR CONCRETE SILOS.

I have been a subscriber of "The Farmer's Advocate" for a number of years, and I assure you we would not know how to run our farm without your valuable paper. I am a great believer in growing corn for ensilage, and have always been very interested in your articles on growing corn, and silos. I see the concrete silo seems to be the coming silo of the day. I am wanting to build a 15-ft. concrete silo this year, but can't find any person in our part of the Province that has the moulds for doing that. I did not know but you might give me some information as to where I might find a man and tools for building silos. I assure you any information you might give me would be much appreciated.

J. A. McC.

Ans.—Write the London Concrete Machinery Co., London, Ont., who advertise in this paper the adjustable steel curbs for building battered monolithic concrete silos. They will be able to direct you to the man nearest you who has a set of these curbs.

#### BUCKHORN IN CLOVER SEED- ING.

I was unfortunate last year in getting clover seed with buckhorn in it, which I sowed for this year's meadow. Will the buckhorn ripen to seed before hay crop is harvested? What would you advise me about it?

J. A. P.

Ans.—Buckhorn, or ribgrass, ripens its seed from July to September. If the hay is cut by the 6th of July, which is about the average date for the cutting of hay in Ontario, it is not likely that any of the buckhorn will have matured seed by this time, but it must be borne in mind that buckhorn, being a biennial or perennial weed, the cutting of the tops with the hay will not prevent it coming up again the following year. The buckhorn, being a comparatively low-growing plant, some of the flower-stalks will not be destroyed when the hay is cut, and, therefore, some of it will mature seed. If the meadow is badly infested, it will be necessary to break it up and put in a crop which allows of thorough cultivation in order to get rid of the buckhorn.

J. E. HOWITT.

#### WEED SEEDS.

Enclose sample of foul seeds for a report on same. They were got in oats bought from a Toronto seed house. Seed was imported from Great Britain.

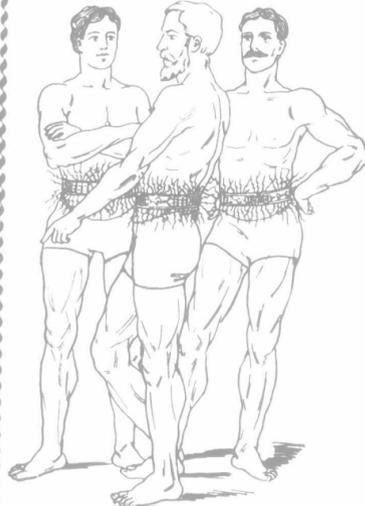
H. C. B.

Ans.—The black triangular seeds are the common black bindweed (*Polygonum convolvulus*). You will note reference to it on page 48 of the revised edition of "Farm Weeds," which may be purchased for \$1 from the Superintendent of Stationery, Government Printing Bureau, Ottawa. The round-like seeds, with the roughened seed-coat, are cleavers (*Galium aparine* L.). You will find reference made to the Dedstraw family on page 140 of the revised edition of "Farm Weeds." This species of the Dedstraw family (which is commonly called cleavers in Great Britain, where it is a weed of secondary importance, though sometimes troublesome in grain crops) is not at all common in Canada, and is not likely to give serious trouble in the Ontario climate. It is an annual, having somewhat the general appearance of northern bedstraw, which is fairly common throughout Eastern Canada. The plant is characterized by square stems, which are covered with stout hooked hairs, by means of which the plant obtains support on other plants. The narrow leaves are about one inch long, and are arranged in whorls. The small flowers, which appear in July, are white, and are arranged in clusters from the axes of the leaf whorls. In rich soils, cleavers sometimes reaches to a height of two or two and a half feet by clinging to the grain crops. The stem is quite weak, and unable to support itself. It thrives best in a moist climate.

G. H. C.

# STRENGTH FREE TO MEN

**How to Regain It Without  
Cost Until Cured**



Strength of body—strength of mind. Who would not possess it if he could? It is nature's greatest gift—our most valuable possession. Without this strength, life is a failure, with it everything is possible. Almost every man was made strong, but few have been taught how to preserve this strength. Many, through ignorance, have wasted it recklessly, or used it up excessively, leaving the body exhausted, the nerves shaky, the eyes dull, and the mind slow to act. There are thousands of these weak, puny, broken-down men, dragging on from day to day, who might be as strong and vigorous as ever they were if they would only turn to the right source. Electricity cures these weaknesses. It gives you back the very element you have lost.

It puts new life into the veins and renews the vigor of youth. For 40 years I have been curing men, and so certain am I now of what my method will do, that I will give to any man who needs it, my world-famed DR. SANDEN ELECTRIC BELT AND SUSPENSORY, FREE UNTIL CURED. You pay nothing down, you deposit nothing, you risk nothing; but, upon request, I will furnish you with the Belt to use, and, if it cures, you pay me my price. If you are not cured, or satisfied, return the Belt to me, and that ends it.

As I am the originator of this method of treatment, and have made it a great success, there are many imitations of my Belt; but my great knowledge, based on 40 years' experience, is mine alone. My advice is given free with the Belt.

This offer is made especially to men who lack strength and vitality, who have nervousness, lost vigor, varicocele, etc., but I also give my Belt on the same terms to sufferers from Rheumatism, Lamé Back, Sciatica, Kidney, Liver and Stomach Troubles.

Write for a Belt to-day, or, if you want to look into the matter further, I have two of the best books ever written on Electricity and its medical uses, which I send free, sealed, by mail.

**DR. A. F. SANDEN,**

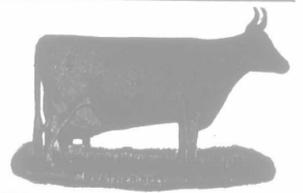
140 YONGE STREET, TORONTO ONTARIO.

Office hours—9 to 6; Saturdays, until 9 p. m.

## Burnside Ayrshires

Having disposed of my 1909 importation, I intend leaving about March 1st for another lot. I expect to have a number of bulls through quarantine by first week of June. Orders entrusted to me will be carefully attended. We have a few young bulls fit for service on hand of choice breeding, and females of all ages. Phone, etc.

R. R. Ness, Burnside Stock Farm, Howick, Que.



### CRAIGALEA AYRSHIRES.

Present offering: One Bull, 14 months old, unbeaten at Fairs last fall; also 3, under 6 months, all from Record of Performance cows, true to type, with good teats; also a few Heifers.

H. G. HAMILL, Box Grove P.O., Locust Hill, C.P.R. Markham, G.T.R. Bell phone connection from Markham.

When Writing Mention This Paper.



## Ayrshires and Yorkshires!

We still have a few choice individuals of almost any age on hand in Ayrshires, and are always ready to price any. Other breeders in this section. Bull calves from Record of Performance cows. A few young Yorkshires on hand.

ALEX. HUME & CO., MENIE, ONT.

Ayrshires—Four young bulls, all bred on dairy lines, out of famous dams; fashionable in color, as well as in breeding. Will be sold worth the money. Females all ages.

N. DYMENT, Clappison's Corners, Ont.



HILLCREST AYRSHIRE\$—Bred for production and large teats. Record of Performance work a specialty. Fifty head to select from. Prices right.

FRANK HARRIS, Mount Elgin, Ont.

## Stonehouse Ayrshires

all ages. Am now booking orders for bull calves.

Hector Gordon, Howick, Quebec.



Shannon Bank Ayrshires and Yorkshires Am now offering young bulls and heifers, true to type and high in quality. Young Yorkshires of both sexes.

W. H. Tran & Son, Locust Hill P.O. & Sta., Ont.

Ayrshires from a Prizewinning Herd—Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to WM. STEWART & SON, Campbellford, 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.

## 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. Don't experiment with substitutes or imitations. Use it, no matter how old or bad 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

### WOODBINE STOCK FARM

Offer a number of Holstein cows, heifers and young bulls at moderate prices, sired by Sir Creamelle, whose breeding combines the blood of De Kol Creamelle, world's champion milch cow, with that of Duchess Ormsby, highest-testing family of the breed. Write for anything you want. Telephone connection.

**A. KENNEDY, Ayr, Ont.**

### MERTON LODGE HOLSTEINS.

I am offering my entire crop of spring calves, sired by a son of De Kol the 2nd Butter Boy the 3rd. I also offer a few young cows and heifers sired by a son of Hengerveld De Kol, the greatest sire of the breed; also a number of high-grade calves sired by our imported Bull, Butter Boy Calamity.

**W. W. GEORGE, Crampton, Ont.**

### STILL GREATER!

Grace Fayne 2nd Girl just completed a test of over 30 lbs. butter in 7 days. Her dam Grace Fayne 2nd is also dam of Grace Fayne 2nd Homestead, world's record, 35.55 lbs., and Grace Fayne 2nd Sir Colantha, who heads the Homewood herd; sire's dam, Colantha 4th Johanna, 35.22 lbs. Young stock for sale. **M. L. & M. H. HALEY, Springfield, Ont.**

### The Maples Holstein Herd

of Record-of-Merit cows, headed by King Posch De Kol. Nothing for sale at present except choice bull calves from Record-of-Merit cows. Also one or two good cows.

### WALBURN RIVERS, FOLDEN'S, ONTARIO

**High-class Holsteins**—Head of herd, Pietje Korndyke Lad. Two nearest dams average 26.09 lbs. butter in 7 days. His sire's dam, Pietje 22nd, has a record of 31.62 lbs. butter in 7 days. Present offering: now booking orders for bull calves sired by above sire and out of A. R. O. dams.

**WM. C. STEVENS, PHILLIPSVILLE, ONT.**

### Fairmount Holsteins

Headed by Aaggie Grace Cornucopia Lad, whose dams for four generations have records that average 21.30 lbs. For sale are two young sons of his, cows and heifers freshened to him. **C. R. GIES, Heidelberg P. O., St. Jacob's Sta.**

**Ridgdale Holsteins**—I have left three bull calves that will be priced right for quick sale; their dams are heavy producers, and their sire was bred right.

**R. W. WALKER, Utica, Ont.** Phone connection.

Sir Francis Burnand, the late editor of Punch, was requested one night in company to make a pun extempore.

"Upon what subject?" asked Burnand.

"The King," was suggested.

"Oh, sir," he replied, "the King is no subject."

There is no problem of increased cost of food if you eat more

## Quaker Oats

An ideal food; delicious; appetizing; strengthening.

Compared with other foods Quaker Oats costs almost nothing and yet it builds the best.

### GOSSIP.

T. H. Hassard, Markham, Ont., the well-known importer of Clydesdales and Hackneys, writes: I have still on hand twelve extra-good Clyde stallions, and will sell cheap to clean up, to make room for more. Mr. Hassard's importations are uniformly of high-class character, and find ready buyers when seen at his stables at Markham, G. T. R., 20 miles from Toronto, on the Midland branch.

Geo. Davis & Sons, Alton, Ont., breeders of Aberdeen-Angus cattle, reported the following as among their recent sales: To John M. Levy, St. Mary's, Ont., the bull Donald 3rd of Glengore, dam Queen Easter 3rd of Glengore; a nice, straight, low-set bull, of excellent quality. Messrs. Davis have still some beautiful young bulls of serviceable age for sale, which, by their excellent quality, thrift and foundation of breeding, will make choice herd-headers. Their cattle all trace to importation, and are of the famous Blackbird strain, which is so noted in the United States.

"The man who goes ahead now to breed carriage horses is going to make a ten-strike, in my opinion," said a well-known New York horse-fancier recently, on observing the increasing number of finely-appointed Victorias and other horse-drawn carriages on Fifth Avenue. "It looks like a certainty that the fashionable families are going to come back to the horse for their pleasure-driving to a great extent, and if they do there will not be one-quarter enough fine horses five years hence. The automobile has scared so many people out of breeding harness horses, that very few are coming on to supply the future demand, and prices are sure to jump." It is not alone in the metropolis that high-class harness horses are coming into fashion again. Other large cities show the same tendency.—Horse World.

### PHEASANT FARMING.

Conservation of the fauna, including the game birds of the United States, requires the strict enforcement of laws intended to control the shooting and marketing of wild birds, and necessarily limits both the period during which they may be hunted and the number available to supply the increasing demands of those who desire those table luxuries.

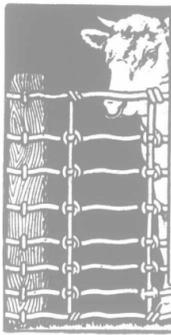
This lack may be remedied by the product of aviaries, preserves, and private parks, devoted to rearing of domesticated game, the marketing of which, under suitable safeguards, is already permitted in several of the States, indicating that American markets will open more and more to these domesticated substitutes to the fast-disappearing wild game.

In order to call the attention of the farmers and the suburban population to this subject, the U. S. Department of Agriculture issued some time ago a bulletin on "Deer Farming in the U. S." (Farmers' Bulletin No. 330), and is about to issue the results of recent investigations of pheasant-raising in the U. S. (Farmers' Bulletin No. 390).

At present there is no lack of demand for pheasants for various purposes. Owners of private preserves, and State game officials, pay profitable prices for certain species for stocking their covers, Zoological and city parks and owners of private aviaries are ready purchasers of the rarer and more beautiful species, and large numbers of dead pheasants are annually imported from Europe, to be sold for several times the price they bring in European countries. The demand for pheasants is increasing.

The seventeen illustrations make very clear the descriptive text, presenting actual conditions at the Illinois State Game Farm, the New Jersey Preserve, and the Preserve on Long Island, besides showing pictures of ten species, and photographs of coops, rearing fields, breeding pens, and runways.

Copies of these publications may be obtained upon application to Senators, Representatives, or Delegates in Congress; to the U. S. Department of Agriculture; or to the Superintendent of Documents, Government Printing Office, Washington, D. C., who has them for sale at five cents per copy.



## The fence that's strong all through

Every wire in our heavy farm fence is No. 9 hard steel, with uniform strength and lasting qualities in each strand. A fence with any small or soft wire in it is short lived. A chain is no stronger than the weakest link. Then PEERLESS Fence made from English wire is rust-proof—that withstands more than double the endurance of other makes.

### Peerless the fence that saves expense

The PEERLESS does not cost anything to keep—there are no repair bills—it is not affected by changes of temperature. The horizontal wires being crimped makes ample provision for all contraction and expansion. PEERLESS Fence, once well stretched, is always tight—no shock affects it. We are manufacturers of high grade farm, poultry, ornamental fencing and gates. Write for Free Book, a sample of PEERLESS Fence and a simple method of testing any make of fence.

THE DANWELL HOXIE WIRE FENCE CO., LTD., DEPT. B, HAMILTON, ONT., WINNIPEG, MAN.

### CENTRE AND HILLVIEW

## Holsteins

140 head, 45 females in R. O. M. Herd headed by Brookbank Butter Baron, Bonheur Statesman and Sir Sadie Cornucopia Clothilde. The average of dam, sire's dam and grandam is: milk in 7 days, 62.85 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.**

## Holstein - Friesians

FAIRVIEW FARM offers young bulls, sired by Pontiac Korndyke and Rag Apple Korndyke, without question the two greatest Korndyke bulls in the world, and out of cows with large A. R. O. records and testing 4% fat. Come and see them, or write.

**E. H. DOLLAR, Heuvelton, N. Y.**  
Near Prescott.

## LAKEVIEW HOLSTEINS!

Herd headed by Count Hengerveld Payne De Kol, whose sire, Pietertje Hengerveld Count De Kol, is the sire of De Kol Creamelle, the world's champion milch cow, with 119 lbs. milk in 1 day, 780 lbs. in 30 days, 10,017 lbs. in 100 days. He has five daughters that average 30 lbs. in 7 days, and 120 lbs. in 30 days. His dam, Grace Fayne 2nd, 26 30 lbs. in 7 days, is dam of Grace Fayne 2nd's Homestead with the following records:

7 days, 4 years old,	29.16 lbs.	% fat 4.12	Bull
30 "	4 "	119.22 "	% " 4.09 calves
7 "	5 "	30.55 "	% " 4.37 for
7 "	6 "	35.55 "	% " 5.42 sale.

**E. F. OSLER**  
BRONTE, ONTARIO.

**Elmwood Holsteins**—Chicely-bred calves for April and May delivery. Sired by imported Ykema Sir Posch and Pontiac Sarcastic, a grandson of Sarcastic Lad, Registered. Delivered. Express paid. Safe delivery guaranteed. **E. D. GEORGE & SONS, PUTNAM, ONT.**

**Evergreen Stock Farm** For sale: A fine bull calf 2 months old, from Pauline Pet, record 16,000 lbs. of milk per year for 8 years; sired by Sir Mercena Faforte. Also other bull calves at moderate prices. **F. E. PETTIT, BURGESVILLE, ONT.**

## ON TRIAL TO MEN



### Dr. McLaughlin's Electric Belt

Does wonders in a few applications. It arouses all the dormant energies, develops muscular and nerve life and restores the feeling of youth, courage and vigor. It makes men over again. It makes perfect men of the puniest, weakest specimens of "half men."

I can give back to any man what he has lost by abuse of the laws of Nature.

Do you doubt it? If so, any man or woman who will give me reasonable security can have my Belt, with all the necessary attachments suitable for their case, and they can

### PAY WHEN CURED

Petersburg, Ont.  
Dear Sir,—I am very thankful to say that I feel much better, both in strength and health. My back is not like it was, for I can do a day's work now much easier than I could before using your Belt. I now wake up in the morning feeling fresh, not like before, when I had that languid feeling. I have more life in me now. I am well satisfied with the Belt. I only wish I had obtained it before. Yours truly,  
**A. RICKARDS.**

Every man should understand that physical power, large muscles, strength and endurance come from animal electricity. My treatment will pump every part of the body full of that, and perfection will result.

It not only restores vigor and increases nerve power, but it cures rheumatism, pains in the back and kidneys, indigestion and constipation, and all troubles which result from weakness of any vital organs.

The whole force of vitality in your body is dependent upon your animal electricity. When you lose that in any manner my Belt will replace it, and I will cure you.

**FREE BOOK.**—Cut out this coupon now and mail it. I'll send this book without delay, absolutely free. Call if you can. Consultation free.

**DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Can.**

Dear Sir,—Please forward me one of your Books, as advertised.

NAME .....

ADDRESS .....

Office Hours—9 a.m. to 6 p.m. Wednesday and Saturday until 8:30 p.m. Write plainly.

## Troubled With Backache For Years.

New Completely Cured By The Use Of

### DOAN'S KIDNEY PILLS.

Mrs. W. C. Doer, 13 Brighton St., London, Ont., writes:—"It is with pleasure that I thank you for the good your Doan's Kidney Pills have done me. Have been troubled with backache for years. Nothing helped me until a friend brought me a box of your Kidney Pills. I began to take them and took four boxes, and am glad to say that I am cured entirely and can do all my own work and feel as good as I used to before taken sick. I am positive Doan's Kidney Pills are all you claim them to be, and I advise all kidney sufferers to give them a fair trial."

Let Doan's Kidney Pills do for you what they have done for thousands of others. They cure all forms of kidney trouble and they cure to stay cured.

Price, 50 cents per box or 3 boxes for \$1.25 at all dealers or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

When ordering specify "Doan's."



### ELECTRIC BEANS

Sized supreme as a Blood and Nerve Tonic.

They are unequalled for Biliousness, Sick Headache, Constipation, Heart Palpitation, Indigestion and Anemia.

Those who are in a position to know what is best use "ELECTRIC BEANS."

Write for Free Sample

50c. a Box at all Dealers or upon receipt of price, from  
THE ELECTRIC BEAN CHEMICAL CO. Ltd  
OTTAWA.

## BRAMPTON Jerseys

CANADA'S GREATEST JERSEY HERD

We are offering for sale one 2-year-old bull and four yearlings, fit for service; also six bull calves; females of all ages. Come and see them, or write.

B. H. BULL & SON, BRAMPTON, ONT.

High Grove Jerseys and Yorkshires. No better blood in Canada. Present offering: Two young bulls, 12 and 20 months old, respectively; females all ages. Prices and all information on application.

ARTHUR H. TUFTS, P.O. Box 111, Tweed, Ont.

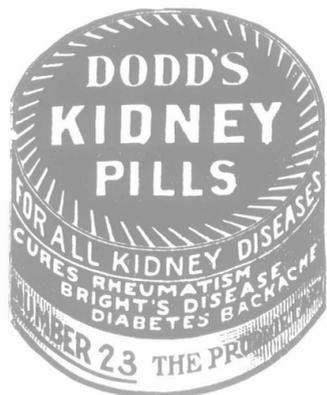
Mrs. Stuyvesant Fish, at a luncheon in New York, said with good-humored mockery of the suffragettes.

"If they keep on, their outlook, really, will become as naively selfish as Mrs. Dash's. Mr. Dash, as his young wife posed before the mirror in a décolleté gown from the dearest shop in the Rue de la Paix, regarded the pretty little lady indulgently, and said with a sigh:

"You do look nice in that frock, dear, but it cost me a heap of money."

"She flung her white arms about his neck.

"You dear old boy," she cried, "what do I care for money when it's a question of pleasing you?"



### GOSSIP.

W. F. Dulmage, of Gorrie, Ont., has recently invested in the imported bay Clydesdale stallion, Montrave Guardsman [5828] (11120), bred by Sir John Gilmore, and formerly owned by G. J. Fitzgerald, V. S., London. Montrave Guardsman is a son of the Highland Society winner, McGregor, by Darnley (222), dam by Garnet Cross, granddam by Top Gallant, by Darnley (222). His dam, Montrave Gay Lass (10625), won 19 first prizes in Scotland, and his granddam won 10 first prizes at leading shows, including the Perth and Highland Society Shows. Montrave Guardsman has proved a very successful sire, some of his colts selling as high as \$100 each, at less than a year old.

Official records of 154 Holstein-Friesian cows have been accepted by the American Holstein Association, from March 18th to March 30th, 1910. This herd of 154 animals, of which one-third were full-aged cows, produced in seven consecutive days 63,042.8 lbs. of milk, containing 2,213.364 lbs. butter-fat; thus showing an average of 3.51 per cent. fat. The average production for each animal was 409.4 lbs. milk, containing 14.373 lbs. of butter-fat; equivalent to 58½ lbs. or 28 quarts of milk per day, and over 16½ lbs. of the best commercial butter per week. These averages, like all Holstein-Friesian averages, are very large; yet it must be noted that these reports are of milk and butter-fat, and that in estimating the amount of butter to which the fat in the milk is equivalent, the rule adopted by the State Agricultural Colleges of adding one-sixth of itself to the fat, is always followed. No well-posted man ever disputes the results when this rule is followed.

The American Aberdeen-Angus Breeders' Association has announced that the generous sum of \$16,125 has been appropriated by the Association as prizes for cattle of that breed at thirty prominent State and Provincial Fairs in 1910. The largest grant, \$5,000, goes to the International Live-stock Exposition, Chicago, \$1,000 to the Missouri Interstate Fair at St. Joseph, and other donations from \$900 downwards, follow. The Brandon, Manitoba, Summer Fair gets \$150, and the Winter Fair at same place \$50. These donations are in addition to the prize lists of the Fair Associations, which in the thirty fairs mentioned amounts to \$40,336, or a total of \$56,161.

### U. S. EXPORT TRADE.

A report on the annual exports of farm products from the United States, from 1851 to 1908 inclusive, is to be published in bulletin form.

The last half century has seen a great increase in the exports of farm products from that country. In the five-year period, 1851-1855, agricultural exports averaged 150 million dollars a year, in period 1901-1905, they had risen to 875 million dollars, and in two subsequent individual years, 1907 and 1908, surpassed a billion dollars. Such exports have increased much faster than the population, though we might naturally think otherwise, the per capita value in 1851-55 being \$5.85, and in 1901-05, this had risen to \$10.88.

The chief agricultural products have for the last 50 years been: 1st, cotton; 2nd, grain and grain products; and 3rd, packing-house products.

In 1851-55, cotton made nearly two-thirds of the value of all agricultural exports, 1,026 million pounds being sent abroad, and though in the banner year, 1907, 4,518 million pounds were sent out, yet other agricultural exports had increased in still greater ratios, though cotton still heads the list.

Grain exports come second. In 50 years, these have increased from 20 million bushels annually, to about 250 million bushels. There has been a decline since period 1896-1900, when the maximum was reached.

Exports of packing-house products have increased the most rapidly of the three, having risen from 10 million dollars a year in 1851-55, to 196 million dollars in 1908. The principal items of this group are pork, lard, beef, and oleo oil. Exports of pork and lard have decreased since 1900, but beef exports increased until 1905, since which time there has been a marked decline.

## FLEURY PLOWS

### Take the Lead Wherever Introduced

We are the original makers of the Famous Fleury Plows Nos. 21 Dandy and 15 (one horse)—the best line of Walking Plows in Canada—and all copied by other manufacturers.

Some dealers offer other plows as being as good as the "Fleury," but imitations are generally inferior, not less so in plows than in other things. We are the only makers of the original No. 21 Plow.

G——— P. O., Michigan, April 15, 1910.

"I used to live in Canada, and over there everybody used the Fleury Walking Plow, which, in my opinion, is the best plow ever built, and as I am unable to procure same here I write to see if you will ship me a plow, and give me an agency for them. Yours truly,

DAN. F. McALISTER."

J. FLEURY'S SONS, AURORA, ONTARIO.

Medals and Diplomas: World's Fairs, Chicago and Paris.

## \$15.00 AND UPWARDS. The DOMO Separator



Excels any other separator in the world. Our liberal offer enables you to prove this. Our prices for all capacities, SIX SIZES, is astonishingly low. The quality is HIGH. Our machines are well built, up-to-date, handsomely finished, Skim Closer, Turn Easier, are Durable and Guaranteed. Thousands in use. We send them to you on trial, FREIGHT PREPAID, and if YOU are not satisfied, return it at our expense. We take ALL the risk. Can we offer anything more fair? Write to-day for our circular "A," which gives Our Special Trial Offer, Testimonials, Remarkably Low Prices, and Easy Terms of Payment. It's Free.

DOMO SEPARATOR COMPANY,  
Brighton, Ontario.

### Jerseys and Chester Whites

I am offering some choice young Jersey bulls, sired by Braepton's Blucher, winner of first prize, Toronto and Winnipeg, and from choice, deep-milking cows with good teats. Also Chester White pigs 3 to 4 months old, both sexes, at special prices.

CHAS. E. ROGERS, Dorchester, Ont.

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs.—Present offering: Lambs of either sex. For prices, etc., write to John Cousins & Sons, Buena Vista Farm, Harriston, Ont.

I WILL SHEEP of the different English breeds for those wanting them. Selections will be made with the greatest care, and the charges will be moderate. Will also bring a few CLYDESDALES and SHORTHORNS on order. Let me know what you want, and ask for particulars. Have two Shorthorn bulls just landed that will be sold worth the money, and they are high-class in every way. Have as usual home-bred Shorthorns. ROBERT MILLER, Stouffville, Ont.

LABELS  
Metal Ear Labels for Cattle, Sheep and Hogs.

The old standby for all who have stock liable to stray, or to dispute as to identification or ownership; for herd or flock records, or for general convenience. Send for free circular and sample. It may save you much trouble. Write to-day.

F. G. JAMES, BOWMANVILLE, ONTARIO.

## Maple Villa Yorkshires and Oxford Downs

For immediate disposal: A number of choice young boars ready for use. Some splendid sows bred to farrow in May, and others of breeding age. An excellent lot of ewe lambs, Satisfaction assured. J. A. CERSWELL, BOND HEAD, ONT. BEETON OR BRADFORD STATIONS.

Spring Offering of LARGE WHITE YORKSHIRES

Choice young boars ready for service. A good selection of young pigs from large imported and Canadian-bred stock. Pairs supplied not akin. Long-distance Bell 'phone.

H. J. Davis, Woodstock, Ont.

C. P. R. and G. T. R.

Monkland Yorkshires

Nothing to offer but suckers and three extra choice young sows, bred to farrow May and June. Be quick if you want one. J. J. WILSON Importer and Breeder, Milton P. O. and Station. C. P. R. and 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.

PINE GROVE YORKSHIRES

At the late Guelph Winter Show exhibitors, including all the firsts and sweepstakes for best dressed carcasses, both at Guelph and Ottawa Winter Fat-stock 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.

# WOOL

WE WANT TO BUY YOURS. WRITE NOW FOR OUR PRICES.

E. T. CARTER & CO.,  
84 FRONT ST. E., TORONTO, CANADA.

FAIRVIEW SHROPSHIRE OFFERING: Choice rams, shearlings and lambs. Extra good ewes, shearlings and older. They are of the very best breeding. Quality and condition beyond criticism. If you want a few, order immediately. Supply limited, demand unlimited. Circular and prices on application to J. & D. J. Campbell, Fairview Farm, Woodville, Ont.

RAISE THEM WITHOUT MILK. Booklet free. The Steel, Briggs Seed Co., Toronto, Ont.

## CALVES

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.

### PINE GROVE BERKSHIRES!

Sows bred and ready to breed. Nice things, three and four months old.

W. W. BROWNRIDGE,  
Milton, C. P. R. Ashgrove, Ont.  
Georgetown, G. T. R.

### Hilton Stock Farm

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.

Newcastle Tamworths and Shorthorns

FOR SALE: Young sows due April and May, by imp. boar, dams by Colwill's Choice, Canada's Champion boar in 1901-2-3-5; also choice pigs, both sexes. Two yearling Shorthorn bulls, Syme and Lavender families, and six choice heifers and heifer calves. Prices right. Bell 'phone. A. A. Colwill, Box 9, Newcastle, Ont.

### Tamworths

A grand lot of young boars from 2 to 4 mos., also young sows (dandies). Some just bred. Some in farrow to first-class boars from best herd in England. Prices reasonable. Chas. Currie, Morrilton, Ont.

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Debentures  
Mean  
SECURITY**

When you are looking for an investment, the principal feature is security. No safer investment could be found than the Debentures of this Company. You are secured by assets of over \$4,000,000. Our loans are made on improved properties only. Rate of interest on Debentures is 4 per cent., payable semi-annually. Write or call for complete details.

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**"ELECTRO BALM"**  
CURES ECZEMA,

Also Piles, Burns, Scalds, Chapped Hands and Face.

Gentlemen use it after shaving. This Balm is handled by the best firms, and is highly recommended by those who have used it.

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THE ELECTRIC BEAN CHEMICAL CO.,  
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**The "BACON"  
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The only Rear-Wheel Driven Seed Drill on the market. The feed in the "Bacon" handles seed without bruising or breaking, and seeds evenly to the last seed. Machine instantly converted from a regular seed sower into a hill dropper. Feed Cut prevents waste of seed when turning rows. For sowing Sugar Beets, Parsnips, Radishes, Carrots, Onions, etc., the 1908 model of the "Bacon" is unequalled for strength, lightness, easy running and good work. Write for our complete catalogues.



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**AGENTS—\$33.30 A WEEK**

Why not make a few dollars a week? Write for our list of agents. We will give you a low price to agents. 1250-1251  
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**It Satisfies**

A paint that looks and wears well is bound to attract the attention and favorable comments of your next door neighbor—just as paint that fades, peels, and chalks off in a few months is bound to attract their attention and condemnation as well.

**Martin-Senour Paint 100% Pure**

Meets every requirement of a good paint—it shows its quality in the can and as it flows from the brush, and months afterward *there it shines*—a testimonial to the honesty and skill of its makers.

The luckless house owner who depends on the fickle protection afforded his property, through the use of a cheap adulterated paint, will soon find himself bluffed and vanquished.

A house protected by *Martin-Senour Paint* can enjoy the thousand shrieking voices of the wind, while you listen from the vantage ground of your well shielded home.

A Good Pure Paint, while defending your home, renders you far greater service—it adds greater comfort, health, protection, cleanliness; besides it saves your buildings from emptiness and decay.

If your dealer cannot supply you, notify us and we will gladly direct you to where our paints are to be had.

**Decline All Substitutes**

Write for illustrated booklet, "Home Beautiful," and interesting color card. Free for the asking.

**The Martin-Senour Co., (Limited) Montreal**  
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**Kills the Bugs.  
Feeds the Plan.**

**BUG DEATH**

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A whole artillery for slaughtering bugs and preventing blight.

When you inquire of your dealer for BUG DEATH, see that our trade-mark is on the package.

BUG DEATH is sold in convenient packages, as follows: 1 lb., 15c., 24 pkgs. a case; 3 lbs., 35c., 12 pkgs. a case; 5 lbs., 50c., 6 pkgs. a case; 12½ lbs., \$1.00, 4 pkgs. a case; 50-lb. keg, \$3.75; 100-lb. keg, \$7.00.

Don't wait until the bugs get here, but order that keg you want to test now, if your dealer has not got it.

**Bug Death Chemical Co., Limited,**  
St. Stephen, New Brunswick.



Don't be contented to let your Savings earn the usual interest. Make them work **harder** and make them earn more.

**MAKE YOUR SAVINGS WORK HARDER**

They will earn 3½% for you in our Savings Department. Their safety is secured by over \$2,000,000 assets. If you have \$100 or more to invest at 4%, ask us about our Debentures.

**3½% Agricultural Savings 4%**

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## This 5-Ton Scale Is Easy To Buy—

You need not club with your neighbors to equip your farm with the scale you need—the CHATHAM Pitless Scale. **COMES READY FOR USE** You can afford to buy it yourself. It will save you more than its cost in one season. Up to five tons it will weigh accurately all you buy or sell. You can erect it ready to use in a morning. **YOU HAVE NO BOTHER**

**No Pit to Dig  
No Extras to Buy**



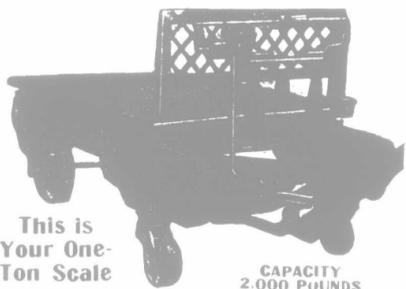
Your CHATHAM Pitless Scale will be YOUR Scale, that you can take with you when you move. You can always get for it what you paid for it. And you need no skilled help to set up the CHATHAM—it comes to you complete, with plain directions. Built wholly of heavy steel. Nothing to rust, decay or go wrong. Government guarantees its absolute accuracy. Tested before it leaves the factory. Warranted fully.

### This is the Complete Scale

Bear in mind that you have no hard work to do in setting up a CHATHAM. It is all solid steel, stands on its own feet above ground—no pit to dig, no fussy preparation needed before you use it. Comes to you so you can be weighing on it in a few hours after you get it. No skilled mechanic necessary at all.

### Special Compound Beam—No Extra Cost

This season we include our new Compound Beam with each CHATHAM Pitless Scale without adding a cent to the price of it. You can find no bigger bargain, yet the price is away down low. In sections where we have agents we offer special long-time credit terms to those who would rather try the Scale before they pay for it. Write us and ask for full details.



**This is Your One-Ton Scale**

**CAPACITY 2,000 POUNDS**

Handy to move about as a wheelbarrow, yet accurately weighs up to a full 2,000 pounds. Swivelled pole and front wheels let you turn it short through doorways and around corners. Strong and staunch, too, like all scales we build.

### You'll Never Wear it Out

Main frame is one solid and very heavy casting. Levers are specially heavy and strong, so they won't spring under excessive strains. Bearings align themselves, because pivot rests on bearing loop, and the scale and it will still weigh right. And the price is very small.

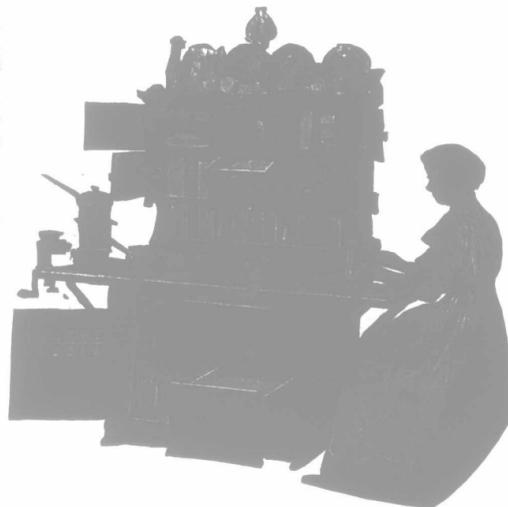


I personally vouch for every statement this advertisement makes, and I further guarantee that my Chatham Pitless Scale is the biggest scale value you can buy for money in this or any other country. Write me about it and I will see that this is proved to your complete satisfaction. Write now.

**MANSION CAMPBELL**  
President

## SAVES—MONEY— —TIME— —WORK— AND REALLY COSTS NOTHING

You can easily afford this handsome, practical kitchen necessity. For our special offer (please send for details of it) lets you pay for it out of what it actually saves in lessened grocery bills. You should ask us about it at once.



Whole table-top one heavy sheet

## OF BRIGHT ALUMINUM

You cannot begin to know the CHATHAM by this picture. For the picture cannot show even one of its most pleasing and valuable features—the **SOLID SHEET OF BRIGHTLY-POLISHED HEAVY ALUMINUM** that forms the covering of the table-top and extension leaves. This **ALUMINUM** is extra-heavy weight, pure metal—LOOKS LIKE SILVER—LASTS LIKE STEEL—cannot rust—won't gather dust or dirt—easily cleaned—simply perfection! And this is the **ONLY** kitchen cabinet you can buy with an aluminum top—which **ADDS FULLY FIVE DOLLARS TO ITS VALUE**. Yet you pay **NOTHING EXTRA** for it!

### You must see it to know it

You must see the Chatham Kitchen Cabinet to appreciate how handy, compact, sensible it is. Exterior of specially-selected black ash, hard as rock and beautifully polished. Panels of golden chestnut. Bake-board, drawers and flour-bin of snow-white basswood. With the CHATHAM everything you use in cooking is at your fingertips. You can get meals ready sitting down. Your flour-bin (metal lined—holds 75 pounds!) is right under your hand in easy reach. Sugar-bin (opened or closed by a touch) is just in front of you. Six air-tight canisters (free with every Chatham Cabinet) stand in the shelf-rack. Big, dust-tight drawers hold spoons, egg beater, funnels, strainers, etc.; ample closets for kettles, pans, and the like.

**Everything in its place** And you can tidy up as you go along when you have a CHATHAM. There is a place provided for all the things you now walk back and forth for, between pantry and table. The CHATHAM spares you all those countless steps. Cupboards for jams and tinned foods, three roomy drawers (besides the two large ones) for small packages. High top makes a fine shelf for dishes—enclosed on three sides, and a rod at the back as a plate rack. Fine French plate mirror in center door—fix your hair in a second if anyone comes.

**Easily moved to sweep under**

The CHATHAM is mounted on ball bearing castors. You can readily move it when you are sweeping up. Yet it is most solidly built—nothing shaky nor wobbly about it. Whole thing is dust-tight, mouse-proof—a permanent, durable, satisfying kitchen help.

### You should now investigate

Yet, with all these conveniences, features found in nothing else—the cost of a CHATHAM is probably less than you imagine. You should write us for the address of our agent nearest you. If you name your agent that will surprise and he will gladly show you the Cabinet and point out its merits. Allow me to send you a illustrated explanation.



We use one of my Cabinets in my own home; and the women-folk say frankly that they simply could not get on without it. It certainly does cut kitchen-work square in half. And I know we build it so well it can safely be GUARANTEED to you.

**Manson Campbell, President**

**FREE BOOK  
JUST ADDRESS**

**The Manson Campbell Company, Limited, Chatham, Ontario.**

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