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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE SUCCEED


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

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OL. XLIV.

LONDON, ONTARIO, MARCH 18, 1909.

No. 860



ROOFS That Stay Roofed

The strongest wind that ever blew can't slip away a roof covered with self-locking "OSHAWA" GALVANIZED STEEL SHINGLES.

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"Eastlake" Steel Shingles

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Send for free booklet.

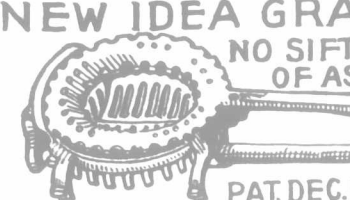
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W. B. ROBERTS, Sparta, Ont.

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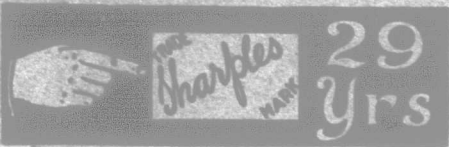


PAT. DEC. 15 08
BOTH SHAKES AND DUMPS

NEW IDEA FURNACES

ASK FOR FREE CATALOGUES. SEND SIZE OF HOUSE IF YOU WISH ESTIMATE OF COST OF FURNACE INSTALLED READY FOR USE.

THE GURNEY, TILDEN CO. HAMILTON, LIMITED MONTREAL WINNIPEG, VANCOUVER.



HEELS UP-HEAD DOWN

There are some mighty funny things about common "bucket bowl" cream separators. One is that the bowls used in them actually run better when turned heavy end **down**—heels up, head down, as you might say.

Prove it? Why, we knew it ten years ago, and have been proving it by building Tubulars with bowls rung heavy end **down** ever since.

But we have just proved it again—this time in a very simple and practical way with a "bucket bowl" itself. We took a common, disc filled "bucket bowl" machine—the sort with the bowl set heavy end **up** and fed through the **top**. The machine looked all right, but the bowl had the "shakes" so bad—that is, it trembled, leaned and strained against its bearings so hard—that we could not run it over 6,000 revolutions per minute, though it was supposed to run 8,000 in every day use.

You see, a separator bowl set heavy end **up** is always top heavy, always leans sidewise, even though the eye can't detect it, and consequently always trembles in its bearings. These tremblings gradually increase until they wear the bearings, shake them loose, bend the spindle and create so much friction that it acts like a brake and prevents getting up speed. That was the trouble with this disc filled "bucket bowl" we are talking about.

When we found this "bucket bowl" would **not** run in its own machine, we took it out, cut a thread on the bottom of the spindle, and hung it, heavy end **down** in a Sharples Tubular Cream Separator, just as we would a bowl of our own. You should have seen it run then. **No trouble at all** to run it 8,000 revolutions per minute. We easily ran it 12,000.

Could you ask any better proof that common "bucket bowl" separators, with bowls set heavy end **up** and fed through the **top** are built all wrong? Or better proof

that the **suspended** bowl and bottom feed used **only in Sharples Machine** is the right way to build a cream separator?

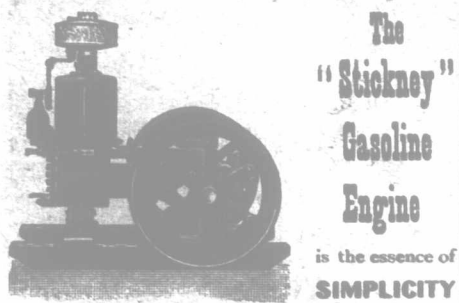
The manufacture of Tubular Cream Separators is one of Canada's leading industries. Sales for 1908 way ahead of 1907—out of sight of any competitor if not all competitors combined. 1909 is going to be better yet.

Get our catalog 193 and then you'll know all about it—you'll be on the safe side.



The many exclusive advantages of Sharples Tubular Cream Separators are possible because **only Sharples Separators have suspended bowl and bottom feed. This makes the Dairy Tubular bowl the lightest and simplest known, yet gives it twice the skimming power of common bowls. Also permits a low supply can that need not be lifted off to remove the bowl; wholly enclosed, self oiling gears; a single frictionless ball bearing from which hangs the bowl; a crank set just right for easy turning.**

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Toronto, Can. Winnipeg, Man.



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is the result of the vigorous, thrifty plant growth insured immediately upon the application (at planting time) of
Nitrate of Soda
Test it for Yourself Entirely Free
Let us send sufficient Nitrate of Soda for you to try, asking only that you use according to our directions, and let us know the result. To the twenty-five farmers who get the best results, we offer, as a prize, Prof. Voorhees' most valuable book on fertilizers, their composition, and how to use for different crops. Handsomely bound, 327 pages.
Apply at once for Nitrate of Soda by post-card as this offer is necessarily limited. "Grass Growing for Profit," another book of useful information, will be sent free to farmers while the present edition lasts, if paper is mentioned in which this advertisement is seen.
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For sowing Sugar Beets, Potatoes, Radishes, Carrots, Onions, etc., the 1908 model of the "Bacon" is unequalled for strength, lightness, easy running and good work. Write for our complete catalogue.
THE EUREKA PLANTER CO. Limited Woodstock, Ont. 2

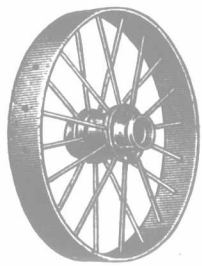
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For wood track, steel track, rod and cable track. Made entirely of malleable iron; no springs. Fitted with our patent deadlock. 25,000 of our Haying Machines in use, is the best guarantee that we build them right.
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4% interest is paid 1/4 yearly on Debentures of \$100 or more



Our Low Wide-tire Steel Wheels Halve Loading-labor

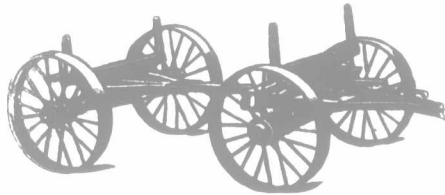
You can load a low-wheel wagon in half the time required to load a high-wheel affair. And there is no reaching-up or high-throwing to do with a wagon equipped with our Low Wide-tire Steel Wheels.

You can turn any wagon into a low one. Our wheels are made in any size, any width of tire, to fit any axle. Reliable in all kinds of weather, wet or dry, hot or cold. Can be readily taken apart and put together again. Sold under a guarantee that completely protects you. Send for catalogue.

Dominion Wrought Iron Wheel Co., Ltd., Orillia, Ont.

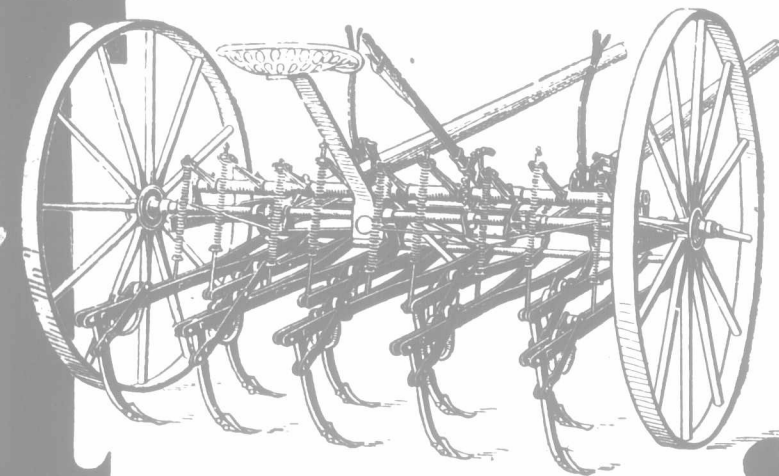
Low Handy Wagon

An immensely popular wagon is our "Queen City" Low Handy Wagon. Strongly constructed, excellently finished splendid appearance. Can be changed into platform wagon in three or four minutes. One man can do more work with "Queen City" than two men with high wagon. Complete particulars in free catalogue.



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The Climax Cultivator

is a stiff-tooth cultivator. With the pressure and tilting levers any desired depth can be reached. Thus weeds can be cut off just below the surface or ripped out roots and all for burning. **The Climax** is strong, substantial, durable, well braced at every angle, and ready for many a season's hard tug and strain. The axle is a solid steel shaft. The drag bars and their braces are heavy and just right in shape. **The Climax** is easy to handle, levers being conveniently located. It is made in two styles: 9-tooth (very popular in Ontario and Eastern Canada), and 13-tooth (much demanded in the West). We have an agent in your locality who will gladly answer your questions and show you this money-saving, crop-increasing cultivator. Write us now for catalog F12 that describes this and our general line of farm implements. It's free.

THE FROST & WOOD CO., Ltd.
 Smith's Falls, Canada

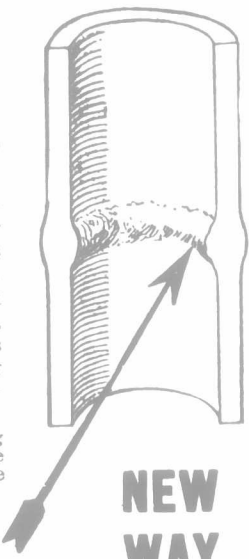
FROST Gates have the distinction of being the first made from steel tubing, and naturally their sale has been heavy. Of course they have been widely imitated, but that has only served to make them more popular.

Not being content with having "Frost" Gates imitated we have installed a modern galvanizing plant for coating the frames of all plain and fancy gates. Thus we are able to give them a more permanent and substantial finish than their imitations. The pipe is first put through a pickling process which removes all dirt, grease and scale, so that the galvanizing not only spreads all over the surface of the metal, but goes into it, filling up the pores and giving an even, smooth and exceptionally durable coating.

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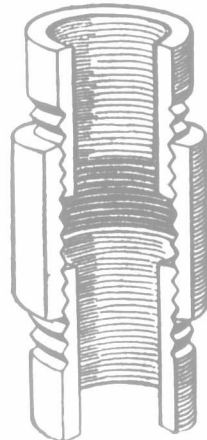
No extra charge is made for this wonderful welded-improvement or for the more handsome and permanent finish—another reason why you should buy "Frost" quality in preference to other goods costing the same.

When ordering, don't ask for a metal gate, but a "Frost" Galvanized Gate. There is a hustling dealer in your neighborhood who makes a business of supplying "Frost" Gates and building "Frost" Fences. It will pay you to get acquainted with him. If he is not known to you, write us.



NEW WAY

Pipe Sections
 Welded Together



OLD WAY
 Pipe Sections
 Threaded into
 Coupling.

FROST WIRE FENCE CO., LTD., HAMILTON, ONT.
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"Frost" Gates

ROOFING FACTS AND FIGURES IN OUR FREE BOOK



show why it will be money in your pocket to lay an **ASBESTOS ROOF**. The figures prove the economy of it. First, because **ASBESTOS** is the only *permanently durable* ready roofing. Second, because it is not made to be painted, coated or protected in any way. The **Asbestor**, being a mineral, is indestructible. Yet it costs no more per roll than some ordinary roofings, which cost more to keep painted or coated than they cost in the first place.

J-M ASBESTOS ROOFING

gives real fire protection, too. No other roofing made does this. Don't listen to "claims." Ask for the *facts*. Our facts *prove* our claims. Learn also why **Asbestos Roofing** keeps buildings warm in winter and cool in summer. Write to-day for Book No. 30 and samples. No matter what kind of roofing you want this book will help you choose wisely. **The Canadian H. W. Johns-Manville Co., Ltd. 85-87 Wellington St., West, Toronto, Ont.**

EUREKA Glass Tank Sprayer

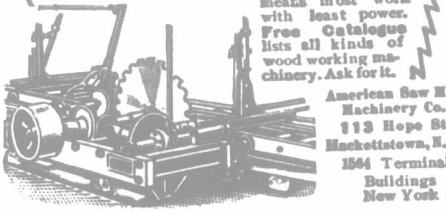


Solution tank is a quart Crown glass jar. If broken, it can be easily replaced for a few cents. **Solution tubes are brass.** None of the liquid used can be drawn back into the pump chamber, thus the chamber and valves are unimpaired. This is the easiest operated and the most effective small sprayer on the market. Inquire of your hardware dealer.

Write for our complete catalogue of Sprayers and Garden Tools.
THE EUREKA PLANTER CO. LIMITED
 Woodstock - Ont., 6

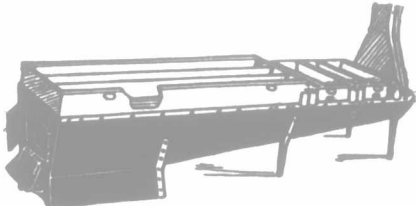
Make With An American Money SAW MILL

Lumber is high. A car load or two pays for an American Mill. Supply your needs and your neighbors'. No experience needed. Haul mill to timber if desired. **All Sizes—All Prices.** The Variable Friction Feed, Combined Ratchet Set Works and Quick Recorder means most work with least power. **Free Catalogue** lists all kinds of wood working machinery. Ask for it.



American Saw Mill Machinery Co.
 113 Hope St.
 Hackettstown, N.J.
 1504 Terminal Building
 New York

Champion Evaporator



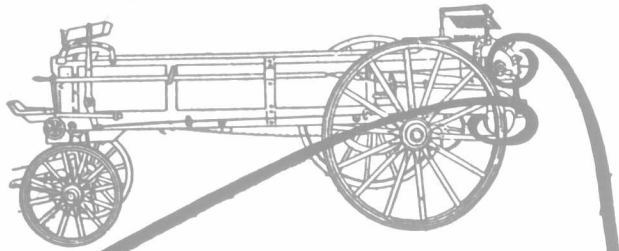
Not a single feature of the **CHAMPION EVAPORATOR** could be dispensed with. The simplest and most economical way of making maple syrup. Produces the highest quality, which brings the most money. Made in 22 sizes for large and small groves. Give your maple business a show by using the **CHAMPION EVAPORATOR**, and our Improved Supplies. This will assure success. Send for descriptive catalogue.

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

HAVE YOU SECURED ONE OF "THE FARMER'S ADVOCATE" PREMIUMS

"Success" Light Draft Roller Bearing Manure Spreader for 1909 is greatly improved

Just go to the Paris Plow Agent in your locality and examine the New 1909 "Success" Manure Spreader. You'll have no doubts about which machine to purchase after you've seen it and noted the improvements for 1909.



The drawing below illustrates the New Gear Case enclosing the Apron Driving Mechanism. The case is cut away so that you can see the Worm and Gear, which run in oil. This case not only prevents all "leakage-waste" of oil but is dust-tight, too. This oil-tight, dust-proof case around Worm and Gear makes the apron driving mechanism of the "Success" the smoothest and easiest-running, lightest-draft on any manure spreader. And as the Worm and Gear are so fully protected against wear they are rendered practically indestructible.

The bottom drawing shows Beater with Roller Bearing at end of Beater shaft. There is also another Roller Bearing at other end of Beater Shaft. These two bearings make the "Success" Beater a marvel for smooth and easy running—and materially decrease the draft. There are three other sets of Roller Bearings on New 1909 "Success." (Any Paris Plow Agent will show them to you). Their use lessens the draft of "Success" by at least one horse.

The large Black Teeth shown on ends of Beater are the Harpoon Teeth. These Harpoon Teeth cut up the long pieces of straw that would otherwise wind around the end of the beater and clog it up. And this is just another draft-decreasing feature found on no spreader but the "Success."

But just see the "Success," and note all its superior features. That's the right thing to do before making your choice of a manure spreader.

THE PARIS PLOW CO. LIMITED.

PARIS ONTARIO

Western Agents: The John Deere Plow Co., Ltd., Winnipeg, Regina, Calgary and Edmonton. Agents for Quebec and Maritime Provinces: Prost & Wood Co., Ltd., Montreal, Quebec, St. John, N.B.



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De Laval
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Separators**

Best for All Parties

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Why shouldn't you know what is in your roofing so that you may be sure of your buildings' protection?

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is made of Trinidad Lake Asphalt—Nature's absolute waterproofer that doesn't crack, rot, break, or leak.

Ask your dealer for Genasco, and thus make sure of economical and lasting protection for every building on the farm. Mineral and smooth surface. Guaranteed weather and backed by our thirty-two million-dollar organization. Look for the trademark, take no substitute. Write for samples and the Good Roof Guide Book.

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Largest producers of asphalt and largest manufacturers of ready roofing in the world.

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C. G. Company, Vancouver, B. C.

The Farmer's Advocate

and Home Magazine

"Persevere and Succeed."

Established
1866.

Vol. XLIV.

LONDON, ONTARIO, MARCH 18, 1909

No. 860

EDITORIAL

Systematic Cropping.

A definite system of crop rotation is necessary for best results on any farm, yet vast areas are annually cropped after a hit-and-miss fashion—now a crop of oats, then barley, then corn or roots, followed, perhaps, by wheat or barley seeded down. In from three to eight years, or perhaps after a longer interval, when the field has ceased to cut a ton of hay to the acre, it is again broken up, and another siege of cropping commenced. On other farms system is followed, but very often the system is improvable. Among the more serious mistakes observable are leaving arable land too long in sod, cropping too many years in succession to grain, putting oats on inverted sod and corn on stubble, and similar inversions of correct practice.

While conditions do not admit of the same rotation being adopted to advantage on every farm, there are a few fundamental principles which all should seek to observe. The main objects of rotation are to economize plant food, to maintain or increase the supply of humus in the soil; to prevent the accumulation, in injurious amounts, of toxic properties; to provide opportunity for cleaning the land of weeds, and to produce maximum crops. Let us discuss these briefly, in order.

It is a well-known fact that plants of various kinds differ in the demands they make upon the several elements of fertility in the soil, as well as in the power of their roots to take up these constituents from the soil. To follow one crop with another of like kind, or of similar character, as to sow one cereal after another, is to fail to utilize plant food to the best advantage, or in the largest possible amounts. The unutilized excess rendered available in the course of a season is subject to waste, particularly in the absence of abundant quantities of humus. Humus is decayed plant tissue. Humus in the soil possesses the virtue of a sponge. It increases the capacity of the land for holding moisture and plant food, and also affords material for the soil bacteria which render plant food available. A soil without humus is dead, inert and unproductive. Cultivation and soil processes are constantly breaking up the humus into elemental forms. A rich, new ground mold, cropped for a few years with grain, soon becomes an entirely different-looking kind of soil. In order that the humus supply may be maintained in ample proportions, not only must reasonable quantities of barnyard manure be applied, but crops, such as grass and clover, must be grown which, when removed, and the field plowed, will leave in their residue of stubble and roots large quantities of plant tissue.

Market gardeners, who use manure lavishly, nevertheless find their land benefited by thus filling it with fibrous plant tissue, while those who depend upon commercial fertilizers alone have still greater need to seed down their land from time to time. The fact is that frequent seeding to meadow is absolutely essential for the economic maintenance of the humus content of the soil, without which the land would soon become leachy, incapable of retaining either plant food or moisture. It is, furthermore, important that the meadow seeding should consist largely of clovers, in order that the somewhat scanty nitrogen supply of the soil may be supplemented by the addition of such quantities as may be abstracted from

the air by means of the bacteria inhabiting the nodules on the roots of leguminous plants.

The third reason for rotation named, viz., to prevent the accumulation of injurious toxic properties in the soil, is somewhat problematical, but yet may be properly noted here. Recent researches by investigators at Washington appear to indicate that the roots of growing plants exude certain toxic properties inimical to a following crop of the same kind, though not usually injurious to another crop of different kind. In the course of a year or two these toxins are reduced in quantity to a comparatively harmless percentage, after which a full yield of the original crop may again be grown. However this may be, it offers one more hypothesis to explain the marked advantage that has often been noted from change of crop.

Of course, no intelligent farmer will dispute the need for a summer-cultivated crop to combat weeds.

The fact is that many unsystematic croppers dissipate and waste much more fertility than they convert into crop, while the farms become worse and worse infested with weeds. Researches on the wheat lands of the Western prairies revealed that annual cropping with wheat for many years depleted plant food in the soil out of all proportion to the amount harvested in the form of crops.

We perceive, therefore, several strong reasons for rotation of crops. A word now as to the order that is best to follow. There are two main classes of farm crops: First, vegetative crops—that is, those grown to provide fodder by their stalks, leaves or roots; secondly, those grown to produce seed or grain. The former class must be subdivided, for cultural purposes, into those such as corn, roots and potatoes, on the one hand, and grasses and clovers on the other. Necessarily, the latter follow the grain crops with which they are seeded. All that remains, then, is to decide the order of the others. The corn and root crops, having a long season of growth, and requiring, as they do, abundance of nitrogen and potash, are especially adapted to follow sod, as they revel in the rich mold resulting from its decay, and their prolonged growth into the latter part of the season enables them to make the most out of the decaying sward. The grain crops, on the other hand, demand a fine state of tilth at time of sowing, abundance of nitrogen and potash in the early stages of growth, and phosphoric acid to mature the seed. These conditions are best met by putting corn, roots, potatoes and soiling crops after sod, following these with grain seeded down, the land to be left one or two years in sod. If one does not wish a third or a quarter of his arable land in hoe crop, he can fill out this section to advantage with peas, after which wheat may be sown without interrupting the series. By alternating the area on which the peas and hoe crop are grown, he may have all the advantage of a six year or eight year course, with the simplicity and convenience of a three or four year one. We are well aware that many will object to putting roots after sod as being impracticable. The objection may hold in the case of tough old sods, but a clover sod of one or two years' standing, if well worked down, may be reduced to an ideal seed-bed for roots, while, for corn, a sod is admittedly the best preparation.

The ideal rotation is the three-course system, embracing either three or four years, according as the land is left one year or two years in sod. It

is an effectual means of cleaning the land; is, on the whole, the best means of circumventing damage by insects, and is a means of securing maximum crops and liberal profits; while, if the manure is carefully saved and applied, the land will become more productive with passing years. Land not adapted to work in such a rotation, should be, in most cases, planted to trees, or seeded to alfalfa or permanent pasture.

Make the Bridges Large.

Among the many valuable features of the recent convention of the Ontario Good Roads Association, the construction of culverts and bridges was given due consideration. The importance of sufficient capacity for full-flood was urged. It was evident, from the tenor of addresses given by those prominent in good-roads work in different parts of the Province, that, just as steel structures took the place of bridges made of wood, so will cement take the place of steel for bridges, and of wood for culverts.

No matter what material is used, however, the question of capacity remains paramount. It is not sufficient that a span be large enough to carry the waters of a stream when it is swollen by days of heavy rain. It must be wide enough and deep enough to allow the swollen waters of a spring thaw and rain combined to pass through. In many instances, the curtailing of initial expense, by reducing the size, has, in the course of a very few seasons, resulted in increased cost to the municipality, because the flood, during the spring freshet, could not pass through, and the consequent blocking of ice and debris, by causing a washout, carried the structure from its foundation. In other cases it may be that the current never becomes sufficiently strong to dislodge the culvert or bridge, but the damming of the waters causes disgraceful and dangerous washouts on either side of the structure, entailing almost annual expenses for repairs.

In order to ascertain approximately what capacity is required, those in charge of road construction in the various sections should be on the alert when floods prevail during the spring months, and make careful estimates of the volume of water that flows where new bridges will be a necessity within very few years. When ample allowance has been made for the largest freshet, it would be well to add ten or fifteen per cent., or perhaps more, when preparing plans.

Lost Time on the Roads.

There are, in every district where statute labor is still in vogue, many who unhesitatingly declare that the annual call to "road-work" duties means the loss of so much time. Few, however, take into account the time that is lost on highways because of being in poor condition. If those who are most interested in roads throughout rural Canada would consider that road repair and the keeping of highways in proper condition was an insurance against loss of time, perhaps there would be less difficulty in arranging for funds to meet expenses. Not only is it an insurance against loss of time, but also the wear and tear on harness and vehicles is reduced to a minimum. A consideration of these facts, also, should result in more satisfactory work, even in localities where statute labor is the practice.

Most farmers, in buying or selling, are very mindful of dollars and cents. In general lines, however, where a saving of time could be made, or where horseflesh or implements can be given a longer life or duration of usefulness, the economic standpoint is pushed to one side because of the

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

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JOHN WELD, MANAGER.

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labor or the cost for the present or immediate future.

Conditions make it impossible for every locality to build stone roads, or even to put on a liberal layer of gravel. Lack of funds and distance from source of supply stand in the way. But there are few districts that cannot make improvements in the general condition of the roads. Ordinary earth roads, if properly made, and kept in good repair, are not objectionable, except for a very few days during the year. If, however, the road allowance never has been graded to form a road-bed proper, instead of a wide, flat tract, on which water lies after every rain, the natural condition is mud for many months and a "black eye" to the community. Thorough grading, followed by rolling and smoothing, and then a judicious use of the split-log drag, overcomes most of the difficulty.

Don't forget that time is money, and that some effort should be made to reduce to a minimum the outlay for harness, horses and carriages. Take steps to have the work connected with road construction and repair, in the hands of a competent superintendent. The result will be a saving of money, a pleasure to those who travel on the roads, and a credit to the community.

Metal-surfacing an undrained road is like building a house on quicksand. If a municipality cannot both drain and macadamize, by all means let it do the draining first. There are thousands of dollars invested every year in gravelling and applying crushed stone that would give far better returns, both now and hereafter, if devoted to tile-draining the roads. An underdrained road is fit for any further line of treatment.

There is still time to secure one or two new names for "The Farmer's Advocate," thereby obtaining your own renewal free for six months or a year, as the case may be. If you have already renewed, we have a list of splendid premiums from which a selection may be made that will liberally repay the slight trouble entailed.

Canada's Wheat Future.

Not long ago, in the "smoker" of a west-bound flier, a prosperous-looking individual remarked: "At the rate things are moving out there (his cigar indicated the setting sun), the time may come when we shan't know what to do with our wheat." Noticing that the thought seemed to trouble him not a little, a stranger, unmistakably English, told him not to worry about such a contingency. "Why," said he, "the Old Country can take all your surplus for years to come, and then you can help to feed a hundred millions in the United States; after that, have a turn at the rest of the globe. It will be all right; your land is cheap and fertile, so go ahead as quickly as you like with your No. 1 hard and other brands; it's good stuff." The perplexed one gave a sigh of relief, passed his cigar-case, and said, "Show me." "Well," replied the stranger, the United Kingdom now produces about 55,000,000 bushels per year—enough to keep her two and a half months. To make up the deficit in the national pantry, she had to buy last year 210,000,000. How much do you imagine Canada supplied? About 40,000,000—one-fifth, that's all. Now, what you have got to do is to send her the other four-fifths—send her the whole lot, all she wants. I guess that will keep you hustling (as you say) for a few years. By this time you will be using for home consumption nearly as much as you produce now. Afterwards, when 'mother' can take no more, Uncle Sam will be ready and eager for all he can get. So cheer up, and, as here's my station, so long."

Addresses of Correspondents.

A reader complains that the post-office addresses of our correspondents are not published.

The use of the county, rather than the post-office address in printing communications is a settled policy, adopted by "The Farmer's Advocate," and followed by some of the leading agricultural journals of the United States, as well. One of the objects is to prevent our writers being deluged with an aftermath of personal correspondence; another is to prevent the prostitution of our editorial columns by veiled attempts to secure free advertising. Even when no such attempt is made, there are letters received in the course of discussions which, if published over the writer's name, would unintentionally and in some cases unavoidably have such incidental effect. Our editorial pages are not published for this purpose. Their function is to impart information and stimulate thought. The advertising columns are for the purpose of facilitating business exchange. If a man has something he wants to sell, or if he desires to buy something which some reader or other may have, let him insert an advertisement. In the "Want and For Sale" column announcements may be inserted at the comparatively low price of three cents a word, concerning farm properties, help and situations wanted, pet stock and miscellaneous articles. For live stock, poultry and eggs, and general merchandise, rates will be cheerfully quoted for display advertisements.

For editorial and business reasons, therefore, the names of our correspondents are withheld. It is useless to ask for them. When additional information is wanted, send the inquiries to us, and, if worth while, the replies will appear in print.

If those who leave their fields from three to eight years in meadow, and then crop from two to four years in grain, were to change their practice completely, breaking the sod after one or at most two years in clover, following this with corn, roots, potatoes and peas, and then taking off one crop of cereals, seeding down with this course to clover and timothy, greater quantities of both hay and grain would be reaped, with the hood crop and peas to boot. Short rotation is the ideal.

Acetylene gas is being extensively introduced into Western Australia, as well as other parts of the Antipodean Commonwealth.

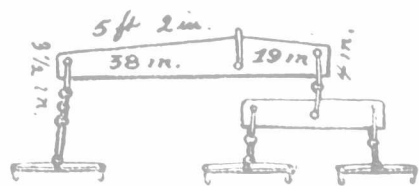
HORSES.

System in Horse-breeding.

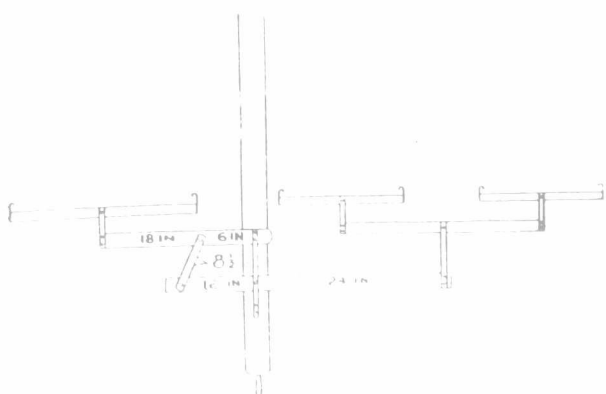
Why are there so few high-class horses of any breed or class owned by farmers in any section of the Dominion? The question is easily answered by saying, "Want of system in breeding." Visit the farms of any section, and you will find pure-bred cattle at one farm, pure-bred sheep at another, pure-bred swine at another, and, doubtless, pure-bred poultry at many. In fact, at many places there will be found pure-breds of the different classes of stock, except horses. The percentage of farmers who own even one horse that is registered, or eligible to registration, or even one high-class animal of any of the recognized classes, not necessarily pure-bred, will be found to be very low. Why is this? We answer that, in the breeding of all classes but horses the farmer has a system; he has an ideal up to which he is endeavoring to breed. He is endeavoring to improve his herd year by year, not only to keep each generation pure, but to improve the quality and individuality. He has discovered that it pays to be particular; that the better bred and the better the individual, the more money it is worth in the market, whether it be sold for breeding purposes or for food. But, in regard to horses, he has failed to appreciate these facts, not that he is not sufficiently intelligent to appreciate them, but because he has not given them the necessary thought and consideration. He, like his forefathers, apparently regards the horse simply as a means of producing power to perform certain kinds of labor. The other classes of stock are kept and bred with an idea of profit, but the horse simply as a means of performing labor, in order that food, etc., may be produced which makes it possible to sustain the others. He apparently is unmindful of the fact that it costs little more to produce, and no more to keep, a good horse than an inferior one. We think that, if from no other motive than appearance, it would be profitable to pay more attention to his horses. He takes pride in the breeding and quality of his cattle, sheep, swine, and probably poultry, and will be pleased to show these and have them admired; but, when asked about his horses, he will say, "Oh, I don't keep much in the horse line; good horses are too expensive, and I simply keep sufficient of a kind to do my work." Of course, with the man who does not breed horses, but who buys what he needs, we have no reasonable fault to find. We may deplore the fact that he has no tastes or ambitions in that line, but he is at least doing nothing directly to prevent improvement in breeding. We would also say to the man who does not care for the horse, simply sees in him something that is useful for certain purposes, views him as he does a machine, as something that is necessary about a farm, but from some cause conceives the idea that he can be bred at a profit, and decides to experiment, "Don't." A man without any particular liking for any kind of stock may, with more or less success, breed and raise other classes of stock, but the man who makes horse-breeding profitable must be a horseman. He must see in the horse something more than simply a means to an end. There are so many more points to be considered in a horse than in other classes of stock that it requires either special adaptability or special training, or both, to enable a man to have an intelligent idea of what he is endeavoring to produce. For instance, in the other classes, when we get the desirable size, conformation and quality demanded in an animal, we have all that can be produced, but in horses we must have, in addition to these, soundness, style, and the action and speed demanded in the special class or breed they represent. Hence, we claim that only he who really knows what the special horse he is intending to produce should be, can be a successful breeder.

To those who breed horses, we say, "Be systematic," stick to type, abandon the old idea that a horse is simply a horse; that a mare that, either from old age or from disease, is no longer much use for work, is good enough to breed, and that the side-road stallion, whose service fee is a few dollars or less, will produce just as good a colt as one with a long pedigree, and the characteristics of his breed well marked, and for whose services a reasonable fee is demanded.

We will not here discuss the most profitable class or breed of horses for the farmer to breed; that question is frequently discussed. We will simply say that, in our opinion, if a man who has no particular admiration for any class, but decides to commence breeding, he will be wise to breed heavy horses; but if he is essentially a light-horse man, favors the carriage horse, the roadster or the saddle horse, by all means let him breed his favorite class. These are classes that require nature, age, training and manners, in order that their value may be received for them, and the breeder will be able to obtain both pleasure and profit by giving them this training. Whatever class the breeder decides to produce,



No. 1.—Three-horse Evener, for use on Harrows and Such Implements.



No. 2.—Three-horse Evener, for use on a Tongue. This device has been criticised as not equalizing the draft exactly.

in order to meet with reasonable success, he must have and observe system. In the first case, he must procure mares—pure-breeds, if possible, but at least those in which the desirable characteristics of the class are at least reasonably well marked. Then, of course, he should secure the services of the very best sire of the class that can be had for a reasonable stud fee. We claim that a mare, without somewhat well-marked characteristics of some class or breed, will seldom prove a profitable breeder. In other words, if a prospective breeder has a mare, and he cannot make up his mind what breed of stallion he should breed her to in order to get the best results, it will probably be wise to defer breeding operations until he can procure a mare with special characteristics. There are exceptions to this, especially in the light classes. High-class saddlers are often produced by breeding a mare of this kind to a Thoroughbred, but, with few exceptions, he is the only sire that will, with reasonable certainty, give satisfactory results when so bred, and even with him the cross should not be too violent. Probably, in heavy horses, more haphazard breeding and mixing of breeds is followed than in the light classes. Especially in these classes, if system were observed for a few generations, and the breeders refused to sell their fillies, but kept them for breeding, and sold their dams or the geldings, even for a much lower price, there would soon be a class of draft horses that could be registered; but, on account of the too constant change in the breed of sire used, either on account of convenience, or to patronize a friend who has a stallion, or on account of the size of the stud fee, or other causes (often thoughtlessness), instead of the purity of breeding being increased generation after generation, it becomes mongrelized. How often do we notice a man with a mare with one or more crosses of Clydesdale or Shire, breed her to a Percheron, Suffolk, or other draft horse, or vice versa. The result may be fairly satisfactory, from a serviceable work horse standpoint; but if the produce be a filly, what about her as a breeder?

If a breeder has a mare with Percheron blood, breed her to a Percheron, her filly to a Percheron, and hers again to a Percheron. With fillies with Clydesdale blood, or other blood, follow the same system. If this system were strictly adhered to, we would soon have a class of horses remarkable for their similarity and characteristics, and, in fact, which would register, and become pure-breeds. But the too-constant change of breed of sires has resulted, and if not checked, must continue to result in the production, not of cross-breeds, but of mongrels. The same arguments, of course, apply to horses of the light classes and breeds. We all know that horses are more often spoken of as classes, rather than breeds. At our horse shows or our fall exhibitions, we notice that there are few sections or classes for cattle, sheep or swine, other than for registered animals. The classes are mostly all for those of certain breeds. There are a few sections for grades of certain breeds, but these are not numerous. How about horses? Here, except in the breeding classes (and even in some of them, the carriage and roadsters, for instance), they are ranked as classes, rather than breeds. How do we account for this? Simply from the fact that horse-breeders have observed less system in breeding than the breeders of other classes of stock. It will require very thoughtful and careful breeding for a few generations of horses to change this order of things, but it can be done, and with the breeders rests the onus of doing it; but any thoughtful man will admit that the sooner it is done, the better it will be for the interests of our country. —WHIPP.

Eveners for Several-horse Hitch.

The practice of reducing the wages for laborers on the farm, by using a greater number of horses on farm machinery, has led to many devices for three-, four-, five- and six-horse hitches. From those that seem to give general satisfaction in practical use we have selected simple types. The prime object in each case must be to equalize the labor for the various horses. With implements on which a tongue is necessary, special precautions must be taken to avoid side draft.

In No. 5, A represents the furrow; B, plow head; C, five-horse evener; D a pulley; E a chain; F a neckyoke; G the lead team's whiffletrees; H the fifth horse's whiffletree; I a spring connecting C and H; J the back team's set of whiffletrees.

The usual length of C is 45 inches. This length gives the four horses 9 inches of C, and the other horse 36 inches of the evener.

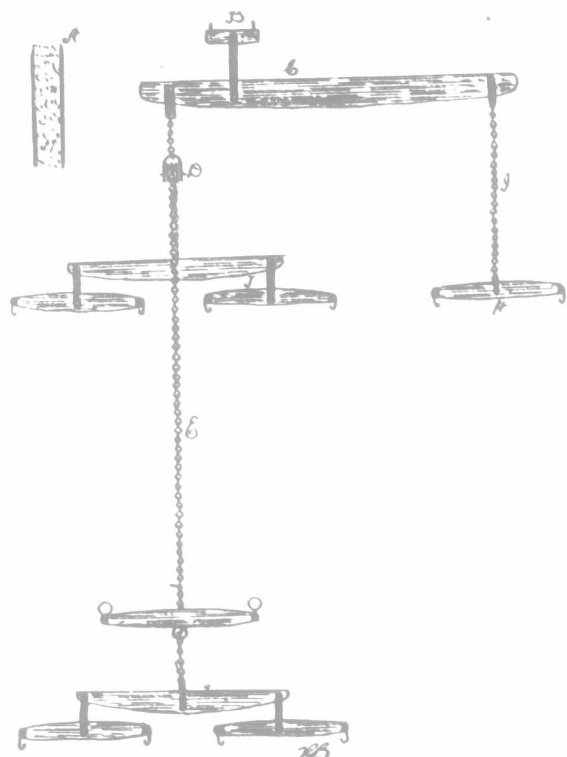
The pulley, D, needs to be rather heavy to stand the strain of the four horses.

The chain, E, should be quite heavy where it passes through the pulley. It should be allowed to pass through a ring attached to the ring of the neckyoke.

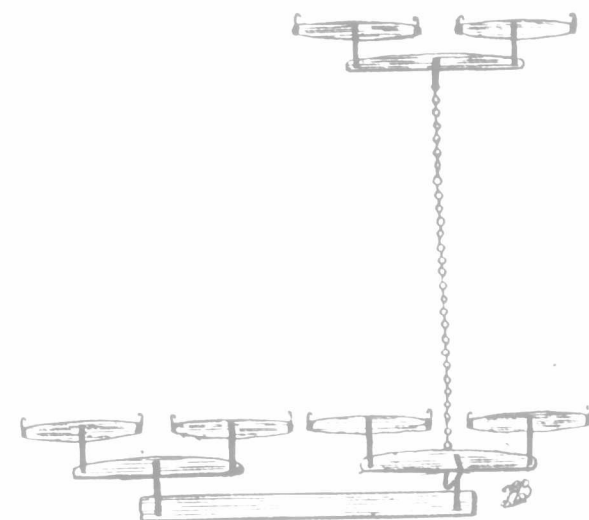
The use of the spring, I, is to break the jerk on the fifth horse when the plow strikes a stone or root.

The whiffletrees of the hind team should be placed above the tandem chain. By placing them above the chain the draft on the back team is not so low.

For six horses, No. 5 could be remodelled, having two horses hitched to I instead of one, and changing the lengths of the arm C to 30 and 15 inches instead of 36 and 9 inches. The accompanying illustration, No. 6, is of similar construction.



No. 5.—Five-horse Evener, Tandem Hitch.

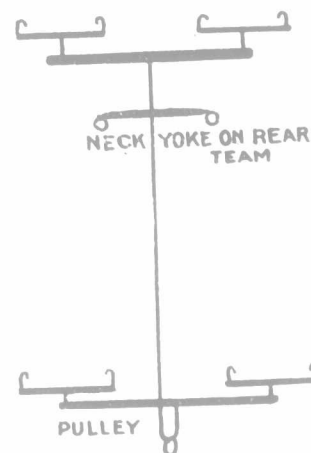


No. 6.—Six-horse Evener, Tandem Hitch.

tion. None of the horses are obliged to walk on the plowed ground. The iron evener is upright, with tandem rod clevised to the bottom end and a doubletree on top end. The evener should be slightly curved, and both end holes exactly the same distance from the center hole. Many prefer this plan to working horses abreast, as they do not crowd, and are cooler in warm weather, and with six horses on, one can fasten a section of harrows behind and do two jobs at once. This rig can also be used for five horses, by putting a five-foot evener on the plow and giving the third horse behind 4 feet of evener, and the 4 horses 1 foot.



No. 3.—Four-horse Evener, for use when horses are hitched abreast on Harrows, etc.



No. 4.—Four-horse Evener, Tandem Hitch. The teams are hitched, one to each end of a chain, which passes through a pulley attached to the implement.

LIVE STOCK.

Fat Steers from Deep Milkers.

The much-needed and welcome movement in the direction of improving (or perhaps we should say restoring) the milking capacity of pedigree Shorthorns has now made considerable progress, and the pioneers of reform in this direction are already being besieged with applications for young bulls, not only from other pedigree breeders, but also from large dairy farmers, who, a very few years ago, would have looked askance at a registered bull, fearing to use it in case it should "spoil the milk yield." These men, it should be said, refuse to buy "a pig in a poke," and are guided in their choice, and in the price they are willing to give, by the evidence laid before them of the milking powers of the females on both sides in the bull's pedigree, and this evidence can only be given by means of careful and long-kept records. The milk-book record has, therefore, become as important as the pedigree itself, and, as recommendations for a dairy bull, they must stand or fall together. We have here the theory of heredity applied in practice; but, in order to test its full value, we must investigate the breeding for at least three or four generations. For a buyer to be told that a young bull is from a cow annually yielding 1,000 gallons, is not enough—not nearly enough—to induce him to give a long price, because, if that be all, he has no guarantee of unbroken and concentrated hereditary powers. To insure this, he must have the milk records of the cow's dam and grandam, and also those of the sire's dam and grandam. At present there are indeed few young bulls in any herd whose pedigree could bear such a test, because the movement is so recent, and the regular weighing of milk is an extremely modern practice. A breeder tells me that he has sold no less than twenty-three bulls since October last, at an average of about £40 each, specially as dairy sires, and this is the strongest possible proof of the direction in which things are tending. With regard to milk records, we are now very much in the same position as the compilers of the first volume of the herdbook; that is, we are short of reliable materials. Recognizing their immense practical value, the pedigree dairy breeders will see to it that in a few years' time there will be an enormous increase of milk records, and breeding will be more and more carried on with an eye to the increase of total annual yields. This policy is understood to be that of those breeders who are cultivating milking herds, and is the only one which can be expected to succeed. Few, however, except the students of heredity, are likely to realize what it involves. Breeding exclusively for milk means an alteration of type, and a steady widening of the difference of shape and character between the beef and milking Shorthorn. Although we have had a few eminent prize cows as evidence telling against this statement, they have been only striking exceptions to the rule that deep milking and the perfection of beef points in the same animal are incompatible with each other. There seems no sufficient reason for fighting against this natural law, which is apparently struggling for the unattainable, or why we should attempt to maintain in the Shorthorn the uniformity of type which naturally belongs to a one-purpose breed. For the future success of the breed as a whole, it seems to the writer that it would be better for every breeder to frankly recognize that the means abundant

milkers, he must be prepared to surrender the beef type as it is understood in the show-yard.

Let us, however, glance at the dual-purpose cow as she strikes the dairy farmer who is also a grazer, and wishes to turn out some good steers or sell his bull calves to others to rear and feed. Although the exhibitor in the open classes at our shows can rarely win with a heavy milker, it does not follow that the ordinary British dairy farmer, in order to have 1,000-gallon cows, need sacrifice his beef value by breeding light-fleshed cattle approaching the Channel-Island type. Let us take a case in point which has just come to the writer's notice. A dealer bought twenty steer calves from Mr. R. W. Hobbs' large herd, bred from cows yielding an average of about 1,000 gallons yearly. They were sold to a farmer in the neighborhood, reared and fed by him, and sold at the last Christmas markets where prizes are given. Altogether, these steers from heavy milkers won £30 in prizes, and were sold at an average of £24 15s. 3d. each, being about thirty-three months old. The highest price was £31, and the lowest £19 10s. To obtain such results requires much care and skill in breeding. It may be easy enough where beef points are made the chief consideration, but here we have a lot of good farmers' bullocks, bred from unmistakably deep-milking, pedigree Shorthorns, and what is done by one breeder can be done by others.—[Spero, in English Live-stock Journal.]

The Flock in Spring.

The care of the ewes and the young lambs is an important part of the shepherd's work at this season. He will not grudge a little loss of sleep or extra work, if necessary to save the lives and insure the thrift of the newcomers. If the nights are cold, and the house not warm enough to protect them from frost or drafts, a little work in the way of closing cracks in the walls or feed chutes overhead may improve the conditions considerably. The careful shepherd will make it a rule to look over the ewe flock by lamplight before retiring for the night, and if appearances indicate a probable increase before morning, will wait up and visit the fold at intervals of an hour or two to see that the new arrivals have received nourishment and get a fair start in life. If the lambs come strong, they are generally able to help themselves, but if, for any reason, they come weak, assistance may be needed to get them started, and for this reason it is well to have on hand a few low, short hurdles which may serve to improvise pens in which to enclose the ewe and her lamb or lambs, in order that they may not become separated, and for convenience in attending to them. Two of these hurdles, used in a corner of the house, will make a pen for a ewe and her lamb, in which, in case the lamb is not strong, they may be confined for two or three days, if need be. In a case of unduly delayed parturition, examination should be made to ascertain whether the presentation of the fetus is normal, and if so, more time should be given for nature to work out a deliverance; while if not correct, it should be made so, and then reasonable time given before using force, which at all times should be as gentle as possible, and in unison with the efforts of nature.

In all cases of assisted parturition, hot water and oil should be used on the hand, and a weak solution of carbolic acid poured from a long-necked bottle into the vagina afterwards to allay pain and avoid the possibility of eversion of the uterus, which is liable to occur. For this purpose, the hind parts of the ewe should be raised while the solution is being poured in. If, in a case of prolonged parturition, the lamb shows little or no signs of life, it may be revived by breathing deeply into its mouth to inflate its lungs. It is not well to induce the newborn lamb to take large supplies of nourishment; little and often, is nature's way. If the ewe be young, or have twins, or if for any cause the supply of her milk is short, it is better to hold another ewe that has milk to spare, and let the hungry little one get some from that source, rather than resort to the use of cow's milk, but if the latter is used, it should be taken from a freshly-calved cow, and preferably from the same cow each time, kept warm, and fed in moderation from a bottle with a rubber nipple. In the case of a ewe losing a single lamb, she may be made to adopt one of a pair belonging to another ewe by taking the skin off her dead lamb and fastening it on the one to be substituted. In such case, the ewe and lamb should be kept for a few days confined in a small pen by themselves, and, if necessary, the ewe tied by the neck. If a single lamb be born dead, the mother may be induced to adopt another by rubbing the dead lamb's body on the one to be substituted.

Docking and castration should be attended to when the lambs are ten or twelve days old; the longer delayed after that age, the more danger of loss from shock or bleeding. It is certain that

thousands of dollars are lost to Canadian farmers every year by neglecting to unsex common and grade ram lambs at the proper time, as ram lambs in a commercial lot on the market in the fall are a nuisance, and can only be sold at a price far below that for wether or ewe lambs. Sores on the teats of ewes and on the lips and gums of lambs are in some seasons troublesome. As soon as the ewe is noticed objecting to allow her own lamb to suck, both the teats of the ewe and the mouth of the lamb should be examined, and, if found to be sore, treated with a suitable lotion or dressing. For aptha, a fungous growth on the lips and gums of the lamb, use a mixture of clean lard or sweet oil and sulphur, a few drops of carbolic acid, or a little powdered borax, added, may improve the dressing. And to the sore teats apply equal parts of olive oil or sweet oil and glycerine, after the ewe has been held for the lamb to suck. If soreness between the claws of the hoof of either ewes or lambs occurs, a little powdered bluestone dusted on the sores will in most cases effect a cure. The same specific is generally effective in a case of navel ill, or leaking at the navel of the lamb, which should be checked as soon as noticed. Sickness of the lamb is sometimes caused by the dung adhering to the wool and blocking the passage. This should be cleared away, and a little grease or oil applied. A separate place should be provided for feeding the lambs when they are two or three weeks old, openings being left through which the lambs may go and the ewe cannot. Fresh supplies of clover hay, oats and bran, and sliced roots, given daily, will cause the youngsters to grow rapidly, while the demand on the mothers will be less severe.

THE FARM.

Growing Mangels.

THEIR FEEDING VALUE, AS COMPARED WITH TURNIPS.

Henry gives the percentage of digestible protein as 1.1 to 1.0 in favor of mangels. This would seem to show that the mangel was rather better than the turnip in feeding value. In my own experience, I must vote in favor of the mangel in every case. Changing from turnips to mangels, my cows invariably increase in milk flow, while a contrary change is followed by a diminution of milk, other conditions being equal. Fed to fattening steers with meal, they make quicker gains than when turnips are fed. While my hogs will eat and thrive on mangels fed whole, as the main part of their ration, they will not touch turnips if fed whole. This is proof enough to me that the feeding value of mangels is considerably ahead of that of turnips. In fact, I am prepared to say that, as far as I am concerned, I would prefer a bushel of mangels to a bushel and a half of Swedes, but—and with us Maritime farmers the "but" looms so large it has almost obliterated the mangel—in most cases it is easier to raise two bushels of turnips than one bushel of mangels. Plant a turnip seed in almost any kind of soil, or even drop it on the surface of the ground, and a little moisture will start it growing, while a subsequent cultivation will keep it going to maturity.

GROWING MANGELS.

The writer has experienced both a large measure of success and also a large degree of failure in growing this root, and the failure has generally followed planting too few, unselected seeds on clayey, ill-prepared ground.

I have succeeded in growing a crop approximating 1,000 bushels to the acre, and possibly, if I give my treatment of this piece, it will probably show best what is necessary to a good crop of mangels. The ground needs to be well tined, soft, rich and warm, with lots of humus.

This ground was plowed four inches deep in August, turning under a short aftermath of clover and a good dressing of manure, cultivated during the fall, and plowed again five inches deep in the spring—this to bring the manure near the surface again, and to loosen and warm up the soil. I would hesitate to bring up this inch of subsoil in the spring if it were not that the soil had been plowed deep before, and was a light loam. Indeed, I have learned not to plant mangels on clay soil, for the little plant comes on very slowly at first, and needs fine, loose, warm earth to start it.

After plowing in the spring, a thorough drilling and harrowing is necessary, first sowing broadcast about 100 pounds to 600 pounds of a fertilizer comparatively rich in potash. My practice is to use about 300 pounds nitrate of potash and 200 pounds of either basic slag or bone phosphate. While there is no objection to spreading on the level, I always throw in a low ridge, which not only gives an extra cultivation, but tends to throw the broadcast fertilizer across the ridge and plant, and makes the seed and soil bed lying much easier.

SEED AND ITS TREATMENT.

It seems to be a difficult matter to get good mangel seed. Sometimes it is too old, sometimes it is not well ripened, and hence its germinating power is weakened; again, its coats are so thick that considerable moisture seems to be necessary to get a germination. As a general thing, if one doesn't raise his own seed from selected roots, it is better to buy those done up in sealed packages, rather than buy in bulk. There is more probability of getting seed with greater vitality in the former. To insure quicker germination, I soak the seed for at least twenty-four hours in warm water, then spread out for an hour or two to dry, so as to pass through the seed drill. Besides this, I drill them in moderately deep, at least an inch, since a dry spell of weather following planting may retard germination. In most cases the hind wheel of the seed drill will firm the earth sufficiently about the seed. I use from 10 to 14 pounds to acre.

After two weeks, the cultivator is run through between the drills to lighten up earth, kill weeds, and conserve moisture. This cultivation is followed up every two weeks, or oftener, during the growing season.

I cannot do with less than two hand-hoings. The first time, when the plants are about one to two inches high, I walk up one side of the row, cutting the weeds and loosening the earth close up to the line of plants, and, in going down the other side, I also cut out between, leaving little bunches of plants about eight inches apart in the row. In about two weeks from this the plants are large enough to thin out to one in a place. I prefer to leave the bunch of two or three until the second time, since the pulling gives another loosening of the soil close around the young plant, which it would not get if they were thinned the first time. If this second hoeing is done thoroughly, there will be no more need of the hand-hoe, unless the land is very weedy. This, with frequent cultivation during the growing season, should give a good crop of mangels.

No doubt many of your readers will say they can grow good crops of mangels without all this bother, and, no doubt, in the case of very rich, moist loams, they will grow readily without much care; but I feel safe in saying that, in the Maritime Provinces, or at least Nova Scotia, in nine cases out of ten the greatest care is necessary to make a success of growing these roots.

I have tried several different kinds, but I consider the selected long reds give the best results.

I am persuaded that we cannot take any of the short-cuts in gathering these that we do in getting our turnips out. As I generally feed the tops to cows and hogs, I generally pull four rows at a time and throw them together in heaps, where they are topped by a twist of the hand. This leaves tops and mangels in heaps, whence they can be readily thrown into the cart and taken to the cellar. R. J. MESSENGER.
Annapolis Co., N. S.

World's Grain Production of 1908.

The Hungarian Agricultural Ministry has issued from Buda-Pesth an octavo pamphlet of 108 pages, on the world's grain production of 1908 (Die Getreideproduktion der Welt im Jahre, 1908), comprising wheat, rye, barley, oats and corn. The world's total production of each of these cereals in 1908 is estimated in millions of bushels, as follows: Wheat, 3,167.60, against 3,130.19 in 1907, a decrease of 22.89; rye, 1,557.61, against 1,688.97 in 1907, a decrease of 131.36; barley, 1,576.08, against 1,179.12 in 1907, an increase of 396.96; oats, 3,889.78, against 3,556.83 in 1907, an increase of 332.95; corn, 3,831.32, against 3,565.91 in 1907, and increase of 265.38. The total production of the world's principal grain crops in 1908 amounted, therefore, to 13,953.42 millions of bushels, against 13,121.35 in 1907, a net increase of 832.07 million bushels. The figures are converted from meterzentners into bushels, at the rate of 60 pounds per bushel of wheat, 55 pounds of rye and corn, 48 pounds of barley, and 34 pounds of oats.

Salt-petre Production by Water-power.

The immense possibilities for Norway, resulting from an invention in the salt-petre fertilizing industry, are attracting public attention in Europe, says C. E. Sontum, Canadian Commercial Agent in Scandinavia. Professors Brogger and Avest publish the following statement in the *Berliner Tagblatt*: "Through the Birkeland-Eyde method, there is already produced, at Notodden in the district of Norway where these factories are situated, more than 400,000 centners of fertilizer, and the largest in Europe, viz., 40,000 horse-power. A new water-power station, with a capacity of 1,000 horse-power, is now under construction, and from this new plant, during the course of two years, he produced more than 1,200,000 centners of salt-petre."

Corn versus Roots.

Editor "The Farmer's Advocate":

At the monthly meeting of the Brant Township Farmers' Club, held at the home of Walter Rowand, on the evening of March 2nd, the attendance consisted of about 20 members and a number of non-members.

The educational feature of the evening was a debate on the following subject: Resolved, that it is more profitable to grow roots alone than corn alone. The question is a live one in this locality, and much interesting matter was gathered together. I will briefly enumerate the points on both sides.

POINTS ON THE AFFIRMATIVE SIDE.

1. The expense for raising and properly curing corn is greater than that of roots.
2. Roots can be fed to all stock, while corn has not that advantage.
3. In value, roots produce more per acre than corn.
4. The watery part of roots help to extract the nutriment from other fodders.
5. Potatoes a good thing for pulling through crippled pigs.
6. Different roots have different seasons for seeding, so we can be surer of a crop. If mangels fail plant turnips, and if they fail plant Grey-stone.
7. Corn has a habit of suddenly disappearing by reason of the crow, while mangels when once sprouted are there.
8. Mangels and turnips stand more frost than corn.
9. There is more of a chance to get poor corn seed than poor mangel seed.
10. A farmer can do without corn, but not very well without roots.
11. Certain roots have many other uses besides food. Turnips can be made into poultice. Carrots for butter color.
12. The varieties in roots allow a change in the feed for stock which is a benefit.
13. Potatoes are the staff of life for the human family.
14. Turnips will go a great way in supplying water to stock when that commodity is scarce.
15. Cornstalks or stubs in a field cause considerable trouble in working up the soil.
16. More farmers rely on roots than on corn.
17. Our imported stock (from Scotland) is raised on roots and not on corn.
18. Counties in Ontario adaptable for corn raise less stock than those adaptable for roots.
19. Growing roots allows a better cleaning of weeds than corn.

POINTS ON THE NEGATIVE SIDE.

1. Turnips are 90.5% water. To devote a whole year's work for the production of 9% of matter seems rather a waste of time. Water is cheap.
2. Roots require more manure than corn.
3. Roots require more labor in preparing the seedbed than corn.
4. Analysis of corn shows that it contains less water and more nutriment than roots.
5. Sowing corn is less labor than sowing roots.
6. Potatoes are objected to for making cheese.
7. Turnips are objected to for making butter.
8. The number of siloes going up every year is evidence of the advantage of corn.
9. Turnips are raised at a loss of late years.
10. Those that have stood by corn speak more highly of it year by year, and call it the "king of crops."
11. Roots are subject to insect pests which cannot be averted, while the crows on the corn can easily be stopped.
12. After a crop of roots is harvested and in the root cellar, they are liable to rot, especially if lice have been on them, while silage keeps.
13. What is left of turnips that have been troubled with lice isn't worth a great deal as feed.
14. Farmers after growing corn are able to raise and feed more stock than formerly.

After a due consideration of the above points the judges decided in favor of roots.

Note.—To be fair with the negative side, I should say that when this subject was chosen the resolution read that the two crops were for stock feed only, but through a mistake the affirmative included other purposes.

Instead of a debate for next meeting it was decided to discuss the preparation of soil and the sowing of the following cereal grains: Barley, oats, buckwheat, summer and peas.

A club, we have been able to get special fat on our clover seed this year.

ALBERT E. WAHN

The wheat harvest in New South Wales is estimated at 15,731,000 bushels, wrote J. S. Larke, up to date of January 18th. This would mean an average of 12.6 bushels per acre. The total harvest of Australia was estimated at 61,500,000 bushels, which would allow 22,500,000 bushels for exports.

King System of Ventilation.

1. We have been thinking of putting in the King system of ventilation in a barn next summer, but we have been told that the out-takes will fill up with frost, and then, in a mild time, they will drip. Is such the case?

2. Would two out-takes, 2 feet each way, be about the right size for a barn 56 x 84, or would smaller ones do?

3. How many, and how would you put in the intakes when building a stone wall?

4. How would you build the out-takes?

5. Would a ventilator, such as some of the roofing companies make, be proper to put on the barn?

6. Are there any barns using the King system around Guelph or Galt, where a person could inspect same?

ONTARIO.

Ans.—In the King system of ventilation there is no more danger of the outlets filling up with frost and dripping during mild weather than there is with any other form of outlet. The shafts which are used for carrying off foul air should be made of two thicknesses of lumber, with tarred paper or building paper between these, thus making a shaft which is a good non-conductor of heat, and preventing the warm air inside the shaft from becoming chilled. If this is done, there will be little danger from dripping. Two outlets, each two feet square, should be sufficient for a barn the size mentioned. Possibly, smaller ones might do, but it is well to be on the safe

would occupy too much space to go into a full description of the system. G. E. DAY.

O. A. C., Guelph.

[Note.—Professor King's book on Ventilation may be obtained through this office for 75 cents, or as a premium for obtaining one new subscriber.—Editor.]

A Vote for the Negative.

Editor "The Farmer's Advocate":

I have read the summary of debate on Specialty Versus Mixed Farming, and your comments thereon, with a good deal of interest, and I must say I find it a great deal easier to criticise the points than to decide which side won the debate. I rather incline to think that the negatives came out ahead, but that is not saying that I agree with them. In the first place, I cannot accept the definition of mixed farming. As there defined, it is precisely the same as in No. 2 on negative side is called specialized farming. The environment is different, that is all; both are grain-growers, pure and simple. Mixed farming, as practiced in Great Britain for generations, and also in many, if not all, parts of Ontario to-day, means raising for sale cattle, sheep, hogs, poultry and eggs, dairy products, potatoes, and may or may not include grain. As any one of these lines is specially developed, and others partially or entirely dropped, so is the tendency to specializing. I cannot accept a grain-grower as a "specialist"—he is a primitive farmer. Negative criticism of point No. 1 is well taken. The only reason I can see why farmers do not farm as their forefathers did, is that the land won't stand it

any longer. It is not that the average farmer wishes to change his methods; he is exceedingly loath to do so, as witness the exodus to the West, where primitive methods are still in vogue, and more or less successful.

Point No. 3 won't do for the farmer. While it is wise, no doubt, to specialize more or less, he must keep up on all lines; very few can be dropped entirely. We hear more of "specialists" in medicine and surgery than in any other profession, but who ever heard of one who was not also a fully qualified and expert general practitioner? It is just as impossible for a farmer to devote all his time and attention to one single line; and be successful as it would be for a doctor to devote himself

entirely to the treatment of one organ of the body, without paying any attention whatever to the condition of the rest.

No. 5.—The farmer is the employer, not the employee.

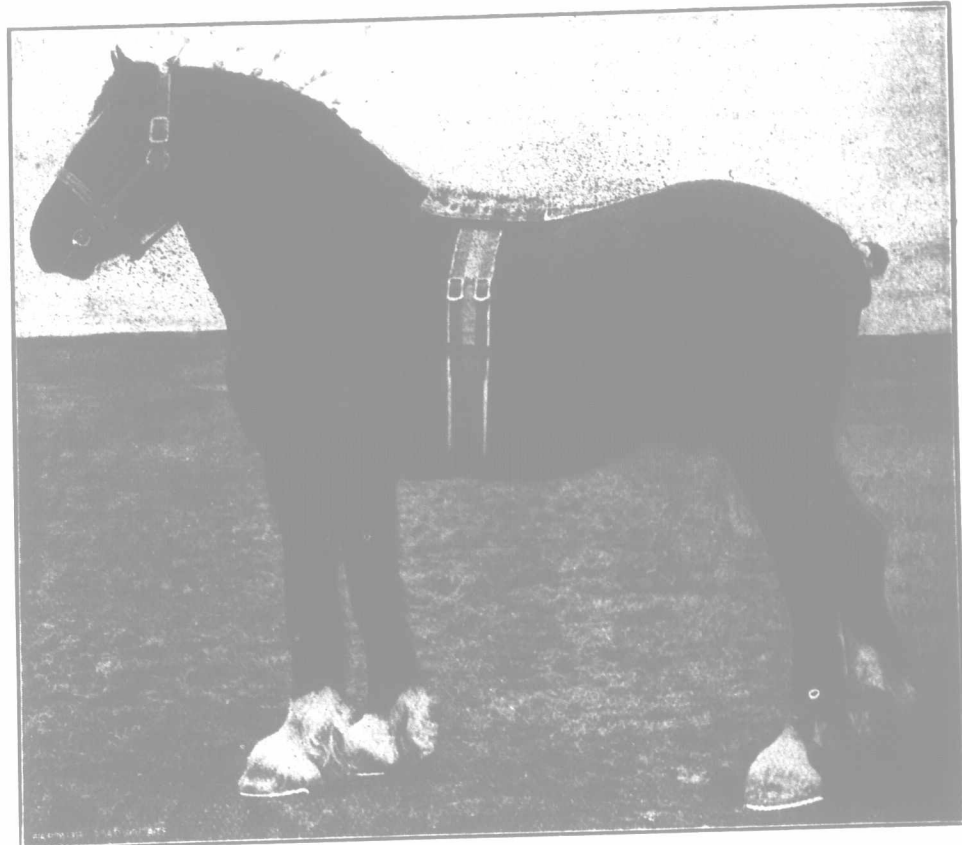
Nos. 6, 7, 8.—While the farm may be a factory in a sense, it is a factory with a difference. These points hardly apply to farm products.

No. 13 scarcely applies either. If we specialized on one grain for any length of time, the results would soon be the reverse of those stated. The fact is there is a limit to the possibilities of profitable specialization in farm products. A balance must be kept between one line and another, or cost of production will be increased.

I cannot agree with the negative criticism of point No. 11. The location undoubtedly has a great deal to do with the earning power, but it is the earning power after all that fixes the general average of value. On the whole, the negative points are well taken, and I believe they have the best of the argument, though my sympathies are rather on the other side. I would like to endorse every word you have said in your comments.

ALFRED HUTCHINSON,
Wellington Co., Ont

Twelve years' continuous selection of seed oats at Guelph, using each year seed from a crop grown from selected seed, resulted in a final difference of yield, in the twelfth year, of 26.1 bush. per acre, in favor of large, plump seeds, as against light weighing and light colored seeds.



Ganymede (14130).

Glydesdale station, black, foaled in 1905. First in aged class, Glasgow Station Show, February, 1909. Sire Mirror, by Marcellus; dam by Baron's Pride.

The inlets for fresh air are usually recommended to be put on each side of the building, and about twelve feet apart. These could be made comparatively small, say about six inches square. The outside opening should be at least three feet lower than the inside opening. It is a little more troublesome to make inlets in a stone wall than it would be in another kind of building, and one of the simplest methods would be to simply place shafts through the wall, near the top, at intervals of, say, twelve or fifteen feet. On the outside, a person could then cover the outer end with another shaft running down the wall for a distance. This would prevent the wind from blowing directly into the stable, and the fresh air would find its way up through the outer shaft and in through the opening at the top of the wall. Some ventilators devised by roofing companies work very well.

The dairy stable at the College is ventilated by means of the King system, or something very closely approaching it, and it is working very well, except that, possibly, rather more inlets should have been provided. The inlets should have some sort of shutter on the inside, so as to regulate the inflow of air in case the stable became too cold. A small door hinged on the lower side of the opening, would answer the purpose.

Would advise this inquirer to write the Director of the Agricultural Experiment Station, Madison, Wis., and ask for Bulletin No. 161, which deals with the King system of ventilation. It

Varieties of Crops and Methods of Cropping.

Farm practice changes with passing years; new varieties of crops come in and old ones are dropped, while invention steadily supplants methods hitherto in use with more economical and better ones. Comparison of experience is always stimulating and helpful. "The Farmer's Advocate" has been at pains to collect a symposium of correspondence from a select list of correspondents, representing a wide range of conditions, dealing with important features of seeding practice as applying to their own farms, and also more generally to the respective counties or vicinities in which they reside. Every subscriber should make it a special point to read their replies.

R. A. PENHALE, ELGIN CO., ONT.—The conditions in this section have gradually changed from raising barley, wheat, oats, hay (two or more cuttings), and pasture, with beef cattle and wheat occupying the most popular place in our farming operations. This system has largely given way to dairying and hog production, the milk representing the raw material for the butter and cheese factory, condensary, or being used to supply the wants of a near-by city. Corn is raised for the silo, using about a peck of seed to the acre on a well-manured clover sod (we have, after several years' experience, found that the Leaming, Early Mastodon, Mammoth and Cuban are very desirable varieties for this section), followed by oats, sowing from two and one-half to three bushels to the acre, depending somewhat upon the earliness or lateness of the time of seeding. The Banner oat was very popular here, but we are now growing the Twentieth Century, which is a good oat. With the sowing of oats we seed down, by sowing about twelve to fifteen pounds of grass and clover seed mixed, about eight pounds of red clover, two of alsike and five of timothy. A crop of hay is taken off, and, occasionally, a crop of clover seed. This is followed by a covering of manure in preparation for the corn crop to follow, which completes the circle of rotation. Roots are not very generally grown, on account of the great amount of labor required, but successful growers in this section sow about four pounds of seed to the acre, the Yellow Intermediate mangel being most popular. Grass and clover seeding in our own case embraces all of our grain crop, and of those who are adopting a longer rotation it would be safe to say that from a half to two-thirds of the grain crop is seeded, timothy seed, red clover and alsike being a very favorite mixture. Permanent pastures have not become very popular, save our native June grass pastures, of which, for various reasons, usually broken lands are not plowed up. Soiling crops are to a limited extent used, such as oats and peas, mixed, one bushel of peas to two of oats sown to the acre, at intervals of ten days or two weeks, to be followed later in the season by corn. But as the silo is with us now, we find that silage is a very good feed to supplement the shortage of pasture. Alfalfa seems to be meeting with a good deal of success. In our own case, after one year's experience, we are about to double our acreage. In our three-year rotation, which we have been following now for fifteen years, of corn, oats, hay, we have invariably manured for corn. Implements used are larger than formerly, it being quite a general thing to see three horses working a two-furrow plow, cultivator, disk harrow, etc. Four-horse teams are used occasionally, but as yet not generally.

R. C. McMILLAN, HEBRON, IND., U. S. A.—The crops grown in this part of Indiana, fifty miles south-east of Chicago, are King corn, oats, wheat, rye, timothy and clover. It is a great dairy country. The quantity of seeds sown to the acre are as follows: One bushel of good seed corn will plant from 7 to 10 acres; that is, hilled corn. Oats, 2 to 3 bushels. Oats the last three years have not done well. Land which a few years ago produced 50 to 70 bushels per acre now yields 20 to 35. Wheat, 1 to 1½ bushels; no spring wheat sown. Rye, 1 to 1½ bushels. Roots are not grown to any extent in this locality, but nearly every farm has a silo. Timothy and clover lead here for grasses. Of the former 8 to 10 quarts, and the latter 2 to 6 quarts to the acre, the nurse crops being chiefly wheat and rye, although since farmers have commenced drilling their oats they get good stands of grass by seeding with the oats. About one-third of the total grain crop is seeded annually. Soiling crops, alfalfa and permanent pastures, are very little sown, and with poor success. The prevailing practice as to rotation of crops, and which is most commonly used, is as follows: After breaking sod, corn is planted, corn again the following year, then oats, and sometimes seeded to grass with the oats; but generally wheat or rye follow the oats, then the land is seeded. Since manure spreaders are now found on all of the farms, the most of the manure is used in top-dressing the meadows. As to the kind and sizes of the implements used in seeding, cultivating and harvesting,

I will say that the most modern machinery is used. Eighteen to 24 ft. lever harrows; 12-ft. flexible rollers; gang plows, 12 and 14 in. (one might travel here all day and not see a walking plow); one- and two-row cultivators. There is nothing seen on farms here but three- and four-horse teams. All the machinery has a seat on for the poor hired man. I have been a reader of "The Farmer's Advocate," and along with the Breeders' Gazette, they are the best team in America. This farm could not get along very well without them.

W. E. M., COMPTON CO., P.Q.—To properly understand our methods one should know that a large part of the county has been opened up only during the last three or four decades, and the settlers are lumbermen as well as farmers. A considerable proportion, and in many cases the greater part, of their income is derived from lumbering. Grass is the chief crop, and comprises, perhaps, three-fourths of the cultivated land. Oats is about one-half of the grain crop. The other crops are barley, potatoes, roots, etc. Occasionally one sees a field of corn grown for silage. A great part of the land is clay loam, but there are also large districts of sandy land. Barley is preferred as a nurse crop, but oats and wheat are also used. About one-half of the total grain crop is seeded each year to common red and alsike clovers and timothy. The quantity of timothy in many cases is larger than that of clover, and in a few cases no clover at all is sown. Soiling crops and alfalfa are not grown to any appreciable extent. When land is turned to pasture it is generally sown to timothy, but in a few years the natural grasses find an opportunity to grow and greatly improve the value of the pasture. There is no regular rotation of crops, except in isolated cases. When land is seeded to grass it is allowed to grow as many crops as it will produce. When the annual hay crop becomes very light on a piece of land a coat of manure is spread on to stimulate further growth. It is not uncommon for land to grow eight or ten crops of hay in succession. The first crop grown when a piece of land is broken from grass is either oats, roots, potatoes or corn. The second year it is sown to oats, barley or wheat, and seeded to grass. The only cultivating implements in general use are plows and harrows. The harrows most generally used are either the disk or spring-tooth. These are adapted to either two or three horses. Farm help is very scarce. For the last four or five years good men expect \$30.00 per month for the summer season, and from \$45 to \$50 for the month of haying.

ROBT. NESS, CHATEAGUAY CO., P.Q.—We have entirely changed our system of cultivation, sowing less and putting it in better shape. The average farmer here, with, say, 150 or 200 acres, sows about 50 acres in all yearly. Most of them ship milk to the cities, and require lots of silage to keep up the winter supply. In that case they sow from 20 to 25 acres of corn, the balance in oats, and a few acres in potatoes, carrots and mangels. We here sow the Banner oat, which seems to do very well; about 2 bushels, of 40 lbs. per bushel, to the arpent, which is rather different from what prevails in Ontario. You have the English acre, and the small bushel of 34 lbs., and require more bushels. In preparing the land for corn we top-dress on the pasture, hauling the manure from the stables direct, and spreading early, before any vegetation takes place, then plowing in the fall; keeping it well drained. About May 20th we cultivate well with double disk harrows, making a fine seed-bed, and sow with the drill seeder three feet apart. As soon as the first weeds appear we begin to cultivate with double and single cultivators, and continue right on until the corn is too high to pass between the rows. The seed we use is the White Pearl, Red Cob and Leaming, mixed together, about one-half bushel per acre. In the fall we plow well, then sow oats and seed with 10 pounds timothy, 4 pounds late clover, 4 pounds early, and 3 pounds alsike per acre. We don't try alfalfa, or any permanent pastures, as they do not succeed here. The general system of rotation is about five years: Hay, two years; pasture, one, and top dress with barnyard manure; then corn; then oats, and sow out with grass seeds. In that way we can keep our land in good heart, and ready to respond to good treatment. As time is money, we want to do all possible in a given time. We use three horses in double disk harrow and drill and broadcast seeder; then with the double and single cultivator we get through quite a lot of work in a day. We do not use any four-horse teams around here, we think three can draw anything we use in the implement line.

W. E. M., COMPTON CO., P.Q.—This is a long time since we had a good crop of corn in this section, and it is very early frosts, therefore no corn is

mon grain crops are represented, while areas of varying sizes are devoted to roots. Following are the varieties and quantities sown for the common farm crops: Oats—Waverly, Storm King and Legion, sowing about 2 bush. 1 pk. per acre, on soil that has had about two crops taken off (one spring wheat and one barley) since manuring. Barley—Mandscheuri, sowing about 2 bushels per acre, on rich loamy ground, well worked. Spring Wheat—White Russian and Red Fife, sowing 1 bushel 2 pks. per acre, on rich soil well worked, Red Fife has not been a success. Peas—Mummy, sowing about 2 bushels per acre, on poorish ground, as peas help to build up the land. Very few peas sown in this locality, as the weevil has destroyed them of late years. Buckwheat—Silverhull, sowing about 3 pks. per acre, on dirty ground, as buckwheat smother the weeds. Rape—Dwarf Essex, sowing about 4 lbs. per acre on good ground, well summer-fallowed, till about July 12th. This crop, if put in in good shape, gives fine results; at least this has been our experience. Roots—Half-sugar Mangel, on account of their good-keeping qualities and being easily harvested; also prefer manuring in fall if possible. Turnips—The old Purple-top Swedes are about as good as any. Many kinds have been tried. Work the ground well, and do not sow until about June 21st. Potatoes—Elephant and Empire State for late crop, and Early Fortune for early. Both crops do well if properly cultivated and kept free from bugs. Corn—Not grown to any extent. No silos in this district, but I think they would be a good thing. In clovers and grasses we have Red, Mammoth and Alsike clover; sowing from 6 to 8 lbs. per acre of alsike and 10 to 12 of the others. Timothy sown half and half with red clover for hay, about 3 of timothy to 6 or 7 of clover. For nurse crops spring wheat and barley are used, spring wheat being preferred by many. Alfalfa is not grown in these parts. It seems to be hard to get a catch. Any permanent pasture land is rough ground or wet fields. In rotation, manure is put on for roots, having as much as possible done in the fall. The next year following the roots spring wheat is sown, seeding to clover and timothy. If no catch, then barley, seeding down again, and if no catch, then oats. Some people in this section sow barley after roots with good results, and then sow the same year in fall wheat, top-dressing again with manure if possible. The top-dressing is applied with spreader. Those purchasing new farm machinery are bringing in larger implements than were used a few years ago. However, the styles and sizes vary on the different farms. Most of the grain is drilled in. The sizes of the common implements are: 13-hoed seeders, 15-bull harrow, 7-foot-cut binder, 12-foot rake. Three-horse teams are used on nearly every farm. No four-horse teams are used yet, but I think it will not be long before some will adopt this means of keeping down labor expenses.

D. A. McNAUGHTON, WELLINGTON CO., ONT.—Oats, peas and barley, with a considerable showing of mixed grain, are the principal spring crops. In oats we have Sensation, Irish White, Lincoln, White Jewell and Bumper King, all doing well. We sow 2 bushels per acre. In barley, Mandscheuri, with 1½ bushels per acre, yields splendidly. Peas have been a partial failure on account of bugs and a green louse. Some say it is the Kansas green-bug. They will be sown considerably again this spring. In grass seed, we consider 4 or 5 lbs. of clover and 3 of timothy to give as good results as a heavier seeding. We sow on fall wheat, barley and oats, wheat and barley preferred, and seed 30 to 40 per cent. of crop. Alfalfa is growing in favor, and does well on our limestone soil. A four-year rotation is generally followed. In cultivating machinery we have spring-tooth cultivator and disk harrows. I prefer the shovel-point stiff-tooth cultivator. Three-horse plows have been tried and discarded on account of the stony condition of the soil and sidehills, but three-horse harrows and cultivating machinery are growing in favor. The disk drill, introduced last year in this vicinity, is doing good work, but is no saver of labor. This applies more particularly to the Township of Puslinch. In mixed grain, a bushel and a half of oats, with ½ a bushel of barley, with a few peas, is generally sown. My practice in spring seeding is to sow oats first, as soon as the ground gets dry enough to work, followed by barley and peas.

J. B. CUMBERLAND CO., N. S.—Probably hay is the most important crop grown in this part of the county. Only enough barley and oats are raised for home consumption. Of barley, we sow about two bushels to the acre; of oats, about three bushels. Not much wheat is grown, very few having enough to supply themselves with flour. In this part of the country it is rare to see a field of buckwheat. We are subject to very late and very early frosts, therefore no corn is

grown to speak of. Potatoes are largely grown, and are usually a good crop with us. Carmen No. 1, American Giant and Delaware are the kinds principally used. Turnips are grown to quite an extent. Quantities are used for feed for cattle. Beets, carrots and parsnips rank next, but are raised only to a small extent, as other things pay better. Our soil is generally a light sandy loam. Lands along the river are self-sustaining. Marsh mud used to be much used as fertilizer. It has now mostly given way to commercial fertilizers. Timothy is the prevailing grass. We usually sow about fifteen pounds of timothy, mixed with five pounds of clover to the acre. The kinds of clover are Late Red and Alsike. For feed we like a mixture of equal parts of wheat, barley and oats. About eighty per cent. of the total grain crop is seeded annually. Soiling crops are not sown to any extent; neither are permanent pastures. I tried alfalfa for the first last year, and will report later as to its success. Rotation of crops: Roots, grain and hay. Grain and root crops are manured, except on alluvial and marsh lands, which do not need it. Two-horse plows, harrows and seed drills are used. Even on the potato-digger but two horses are generally employed. Three- and four-horse teams are not seen very much.

DAVID PETHERAM, NORFOLK CO., ONT.—Our crops with quantities sown are: Wheat, Dawson's Golden Chaff, 2 bushels per acre; barley, Mandcheuri, 1½ to 2 bushels per acre; oats, Banner, 2 bushels per acre; corn, Early Learning for silage, 1½ pecks per acre; mangels, Long Red, 5 lbs. to the acre. There are large areas of mixed grains grown here. Barley, oats and a few early peas mixed together gives a good mixture for feeding purposes. Red clover is sown about ten pounds to the acre, and about five or six pounds of timothy mixed with it gives good results. Barley, oats and fall wheat are generally seeded. Alfalfa is most generally sown with barley. Twenty pounds alfalfa and one bushel of barley to the acre I find to give the best results. I think there would be about 75 per cent. of the crop seeded annually in this section. There is quite a lot of alfalfa grown here, and a great deal more going to be sown this spring. It seems to do very well. The soil is clay loam. Some have had poor luck getting it through the first winter, but once you get a good stand you have something that will give an abundance of good green feed, or pasture, if it should be a dry summer. There are no permanent pastures sown. As a rule, clover sod is plowed down for wheat or barley. If for wheat, a light top dressing of manure is given; if sown to barley, the stubble is most generally put in with wheat next, with a good coat of manure. A great deal of the wheat and oat stubble is plowed in the fall for corn, with a heavy coat of manure, disked into the soil the following spring. Many of the farmers around here use the lance-tooth harrow, three and four sections, for three horses; and a great number use the spring-tooth cultivator, the largest size for three horses, and they do splendid work in tough land. We also have the disk harrow, which is a splendid implement for cutting up sod of long standing. Those who are buying implements are getting the larger sizes, and it makes a great saving of time. The seeding machinery is all built on a larger scale; a great many of the disk drills are coming into use, and I think they are a great improvement over the hoe drill.

J. D. HAIGHT, PRINCE EDWARD CO., ONT.—The crops most commonly grown here are peas and other canning products. Very little land is given to grass, and not very much to soiling crops or roots. Some grow Indian corn, and others corn for silage. In many sections farming is not done according to system. Mostly two-horse seed drills, cultivators, gang and sulky plows are used. There is a wide variation in quantities sown per acre. Peas run 1½ to 3 bushels per acre; oats, 2 bushels; barley, 1½ to 2 bushels; fall wheat, 1½ bushels. Grass and clover seeds are sown with all kinds of grain, except buckwheat. The mixture of red clover and timothy ranges from 8 to 15 pounds per acre. Alsike is sown 8 to 10 pounds per acre.

JAS. STAVERT, PRINCE CO., P. E. I.—By far the most important and valuable crop grown in my district is oats, the varieties generally sown being Banner, Improved Ligowo, Siberian and Abundance. Generally speaking, about 2½ to 3 bushels per acre are sown by drill, and 3 to 3½ bushels broadcast. The spring wheats most to be recommended are: Campbell's White Chaff, White Russian, Colorado Bearded and Preston. The best returns are obtained by sowing 2½ and 3 bushels per acre by drill and broadcast, respectively. Barley is not extensively grown. McKhill, Odessa and Mandcheuri are the best varieties, and are sown at 2 to 2½ bushels per acre. Peas are never sown alone, but mixed with wheat at the rate of 2 bushels oats to 1 of peas by soiling, or 1½ bushels oats, ½ bushel barley and ½ bushel peas for ripening give good returns.

Golden Vine and Crown are prominent varieties of peas. A very small acreage is given to buckwheat, but it makes good hen feed, and is sown at about ½ bushel per acre. Mixtures of oats and barley, also oats, barley and peas, are gaining in popularity on account of greater returns to the acre. A good proportion for the former is 2½ bushels oats and 1½ bushels barley, and for the latter 1½ bushels oats, ½ barley and ½ peas. Turnips and potatoes, with few mangels and carrots, are cultivated in these parts. Of turnips, Hazard's Improved is perhaps the best. McIntyre is the most reliable potato. Green Mountain, Late and Early Hebron, Early Rose and Burpee's are also grown. Large quantities of potatoes and turnips are grown on Prince Edward Island. Corn is a partial failure here, on account of climatic conditions; however, a little is planted by most farmers for fall feeding. Longfellow is the kind mostly used. Red clover, alsike and timothy are sown for hay and pasture in this region. Five pounds Mammoth Red, one or two of alsike, and about ten of timothy is sown on manured stubble or root land, with a light seeding of oats or wheat for nurse crop. Some good farmers sow only two or three pounds of clover to the acre, and say if it lives it will grow thick enough, and if it dies so much is saved. About 50% of our grain crop is seeded down. Alfalfa is not sown at all in this locality. It has been tried on the Island, but with poor success. Perhaps our winters are too severe. Permanent pastures are not used at all. Our land is all successfully rotated by crops. There are two rotations generally followed: (1) 1st year, roots, land manured; 2nd year, grain, land seeded; 3rd year, hay; 4th year, hay; 5th year, pasture; 6th year, pasture. (2) 1st year, grain; 2nd year, roots, land manured; 3rd year, grain, land seeded; 4th year, hay; 5th and 6th year, pasture. Of cultivating and seeding implements, first and most important is the spring-tooth harrow, usually drawn by three horses; occasionally one sees four horses hitched. Next comes the disk harrow, with two horses; then the iron or spring-tooth cultivator, used for working out couch grass. The roller is being more used now for making a good solid seed-bed, but a field should be gone over by a light harrow after being rolled, in order to stand the wind and dry weather. Broadcast seeders are generally used, but disk drills are being introduced, and where used give good satisfaction, especially during dry summers.

Permanent Pasture Mixtures.

United States Secretary of Agriculture, James Wilson, has remarked that one of the great shortcomings of American agriculture is the lack of good pastures, the rich, thick, velvety grazing meadows of the Old Country being practically unknown in the United States and Canada. The two kinds of seed commonly used in America are red clover and timothy, neither of which is adapted as a permanent pasture mixture, the clover being of short duration, and the timothy, though a good hay grass, being ill adapted to stand grazing and produce a satisfactory summer growth. The Old Country pastures are laid down with a great variety of grasses and clovers especially suited for grazing, and with such treatment as they receive will produce luxuriantly for centuries, actually seeming to improve with years.

Climate may have something to do with their success, but there is no doubt that by sowing a sufficient variety of suitable pasture grasses and clovers, good pastures could be produced and maintained under Canadian conditions, especially with the aid of an occasional dressing of manure applied with a spreader.

We would not be understood as favoring the retention of arable land in permanent pasture under all conditions, and the working of the rest in rotation without ever pasturing at all. For the most part, we believe, it is well to have substantially all the tillable land worked under a system of short rotation, producing its quota of pasture in turn. But there is a great deal of rough land in some localities, which should not be plowed more than once or twice in a lifetime. The less rough portions of such fields may, with great advantage, be seeded to alfalfa, while the worst areas, particularly if watered, should be laid down in permanent pasture. Again, on some level farms there is one field near the buildings, with a stream running through it, that would make a most convenient field for turning milking cows in over night; or perhaps there is a field at the rear end of the farm, so far distant as to entail unprofitable loss of time in hauling manure and crops to and fro. Such a field, if one has steers or other suitable stock to graze it, may, with much advantage, be seeded down permanently. Even if one has no stock except cows it may still be advantageous to convert such a field to grazing purposes if one has a lane through which the cows may come home of their own accord, or children for whom a trip back to the pasture will be good exercise. There is often great economy in letting stock harvest and manure the crops in broken or distant fields.

What to sow to produce a permanent pasture

is a moot question that arises. Obviously in seeding down a field expected to remain long in meadow it is unwise to be parsimonious with seed. In England mixtures are sown comprising a wide variety of seeds, as high as thirty-five or forty pounds to the acre being used. For Canadian conditions probably the best mixture that we can recommend in our present state of knowledge is that grown by Prof. C. A. Zavitz on the experimental plots at Guelph. It consists of orchard grass, 4 lbs.; meadow fescue, 4 lbs.; tall oat grass, 3 lbs.; timothy, 2 lbs.; meadow foxtail, 2 lbs.; alfalfa, 5 lbs.; alsike clover, 2 lbs.; white or Dutch clover, 2 lbs. This mixture at Guelph has produced in 10 years at the rate of an average of 5.09 tons of cured hay per acre. For well-drained soil, and particularly hillsides, this mixture might be improved by reducing the amount of grass seed two or three pounds and substituting that much additional alfalfa. Of course, local conditions may require modification of this mixture, and for low lands, especially, one containing a good deal of red-top and Kentucky blue grass, would probably be advisable, such as 8 lbs. red-top, 3 lbs. timothy, 3 lbs. Kentucky blue grass, and 3 lbs. alsike per acre, supplemented, perhaps, by small quantities of the other varieties named above. Do not buy the seeds ready mixed. Purchase them separately, and do your own mixing. Sow on rich, clean, well-drained land, either alone or with a very light nurse crop of spring wheat or barley. Do not pasture the first season.

Grass and Clover Seeding.

In the system of mixed husbandry practiced in Eastern Canada, substantially all the cereal acreage ought to be seeded down. Even if it were only to be plowed up, without taking off a crop of hay, the saving in fertility and increase of nitrogen would usually pay for the cost of seeding. In the majority of cases, however, particularly in the corn sections, matters could be so arranged as to permit of leaving the seeding for one or two crops of hay, then breaking for corn, roots, potatoes or peas, to be followed by grain seeded down. This system will enrich a farm amazingly in ten years, providing stock is kept, and the manure carefully saved and applied. We have seen it tried, with surprising results, on many farms in at least three Provinces.

Under such a system, clovers should constitute the major proportion of the seeding mixture, timothy being added chiefly as a precaution, so that, in case the clover should fail, there will be a growth of grass, and the rotation thus not interrupted. Clover adds nitrogen to the farm, particularly when the hay is fed at home; its roots are first-class subsoilers; its growth and decomposition enrich and mellow the soil, and well-cured clover hay is the best kind of fodder we have, next to alfalfa. A clover sod is easily put into first-class condition for corn, potatoes, or even turnips, whereas a tough grass sod is not easily prepared for roots, nor is it nearly equal to clover sod for the other crops mentioned. Of course, farm practice varies in different localities, and one must not expect to revolutionize Canadian agriculture in a day. Neighborhoods cling tenaciously to their old methods. Nevertheless, we are convinced that, for almost any progressive farmer, from Ontario to Nova Scotia, who is willing to adopt a modern short rotation, the best plan is to sow much clover and little timothy.

It is unwise to be sparing with clover seed. No doubt, if good seed could be evenly distributed, and all of it would grow, three or four pounds of clover seed to the acre would make a good seeding. But experience proves it does not all grow. Much falls on dry, hard ground. Some never germinates; other seeds sprout and die. Hence, we must sow ample quantities to make allowance. On the hard, dry spots, it is well to scatter extra seed. Many a field has been plowed up because the straggling plants were considered not worth leaving, whereas, had double the quantity of seed been sown, enough plants would have become established to make a fair sward. Bare spots in the seeding not only waste ground, but afford a splendid chance for weed seeds to obtain a foothold. Economy of clover seed consists in seeding liberally with good seed, sown under the best conditions possible.

A widely-favored mixture is 6 to 8 pounds red clover, 1½ to 2 pounds alsike, and 4 pounds timothy, per acre. If the clover "catches" reasonably well, the first year's cutting will be nearly all clover; otherwise, more timothy will be in evidence. The second year's crop will generally contain more timothy than clover. The alsike thickens the stand, adds variety to the hay, and insures a catch on some spots where the red clover may fail or die out. On level-clay or not-too-well-drained lands, alsike is particularly valuable. Where pasture is wanted in the second year, it is well to add four or five pounds of orchard grass or meadow fescue, or a little of each.

With spring grain, the clover and timothy should be sown with a grass-seeder attachment to the grain drill, so arranged as to drop the seeds

in front of the grain hoes, shoes or disks, as the case may be. On fall wheat or rye, the timothy will usually have been sown in the fall, and the clover may be sown by hand on a still morning, or with one of the patent clover seeders on the market. Opinion differs as to when is the best time to sow clover on fall wheat. The common practice is to sow it in late March or early April, on some wind-still morning, when the ground is covered with a light snow or honeycombed with frost, thus affording crevices into which the seeds drop, and become subsequently covered. Others contend—and in 1906 a number of them reported very favorable experience, extending over fifteen years or so—that it is best to wait until late April or early May, when growth is starting, and then sow the seed and harrow it in, in some cases following with the roller. This, although it seems like destroying the wheat, really appears to benefit that crop, and the effect on the clover seeding is declared to be altogether favorable. What effect it might have on timothy seeded the previous fall, is an unsettled question. Probably, where this system of clover seeding is adopted, it might be better to defer the timothy seeding until spring, also.

Dates and Order of Sowing Grains.

Probably ninety-nine farmers out of a hundred, if asked the best order of seeding for spring grain, would say, spring wheat, oats, barley, peas. "The Farmer's Advocate" would not undertake to pronounce this order wrong. It is the sequence the editors have observed in their own practice. It is noteworthy, however, that experiments conducted at the Ontario Agricultural College, Guelph, point to a slightly different order, viz., spring wheat, barley, oats and peas, the difference consisting in that the barley precedes the oats. An experiment was conducted in duplicate in each of five years, by sowing spring wheat, barley, oats and peas, on each of six different dates in the spring. The first seeding took place when the land was warm enough and dry enough to work to good advantage. One week was allowed between each two seedings, so far as weather permitted. The average date of the first seeding was April 18th, and of the last seeding May 23rd. The average results for the five years, in per cent. of rust, weight per measured bushel, and in yields of straw and grain per acre, for each of the four classes of grain, and for each of the six different dates of seeding of each kind of grain, will be found in the table here given.

Class of crop.	Seeding.	Average results for five years.			
		Per cent. of rust average 4 years.	Weight per meas'd bushel.	Tons of straw per acre.	Bush. of grain per acre.
Spring wheat	1st seeding	4.5	60.1	1.22	21.9
	2nd "	5.5	59.6	1.13	19.2
	3rd "	5.3	59.0	.97	15.4
	4th "	7.8	58.9	.87	13.0
	5th "	8.5	56.5	.63	8.4
	6th "	11.3	54.0	.77	6.7
Barley	1st "	4.0	52.3	1.20	46.2
	2nd "	4.3	52.6	1.19	45.9
	3rd "	5.5	51.8	1.05	39.8
	4th "	6.3	50.3	1.01	37.1
	5th "	11.8	48.2	.94	27.6
	6th "	14.0	45.1	.85	18.4
Oats	1st "	10.8	33.9	2.00	75.2
	2nd "	15.8	34.5	2.10	76.0
	3rd "	19.3	32.1	1.83	64.2
	4th "	25.0	29.9	1.72	55.8
	5th "	25.3	27.3	1.56	45.2
	6th "	23.8	24.2	1.72	37.0
Peas	1st "	13.5	56.6	.92	25.4
	2nd "	56.0	56.6	1.07	28.8
	3rd "	49.0	57.6	1.10	28.5
	4th "	51.5	57.4	1.02	25.5
	5th "	59.5	57.0	.87	21.5
	6th "	57.0	57.0	.95	19.5

* * Per cent. of weevily peas, average 2 years.

The results show that the greatest average yield of grain per acre was produced by the spring wheat and barley from the first, and by the oats and peas from the second date of seeding. This holds good for the most part in the case of the straw. As the date of seeding was delayed, the percentage of rust in the resulting crop was gradually increased, with only one slight exception. From this, Prof. Zavitz deduces that the most advantageous order of seeding was wheat, barley, oats and peas.

Whether or not the same order of seeding might prove best on other than the rich, rolling, well-drained loam of the O. A. C. experimental plots, an important lesson may be learned from the results of this experiment, which show that

for every day's delay in the seeding, after the first week was passed in which the seeding took place, there was an average decrease of 56 pounds oats, 53 pounds barley, 29 pounds of spring wheat, and 23 pounds of peas, per acre.

Treatment for Grain Smuts.

From smutty seed a smutty crop results—unless the seed is treated before sowing with a fungicide that will destroy the spores. As much of our seed oats and wheat is to a greater or less extent infected, treatment is called for in a great many cases. Three different lines of treatment have been advocated in turn, to wit: Hot water, bluestone and formalin. The last is the best; and, of the two ways of applying, viz., sprinkling and immersion, the former is usually preferred. Spread the seed grain out on the barn floor and sprinkle until quite moist, with a solution of a pound of formalin (a pound is not quite as much as a pint) in thirty-two to thirty-five gallons of water, using the stronger solution if the grain is badly infected. Shovel over a few times, applying the solution as the turning proceeds. When all is well dampened, shovel the grain into a conical heap and cover with old blankets for two or three hours; then remove the blankets and spread the grain out to dry, stirring occasionally. It is better to mix each time just enough to treat the grain that can be sown within three days. After treatment, keep the seed free from infection by contact with bins or sacks in which smutty seed has been contained.

A pound of formalin (which is simply a 40-per cent. liquid solution of the gas formaldehyde) costs about 75 cents, and may be had at any drug store. This quantity will suffice for 27 bushels of seed oats, or 32 of wheat.

Be careful not to use the solution stronger than advised, or the vitality of the germ may be injuriously affected.

Alfalfa Seeding.

Various methods may be adopted for seeding to alfalfa. It may be sown either alone or with a nurse crop; in spring or in midsummer. All things considered, a light nurse crop of a bushel of barley per acre is, perhaps, to be advised, seeing that it will not seriously interfere with the growth of the alfalfa, while it is of some little service in keeping down weeds, and will yield a fair return in grain; whereas, otherwise, one would usually realize no harvest from the field

seeds. The manure should have been applied to the preceding crop. A good many advocate loam soil as the best for alfalfa. This is a mistake. While almost any well-drained field will serve, the best land for alfalfa is a hard, clay hillside, so long as it is not springy. Alfalfa demands free surface as well as subsoil drainage. Water or ice about the crown is fatal to it. Hill-sides are usually well drained. Other reasons why such soil is best are that clay land contains abundance of the mineral elements of fertility which the alfalfa craves; nitrogen it can draw from the atmosphere, by means of the bacteria in the nodules on its roots. Finally, on hard, clay hill-sides, it stands the winter best, and is less likely to be crowded out by blue grass. In some cases alfalfa will retain a good foothold on clay hill-sides for twenty years or more. Many a time we have seen it sown on rolling land, and a good catch obtained, the growth being especially luxuriant the first season on the loamy knoll tops, but in a few years' time there would be little but grass on the knolls, whilst on the clay slopes the alfalfa held the ground, improving with years. It is usually more difficult to get a catch on hard clay, but, once established, it generally remains.

Before seeding with alfalfa, make sure that the land is sweet. Procure at the drug store a piece of blue litmus paper, then insert it in the moist soil and press the earth about it. In a few hours examine, and if the paper has acquired a reddish tinge, that soil shows what the chemists call an acid reaction, and needs lime. Lime corrects acidity. One can make no mistake, in any case, in liming land for alfalfa. Alfalfa revels in lime, and demands a sweet or alkaline soil, as the bacteria which work on its roots will not thrive in an acid soil. Even soils overlying a limestone rock often need liming for this crop. It is wise, therefore, to sow early in spring two tons of air-slaked lime, or six or eight tons of fine ground limestone per acre. To this, add 30 bushels of unleached wood ashes, if available. Work in well, and prepare a fine seed-bed. If alfalfa has not previously grown on the land, scatter over it, say, half a load per acre of surface loam from an old alfalfa field or a sweet-clover patch (soil from a red-clover or alsike field is of no benefit). If such soil cannot be had, send to the Agricultural College, at Guelph, Ont., or Truro, N. S., for a bottle of nitro-culture for alfalfa, with which to inoculate the seed. Sow in late April or early May, at the rate of 20 pounds of alfalfa seed per acre, along with a bushel of barley, sown with a grain drill. Sow the alfalfa seed in front of the drills, then roll and harrow the field.

With clean, well-drained hill-sides, in fine tilth, limed, and enriched with manure and ashes, with twenty pounds of good alfalfa seed sown with a light nurse crop (or none at all), with the seed well covered, compressed, and kept moist until germination by a loose earth mulch, and with either soil or seed inoculated, as advised, there is little chance of failure, and, if successful, one will have a permanent stand of the most profitable field crop grown on Canadian farms. Of all the conditions specified, we would especially emphasize drainage and lime.

\$15 a Year for Carbide.

Editor "The Farmer's Advocate":

I have noticed a couple of letters in "The Farmer's Advocate," recently, in regard to acetylene lighting. One writer claims it cost him \$15 per year for carbide, and "Farmer's Wife," writing in your paper of March 4th, says that the cost per year is \$40. Now, it does not matter how many gas jets there are in the house, it is the number we use, and the length of time we use them, that counts. We use a generator that drops the carbide into the water and generates gas as it is used, and the cost per year for carbide is \$18, and I think we use as much light as nearly any farm house. There must be some waste of gas or something wrong with a generator that would cost \$40 a year, and not have the gas used in the bedrooms. We very seldom have a lamplight in our house. I think "Farmer's Wife" would be better to change the generator, or use coal oil all the time. J. H. R. Peel Co., Ont.

Prices of British Grain, 1908.

The average prices per Imperial bushel of British grain, computed from the weekly averages of the returns of quantities sold at selected markets, and made under statutory authority (the Corn Returns Act, 1882), were, for the year 1908: Wheat, 97.33 cents; barley, 78.57 cents; and oats, 51.21c. These prices for wheat and barley are the highest since 1898, when they were, respectively, 81.03c and 82.63c. The quantities sold, upon which these prices are calculated, amounted to 26,348,918 bushels of wheat, 26,351,328 bushels of barley, and 19,433,784 bushels of oats (exchange, \$1.36 2/3 to the £1 sterling).

Likes Carbide-feed Machine.

Editor "The Farmer's Advocate":
I am afraid that "Farmer's Wife" pays a very high price for illumination, if she can only average two lights on \$10 worth of carbide. We have seventeen lights in the house, and average about four an evening, unless something special is doing. The gas is also used in the bedrooms, and, in the winter time, the bathroom and kitchen have to be lighted in the morning, as well. No coal oil is used at all, except in the stable lantern and incubator. Two large stores in the town, one a hardware, and the other dry-goods, use the same make of generator that I have, and their light costs them from \$40 to \$45 a year, and they average from twelve to sixteen lights. The electric-light bill that both these stores paid formerly was over \$80 each. My machine is a carbide-feed, using the grade known as pea size, which retails here at \$3.50 per 100 pounds. All the water-feed machines that I have examined have been extremely wasteful of carbide, and some very dangerous in construction. If "Farmer's Wife" were to change her machine for a more up-to-date generator, in two years' time she would save the price of it, and also get twice as much value for her money as she is now getting. J. B. T.
Huron Co., Ont.

Dragging in the Mud.

Have a split-log drag ready to go on the roads whenever the frost comes out and mud appears. Do not wait till the roads dry. More can be accomplished in shaping the crown when the mud is still quite soft. Dragging in the sloppy mud will help to restore the crown, smooth the road, hasten drying, and, if not cut up immediately after, will tend to produce a hard, oval crown. A day with the drag in early spring will often do more than a day with the grader in May or June, and at but a fraction of the cost. There are on most soils three stages of mud. The first is when the roads are sloppy-wet. At this stage the drag does its best work, providing the surface has a few hours to dry before being cut up again by traffic. The second is when the mud reaches a waxy, sticky condition, in which it is impracticable to work the drag. The third is when the road is becoming a little mellow, and when the drag will again pass over it smoothly, leaving a nice, even surface. For general work, most draggers prefer this stage, but for early spring use, it is well to snatch opportunity by the forelock and drag as much of the road as practicable in the "lob-lolly" state. This helps the road to dry much faster than if the water were left to evaporate from ruts, pitch-holes and footprints, and when a rain comes the water is shed quickly to the ditch.

240 Gallons Syrup from 400 Trees.

Editor "The Farmer's Advocate":
You have asked me for some information in regard to sugar-making. I will describe as nearly as possible our proceedings of last year. In the fall of 1907 we put in an evaporator, with capacity supposed to be large enough to boil the sap from 500 trees. Over the evaporator we erected a shanty, 18 x 20 ft., with a lean-to, under which we placed the storage tank, which held about 20 barrels. Our bush lies on the side of a hill, which is quite an advantage in building an evaporator, as it saves the trouble of building up a driveway, since the storage tank must be placed high enough so that the bottom is a few inches higher than top of evaporator. A driveway is necessary to get the gathering tank up high enough to run from the bottom, by way of gas pipe into storage tank. The picture of the building will explain itself pretty much. We used boards off an old board fence. On the top we made a ventilator 10 x 4 x 4 ft., with doors at either side for the steam to escape through. Last spring we started to tap on March 12th. At that time the snow was quite deep in the bush. The sap ran well for two days, and then we did not have any more for about a week, when sugar making commenced in earnest, with sunny days and frosty nights—the kind of weather that is hard on the fall wheat. By this time we had about 400 trees tapped. Our bush lies on the west and east side of the Avon River, near St. Mary's, South Perth, so that the part lying to the east gets the morning sun, and the part lying to the west gets the evening sun; therefore, the sap runs early and late in the day. We keep covers on all the pails to keep out rain and leaves. In the busy part of the season, we try to gather sap twice a day. The sap is strained three times—first when it is put in gathering tank, next when it is put into storage tank, and then when it empties into evaporator. We boiled on an average of 12 gallons a day for the twenty days we boiled. Of course, some days we did not boil that much; one day we boiled fifteen gallons. We like to take off about one gallon an hour; the sooner it is boiled from sap into syrup, the better the quality of the syrup.

The storage tank we placed outside of main building, in part by itself, so as to keep sap cool and sweet, and is carried to evaporator by way of pipe, which is regulated by float in evaporator; and the more quickly the sap boils away, the faster it runs in; the sap in pans is supposed to be about half an inch deep. To do good work, a man must be constantly with it, and have good dry wood or soft coal. We used mostly old rails. To carry on a syrup-making business with 400 trees, it requires the help of two men, and sometimes three, in the busy part of the season. We have gathered as high as sixteen barrels of sap in one day. The syrup was sold for \$1.40 per gallon. Of course, some people got more, but that was our price.
Perth Co., Ont. A. MOUNTAIN.

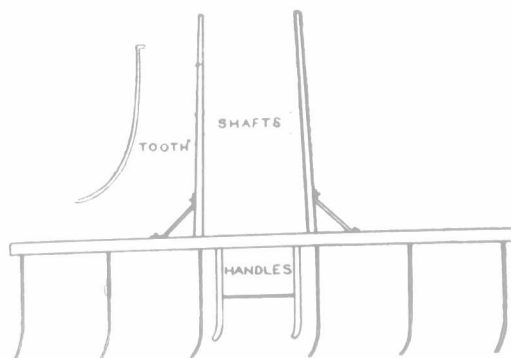


Modern Sugar-making Outfit.

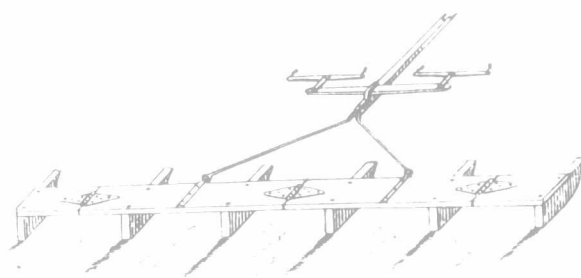
Belonging to A. Mountain, Perth County, Ontario.

Markers for Corn Planting.

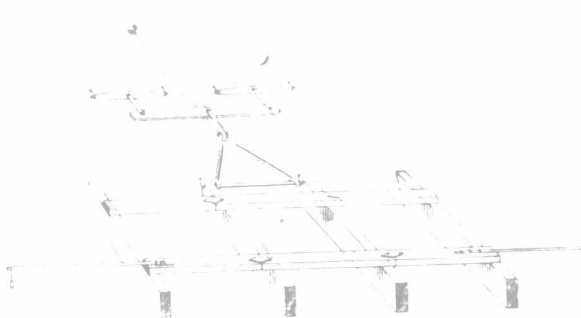
A correspondent recently asked for suggestions on making a handy marker for use in planting corn. From time to time, descriptions and illustrations of different styles of homemade markers have appeared in "The Farmer's Advocate." The important requirements are speed and exactness. Three illustrations are given. In each case the markers can be made the desired distances apart. No. 1 is light, but not so true and steady-running as the sled style. No. 2



No. 1.—Handy One-horse Marker.



No. 2.—Folding Two-horse Marker.



No. 3.—Two-horse Marker, with side trailers for guides.

can be folded when not in use. In either of these only five rows will be marked, although there are six markers. One will follow the outside mark already made. The outer runners can be folded up when turning. No. 3, while having only four runners, marks four rows each time, because of the addition of tracers extending on the

sides to serve as guides. This, too, may be folded in turning. Perhaps some of our readers have something better to offer.

Re Acetylene Lighting.

Editor "The Farmer's Advocate":
Have used acetylene gas light in our house for fifteen months, and in that time have used 450 lbs. carbide, at 3½ cents per pound=\$15.75, which is a large amount, as the first 100 lbs. went very quickly, owing to inexperience. Have a 25-light machine, with 18 lights in house. Have not an oil lamp in house. The light is unexcelled, and is out of reach of children. Am well satisfied with it. The generator is one with the carbide dropping in the water. P. C.
Essex Co., Ont.

THE DAIRY.

P. E. I. Dairymen's Annual Meeting.

The annual meeting of the Prince Edward Island Dairymen's Association was held in the Agricultural Room of the Prince of Wales College, commencing Wednesday, the 25th of February. There was a fair attendance of dairymen present. Harvey Mitchell, of the Dominion Dairy Branch, was also present, and added to the interest of the meeting by his lucid discussions of the different problems that confront our dairy interests.

The financial statement of the Secretary showed a very small balance on hand, and also noted the inability of the association to carry on any educative work in dairying for want of funds.

The Secretary's report on the output of the dairy stations for the year was encouraging, and, in comparison with last year, showed an increase, notwithstanding that three cheese factories remained closed during last season. The following figures will show our gain for the year:

	Lbs.
Milk supplied for cheese, 1907.....	24,423,349
Milk supplied for cheese, 1908.....	26,292,535
Increase	1,869,186
Milk supplied for butter, 1907.....	8,217,134
Milk supplied for butter, 1908.....	9,367,522
Increase	1,150,388

Which shows an increase of milk supplied to the dairy stations for cheese and butter in 1908 of 3,019,574 lbs. The gross value of the output of the cheese factories for the past season was.....\$301,212.24
An increase of 24,372.59

Of butter for past season.....	102,335.17
An increase over 1907 of	14,459.74

The net average return to the factory patron for 1907 was	\$ 74.14
And for 1908	89.61
An increase of	\$ 15.47

The average of milk supplied per patron in 1907	8,518 lbs.
The average of milk supplied per patron in 1908	10,139 lbs.
An increase for 1908 of	1,621 lbs.

It will be seen from these figures that though patrons of factories have decreased to the number of 315, the average per patron has shown a fair increase.

Dairying is steadily gaining in Prince Edward Island the last few years, and though some factories have closed for want of support, others that are well located are increasing their business, and the outlook at present is hopeful.

Mr. Mitchell, in the course of an address, said that the great want of it was more milk. We had splendid factories, up-to-date plants, and could double our output without any more expense if we had only enough of the raw material.

A very interesting discussion took place on the testing of milk, and the variations of the test at different times and under different conditions was explained.

A very animated discussion took place on the "Hand Separator," which is being sold here now to considerable extent, some dairymen contending that it will hurt the dairy business, and others that it will be a help, especially in our winter buttermaking. But the separator men are going right along, and the best thing for dairymen to do is to adjust their business to the change which is fast coming on them, and make an effort to educate milk producers in caring for cream properly, and to observe cleanliness in the use of the separator.

J. A. Dewar, of New Perth, read a very instructive paper on "Dairying a Specialty for P.

E. Island," in which he strongly advocated the feeding of our raw products to dairy cattle, and getting better returns for our oats and potatoes than we could by shipping them in a raw state at great expense for freight. Mr. Dewar emphasized the fact that where farmers had free access to shipping ports and sold off most all of their raw material, the farms were producing less and less each year, while in dairying the land was becoming more productive.

At the evening meeting of the association, Premier Haszard and many members of the Legislature were present, and took part in the discussion.

On the second day of the meeting, Mr. Mitchell held a cheese and butter makers' class, when many of the makers present took part in the discussion of the art of cheese and butter making.

Dairymen on the Island complain of the excessive railroad rates on cheese and butter from the factories to the shipping points. They complain that in comparison with other products, especially fish, that the rates are not proportionate. This is not as it ought to be. Dairying needs all the encouragement it can get, and it does not seem just right that fishermen are paid bounties every year in their business while the dairy companies have to tax themselves pretty highly in order to have inspection and to build up a somewhat new industry that is of paramount importance to the future of our agriculture.

F. T. Morrow, who is inspector and instructor for the whole Island, gave an exhaustive report of his work for the year. He found little to be desired in the quality of the output, and reported makers to be doing their work in a careful manner; and also reported that all factories were well kept, and cleanliness the rule rather than the exception. Dairymen have had good prices of recent years for their products, and they seem now to be paying particular attention to the cow and her feed, with a view to increasing the amount of milk produced without increasing the herd. This is the lesson P. E. Island dairymen must learn if dairying here is to become a principal and permanent business. W. S.

Whey Pasteurization Gaining Favor.

Pasteurization of whey, tried in 56 factories in Western Ontario last year, is rapidly gaining favor among patrons and makers, there being a large number of additional factories adopting it in 1909, the patrons in not a few cases initiating the movement themselves, and in other cases cheerfully increasing the allowance to the makers for doing the work and supplying the steam. Only in a very few instances where it was tried in 1908 has it been voted down at the annual factory meetings, and these have been at factories where the pasteurization was not properly done in 1908, owing either to lack of adequate facilities or lack of necessary zeal and effort on the part of the maker. Generally speaking, the idea is making marked progress. The increased feeding value of the whey, due to retention of the fat and delivery of the whey in sweet, wholesome condition, appeals strongly to the intelligent patrons, also the saving in tinware, the greater ease in washing the cans, while the advantage from a manufacturing standpoint in the making of prime goods, and overcoming bitter, yeasty or goosy flavors, appeals especially to the makers. Generally speaking, pasteurization of whey appeals to patrons as a better proposition for them than the manufacture of whey butter.

Churning Difficulty Overcome.

Editor "The Farmer's Advocate":
To-day, on page 354 of "The Farmer's Advocate," I read an article on trouble in buttermaking. Several years ago I had the same trouble. My son was at the O. A. C. at the time. He came home for a few days, and I told him my trouble. He advised me to keep my cream in a moderately-warm place, cool my cream before adding or putting in the crock, stirring a few minutes every time I added the fresh cream; twenty-four hours before I was ready to churn, he said, set the cream nearer the stove, add two quarts buttermilk, or the same quantity of separator milk previously soured until it was thick (the sour milk is to ripen the cream), stirring it well, often, and then churn at the temperature marked for churning on the dairy thermometer—64 degrees in winter. My butter came all right, and was as good as could be made. R. J. L.

According to the Census and Statistics Monthly, J. A. Ruddick, Dominion Dairy and Cold-storage Commissioner, Ottawa, estimates the increase in the value of the home consumption of butter, cheese and milk for 1907 over 1900 at \$10,000,000, and points out that if this amount were added to the value of the exports for 1907 the total would be largely in excess of any previous record.

During the year 1908, 59,202 cheese were shipped from Montreal to Manchester, as compared with 45,370 in the preceding season.

Improved Transportation for Cheese.

Editor "The Farmer's Advocate":

During the past few months the usual educational campaign has been waged in the interests of the cheese industry, and a great deal of valuable information and sound advice has been presented to the cheesemakers and patrons through the medium of factory and Institute meetings, conventions, and the public press. The producing side of the business having thus been well threshed out, it should now be in order to hear from those engaged in distributing Canadian cheese in the various markets in Great Britain, so that we may learn their views and profit by their criticism, in so far as it appears disinterested and well founded. I would like, therefore, to quote a few of many letters recently received from the leading firms in the cheese and butter import trade in London, Liverpool, Bristol and Glasgow, which were written in response to an inquiry from the cargo inspectors employed, under the direction of the Dairy and Cold-storage Commissioner's Branch, at these ports, who asked for information touching the condition in which our cheese was landed during the past season, with particular reference to heated cheese. It is noteworthy that, almost without exception, these firms say that they received no heated cheese last season, or else such a small quantity as to be practically unnoticeable, this, despite the hot summer we had and the abnormal conditions which prevailed in September and October, caused by drouth and smoke from forest fires, which detained cheese cargoes in the St. Lawrence for days at a time. It is difficult to esti-

boxes are reported as 'scale-boards greasy' and appearance and flavor spoilt, overdeveloped by heat.' On August 14th, 4,429 boxes arrived; 'most of this shipment badly heated, grease coming through the boxes, and flavor completely spoilt.' On August 17th, 7,893 boxes; 'scale-boards greasy, appearance spoilt; flavor of many of them also completely spoilt.' The report is similar until September, when it says, '7,138 boxes; some of these have clean scale-boards, but many of them are greasy, and general appearance has suffered.' From August 2nd to September 26th, this firm reports on 45,358 boxes arriving in heated condition, ex 19 steamships. They add: 'In most of the above-mentioned shipments the boxes have also been very roughly handled in transit, and have arrived here in badly-broken condition.' Their report is dated September 27th. Several other reports of a similar character were received, which is bad for the trade."

Comparing the evidence of 1900, as quoted above, with that of 1908, as contained in the following letters from cheese importers in Great Britain, it is apparent that an enormous saving has been made through improved facilities and intelligent supervision at ports. Following are representative letters received from London merchants:

Copy of letter from The Co-operative Wholesale Society, dated January 7th, 1909.—"In reply to your letter and inquiry, sent on behalf of the Dairy and Cold-storage Commissioner, at Ottawa, dated January 2nd, permit me to say that, for the past few years we have, with pleasure, noted a gradual improvement in the condition, on arrival at both Liverpool and London, of Canadian cheese, which I do not doubt can be safely ascribed to the improved means of transit, both by rail and boat. We have practically had no cause for complaint of the cheese being heated, more particularly during the last two or three years. Going back prior to this period, say, ten years ago, or before, we had frequent cause for complaint of heat in the cheese. This leads me to say, answering your second paragraph, that we think the improvements during the last decade, in the matter of ocean carriage, have brought about very good results."

Copy of letter from Lovell & Christmas, Limited, London, dated January 4th, 1909.—"In reply to yours of the 2nd inst., speaking from our personal experience, the percentage of heated cheese throughout the past season has been practically nil. During the warm weather, we brought all our cheese in cool-storage, at a small additional freight, and found this precaution was of great advantage, because the cheese arrived in perfect condition, and the saving in the weight (shrinkage) almost, if not quite, covered the extra expense incurred by having the cheese in cool, instead of ordinary storage. In our opinion, there has been a vast improvement in the carrying of cheese during the last ten years, and, as far as the past season is concerned, we do not think it could well have been improved on. We believe this is the general feeling of the trade here, especially on the part of those who have taken advantage of the cool storage on the vessels."

Copy of letter from Andrew Clement & Sons, Limited, London, dated January 6th, 1909.—"In our opinion, Canadian cheese have carried much better the last season or two than ten years ago, better attention having been given not only to the carrying, but also as regards the handling of the boxes at the other side, and the discharging of same at this end."

Copy of letter from Rowson, Hodgson & Co., Ltd., London, dated January 7th, 1909.—"Heated Cheese.—Our experience is that only a limited quantity of the imports from Canada this season have shown any external or internal signs of heat. We should not think 5 per cent. of the entire quantity received into this country, whereas, ten years ago, probably fully 25 per cent. of the goods arriving suffered from the defect referred to. Regarding the ocean carriage and landing of butter and cheese, so far as London as concerned, there has been a gradual improvement during the last fifteen years, and more especially since the time that the 'cool-air' stowage has been adopted on two lines of steamers, viz., the Thomson and the Allan lines."

W. W. MOORE,
Chief, Markets Division.



Dinah of Lawnridge 127799.

Jersey cow, representative of herd of S. J. Lyons, Norval, Ont., to be sold by auction on March 31st, as advertised.

mate the additional revenue received from our sales of cheese last year, on account of the fine condition in which the cheese were delivered on the other side, but it must have reached a very large sum. Very few appreciate this fact, our present admirable transportation facilities now being taken as a matter of course; but that very different conditions existed eight years ago, is clearly shown by the evidence of Professor Jas. W. Robertson, then Commissioner of Agriculture and Dairying, given before the Parliamentary Committee on Agriculture, in March, 1901, in which he said:

"Last season our cheese trade got the worst setback from poor boxes and heated quality it ever got. It is now in a precarious condition. I do not know of a time when it was in a more doubtful position than it is at present. We got good prices in the summer, but hot weather in August and September caused the cheese to be heated, and much of it was landed in England in poor condition. It looks as if we might receive this summer of 1901 to the extent of \$2,000,000 less for our export cheese trade, because of the bad impression made in England last season by the poor condition in which much of it was landed."

Further on the Commissioner gave the following details:

"I have here a memorandum, furnished by an importing firm in Great Britain, reporting on quantities of cheese delivered in a heated condition after August 2nd, 1900. On August 2nd, 2,264 boxes arrived with scale-boards greasy, and appearance spoilt; on August 6th, 2,235

POULTRY.

Egg Prices in Manchester, Eng.

Prices paid for eggs this winter have been phenomenal, and all descriptions have sold well, writes P. B. MacNamara from Manchester, Eng. Owing to a shortage of cold-stored and pickles, and the absence of insufficient supplies of fresh, eggs have made record prices. Egyptians, which in former years made 4s., 5s., 6s. per hundred, have recently realized 8s., 9s., and even 10s. per hundred. But the tension has eased somewhat, and a large production of Irish for the time of year, together with French, has reduced prices down to something like a normal point.

Another B. C. Flock Record.

Editor "The Farmer's Advocate":

I had 40 hens to start with on January 1st, 1908. They had the run of the barnyard, so it is hard to tell what it cost to feed them; in the winter time it cost 20 cents per day. I feed all wheat. I set 15 hens, and raised 90 chickens. Sold \$30 worth of roosters, and had 30 pullets, worth \$22.50; and sold six two-year-old hens for \$1.00 each. I keep pure-bred White Wyandottes and Single-comb White Leghorns, and a cross with the Wyandotte male and Leghorn hen. Their eggs are larger than the pure-breds'. The eggs were 50 cents a dozen all last year. I got 5,514 eggs, at 50 cents per dozen, \$229.75

Roosters	30.00
Pullets	22.50
	\$282.25
Feed, 25 cents per day.....	91.25
Profit	\$191.00

An average of \$4.77½ per hen.

I put the feed at 25 cents per day, and I did not count the old hens that I sold. My house is 12 x 12 ft., 4-inch wall, filled with shavings; 4-ft. windows, no glass, only cotton, and I have to raise the curtain in the day time to give them light. Scratching-shed 12 x 20 ft., open front, covered with wire. It was 50 below for a day or two; some combs froze, but they never stopped laying. WM. M. MARTIN.
Yale-Cariboo, B. C.

GARDEN & ORCHARD.

Producing Crops in Farmer's Garden.

Editor "The Farmer's Advocate":

The farmer who does not provide a good vegetable garden is not doing his duty by his family, himself and his bank account. A supply of fresh vegetables through the summer and autumn is not only extremely conducive to health, but will save many a dollar that is otherwise paid out in supplying the table. Less meat and more fresh vegetables means comfort and smaller doctor bills. The cost of the garden is trifling; if properly laid out and managed, the labor necessary for proper cultivation will not be burdensome.

The principles that apply to the small-fruit garden apply also to the vegetable garden. Everything should be planted in rows; the longer the rows, the better. Forty rods is a fair length. This will allow of successful and speedy cultivation with a horse and scuffler. The soil should be a nice friable clay loam, muck, or even a sandy soil would do. The two latter are liable to suffer during dry spells.

The garden should first contain a fair supply of early potatoes. I have practiced planting whole tubers for early crop. These send up strong stalks, and furnish edible tubers sooner than cut seed would. One row 40 rods long will give a supply for the ordinary family till the main crop of potatoes is fit for use.

A supply of green corn is almost indispensable. Plant in a row, and sow two varieties, one early and one late. For the early crop, any of the early varieties advertised by seed houses will do, as they soon get hard, but, for the late variety, plant Stowell's Evergreen. The cobs are large, the kernels deep, and the corn remains in condition for a long time; in fact, it can be eaten till the fall freeze-up.

Garden peas can be sown as soon as the ground is ready to work. There are many varieties early and late, dwarf and tall-growing. The tall-growing varieties need to be supported with brush, but are generally the heaviest bearers. Sow in two rows, about six inches apart, so that they will form one garden row. I have practiced sowing garden peas at intervals of two weeks apart, till four or five sowings have been made. This furnishes green peas all summer. Just a word here in regard to garden peas versus field-grown peas. The man or woman that has eaten good fat, marrowy garden peas will be very loath to go back to green peas picked from

the field. The field peas soon ripen, and the green-pea season is thus a very short one, where only the field varieties are to be had.

Green beans are easily grown, and, like the peas, may be sown at different times, so that a supply may be had during most of the summer months. They must not be sown, however, till the ground is thoroughly warm. Do not cover too heavily, as the young seedling has to lift the bean, the two halves of which form the cotyledons or seed leaves.

A supply of beets comes in nice for a change. There are two forms, the turnip and the long red. The turnip beet is best for summer use, as it attains an edible size sooner than the long red. The long red forms a good keeper for winter use.

Parsnips are easily grown. The seed is sometimes slow in germinating, but do not hoe the row up if the plants are not up in a week. Have patience, and they will come. Parsnips are improved by being left in the ground over winter.

Cabbages, both summer and winter varieties, form a welcome addition to the table. The seed, which germinates readily, may be sown in a box in the house during April, and transplanted to the garden rows later on. Put in a good supply. If you do not use all on the table, the hens will welcome it during the winter months.

Tomatoes are one of the best products of the garden. Sow the seed in the house during the last of February or the first of March. When the plants have got their second leaves, transplant into boxes about two inches apart. Give all the sunlight possible, or the plants are liable to damp off. Plant out in the garden as soon as danger from frost is over. I have practiced throwing up a small ridge, about four furrows in size; set the plants in the middle of this, about four feet apart. In setting out the plants, do not place them upright, but plant in a slanting position, covering the stalk up to within four or five inches of the top of the plant. Fresh roots will start all along the stalk where the dirt touches, and will materially hasten growth and increase yield. If planted upright, the strong, chilling winds that sometimes prevail are liable to break off the plant, and will surely retard growth to a very large extent. Sixty or seventy plants are sufficient to produce a supply for the ordinary family, both for table use and for canning. As to varieties, I have had the best satisfaction with Spark's Earliana, as the tomatoes will all ripen in time to escape the frost. Plants may be bought from the hothouse by farmers not wishing to grow their own, but I have had better satisfaction from home-grown plants.

Cucumbers may be sown on the remainder of the ridge given up to tomatoes, as the tomatoes will not occupy the forty-rod stretch. The cucumbers are easily grown, and furnish a relish and a crock of pickles for the housewife.

Salsify or vegetable oyster is a sort of cross between an oyster and a parsnip. They resemble the parsnip in shape, and taste like a diluted oyster. They can be grown in the same manner as parsnips.

Spinach is as easily grown as a burdock, and makes good "greens." Lettuce makes a nice salad, and is greatly relished by many. Try a packet of the "Cos" or folding variety, if you wish something extra crisp and meaty. The heads are long, and the outer leaves fold in like a cabbage. To secure the best results, they should be tied with string.

Do not forget to put in a hundred plants of celery. White Plume for the early variety, about 25 plants, and the remainder some good winter variety, like the Giant Pascal. Plant on the level, if you would secure best results, and earth up if you would have the best quality. A scrape of the plow on each side of the row facilitates the earthing-up process. On the approach of hard weather, dig the celery up and transfer to the cellar. Pack in sand or dirt, placing the bunches close together. In watering, do not let the water touch the tops, or they will rot. Light is not necessary, as the celery will blanch nicely in any ordinary frostproof cellar.

HOTBED FOR STARTING MELONS.

Melons are a luxury—not a necessity—but if you would like to try a few, I will tell you the plan that has brought me success. The first necessity is a hotbed, which is easily constructed out of a few boards of cull lumber, an old window sash, and a few wheelbarrow loads of horse-stable manure. Make a frame of the cull lumber just large enough so that the sash will fit inside. Your frame does not need to be more than six inches deep in front, and a foot behind. This is to give the glass a slant, so that it will face the sun. Dig a hole in the ground the same size as your frame. The hole should be about two feet deep; fill up level with the manure and tramp down. Place your frame over the hole, and fill in about two inches of good soil over the manure. Bank up the frame on the outside with dirt to keep the frost out, and to prevent it from being shifted. As soon as the manure is sufficiently heated, the hotbed is ready for work. Now, from an old bush pasture, dig some rich sod, and cut it in pieces four inches square. In-

vert the sod, thus putting the grass side down, and in each inverted square plant two or three musk-melon seeds. When the plants come up, thin out to one plant to each square. As soon as the weather becomes sufficiently warm, and all danger from frost is over, transplant those squares of sod to the open garden, into hills which have been well enriched with rotted manure. Put three plants to a hill. The hills should be at least five feet apart, and further is better. Liquid manure, which can be obtained in any barnyard, makes a fine fertilizer for musk melons, but do not apply when the ground is dry, or you may kill the vines. If you have had good luck, when autumn comes, bringing a supply of ripe, melting musk melons, you will think yourself amply repaid for your trouble.

With watermelons I have had but poor success, and if any reader of "The Farmer's Advocate" has succeeded in growing them to his satisfaction, I would like to hear from him through these columns.

In vegetable gardening, the secret of success is good fresh seed and clean cultivation. It does not pay to keep broken packets of seed over from year to year, as some varieties will not grow when over a year old. Garden peas are especially liable to deteriorate. I have learned this by experience. When garden stuff is planted in long, straight rows, the amount of hand-hoeing is reduced to a minimum.

In this article, I have simply described my own methods. They have brought me success, with a minimum of labor. I have made no attempt to grow for market, but my aim has been to supply my own table with fresh vegetables during the summer and autumn. My methods are open to criticism, and if any reader of "The Farmer's Advocate" has better ones, why, by all means produce them, for the "good of the order"; that is, for the "ancient and honorable society of the tillers of the soil." W. E. WILLIAMS.
Middlesex Co., Ont.

Home Market for Apples.

Editor "The Farmer's Advocate":

It is a recognized principle in political economy that the best-paying market is the home market, up to the limit of its capacity. Unfortunately, this market can be overdone in some particulars. In order to determine whether the home market was properly supplied with apples this winter, I made inquiries from the merchants in the principal smaller towns and cities of Ontario. In almost every case it appeared that there was a shortage of good fruit, and an excellent demand for all the winter varieties. Prices ranged high—from \$7 a barrel in Montreal for choice Spies, to \$4.50 and \$5.00 in the smaller towns.

There is not the slightest doubt but what thousands of barrels would have been consumed in the neighborhood of where the apples were grown if they had been properly stored and offered for sale. Windsor, St. Thomas, Chatham, London and Brantford were all practically bare of first-class winter apples, and had only the lower grades to offer, and these at high prices.

On the whole, the prices have been good for winter apples in the Old Country markets, but at no time have they been better than in the home markets, and just at present the home-market prices are higher than the British market prices. Nevertheless, there is a constant stream going to the Old Country, while our own people are eating only the inferior grades, or no apples at all. This is not an extraordinary year in that respect. Four years out of five, at least, there is a shortage in the home markets, and the growers cannot do better than to organize in such a way that the home markets, at least, will be supplied.

Of course, there is danger of overdoing the local markets. The remedy for that is co-operation and publicity. If those who propose to store apples will let the fact be known early in the season, and not attempt to store by stealth, there is little danger of storing too many.

The storage, too, ought to be done as much as possible at local points, to save freight; but, far better pay freight to and from a good cold-storage warehouse than attempt to hold apples where the temperature cannot be kept at less than 50 degrees. The ordinary farmer's cellar may do for storing a few barrels, but is altogether too warm a place to risk any large quantity in. I note this point because, though I recommend the storing of apples sufficient for home use, I would also add the caution that, in order to make the enterprise an assured success, there must be proper storehouse facilities.

A. McNEILL.

Received the watch some time ago, and am well satisfied with it. It goes well, and keeps good time. Thanking you ever so much for your trouble, I remain,
JOHN T. WALLACE.
Brant Co., Ont.

Apples Picked Before Mature.

Editor "The Farmer's Advocate":

I beg to say, in regard to your reference to the keeping qualities of apples from different localities, that this is a question we have been considering for some time. It is a pretty hard question to decide, until a thorough test has been made. Our association is considering a cold-storage outfit as a solution.

I believe, notwithstanding Mr. McNeill to the contrary, that our apples will keep about as well as those grown farther north, if we had the proper means of handling them. This, I think, we have not quite reached yet. I have in my cellar a few Baldwin and Spy apples which are as fine and juicy now as any I ever ate, and that, too, after an unusually trying season for apples in general.

I think many of our buyers pick the fruit much too early—a good deal of it before it is mature. This, being picked in hot weather, without any means at hand to cool it, ripens much faster than it would otherwise do, and consequently will not keep. I have noticed, too, that fruit from well-sprayed orchards keeps much better than from unsprayed; this is particularly noticeable. This may be partly from the freedom of the fruit from fungous diseases, but I believe is largely due to the increased health and vigor the foliage seems to get as the result of spraying. The foliage hangs on to the tree later in the season, and, I should think, would develop more fully the fruiting spurs for the following season's crop. With this increased vigor, the tree develops its fruit much better, and, being fully developed, it will keep much longer. In many seasons our winter varieties, such as Spy, Baldwin and Russet, will keep till July 1st, in an ordinary cool cellar; and I think that is about as well as northern fruit can do.

While I think our country is peculiarly adapted to the raising of the very first early varieties of apples, because we can get them into the markets of our own Provinces when those markets are absolutely bare of apples, unless held over from the previous season—and the varieties do well here—still, I think that our winter apples should not get a black eye, as to keeping qualities, until we are sure that they deserve it (and I do not think they do), because it tends to hurt the sale of them in competition with northern fruit.

I know that we can grow as fine fruit as I have seen in any part of the Province—some varieties better than others—but, as to its keeping qualities, I believe it is simply a matter of proper handling and cooling.

Kent Co., Ont.

Growing Early Tomatoes.

Editor "The Farmer's Advocate":

Some notes, the result of experience in tomato-growing for the early, fancy market, the canning factory, and home use, may be of service to your readers at this time. Returns of from \$100 to \$300 per acre in a season have been secured. The plants, of course, are started in hothouse or hotbed in March (the sooner, the better), using wooden trays 12 in. by 24 in., and 4 inches deep, filled with a fine, moist, rich mixture of mold, sand and manure, about three inches deep. Sprinkle the seed along in rows two inches apart, covering lightly. When the plants are two inches high, transplant into other trays, seven in a row across, and ten rows, making 70 plants to a tray. Let them root for a couple of weeks, and transplant again, 24 plants to the tray. After three or four weeks, move into individual boxes, 5 x 5 x 5 inches, without bottoms. In transplanting, disturb roots as little as possible, so as not to check growth. Keeping them still in the hothouse or hotbed, by May 24th to June 1st, blossoms will be out and fruit set. At first, in hothouse, sprinkle with water about three times per week. Too much water will cause them to "damp off" or rot at the ground. When in the second trays and individual boxes, they will need watering every day. Knock out end of box, and set out soil and roots in mass in holes, rows 5 feet apart, and plants 4 feet apart in the row. Before setting out, give plants a thorough soaking with water, well into roots. Lean them to north, so the wind will not break off tender stalks, which are now about 18 to 20 inches high. They will straighten up and turn towards the sun.

Before setting out in the field, harden the plants by opening the hothouse windows during the day, and giving them plenty of air for a couple of weeks. Extra-rich soil is not needed for tomatoes, and, on sandy or loamy land I prefer spring plowing, when the land is thoroughly dry; and cultivation, to kill off first crop of weeds, before planting. Cultivate the rows every week, or after every rain, with fine, harrow-tooth cultivator.

Pick, when ripe, in 11-quart baskets, holding about 18 pounds each. At first, these bring about \$2.50 per basket, but the price falls as the season advances.

For home use, in the farm garden, start the

plants in small hotbed, and transplant a couple of times, to get them well rooted, in trays or into cold-frame covered with glass or cotton. If you have no trays, move them without disturbing root-growth, and especially so at the last transplanting.

As to varieties, I like best the Earliana, a large, smooth, firm-fleshed tomato; and next, Chalk's Early Jewel, lighter in color. For later use in the home, and canning, The Stone is a splendid sort. These three varieties give a good succession of fine tomatoes, either for home use or for sale.

Save the seed from a number of your choicest tomatoes. When thoroughly ripe, break open and wash out the seed from the pulp in water, and when quite clean dry thoroughly in sun or by the stove.

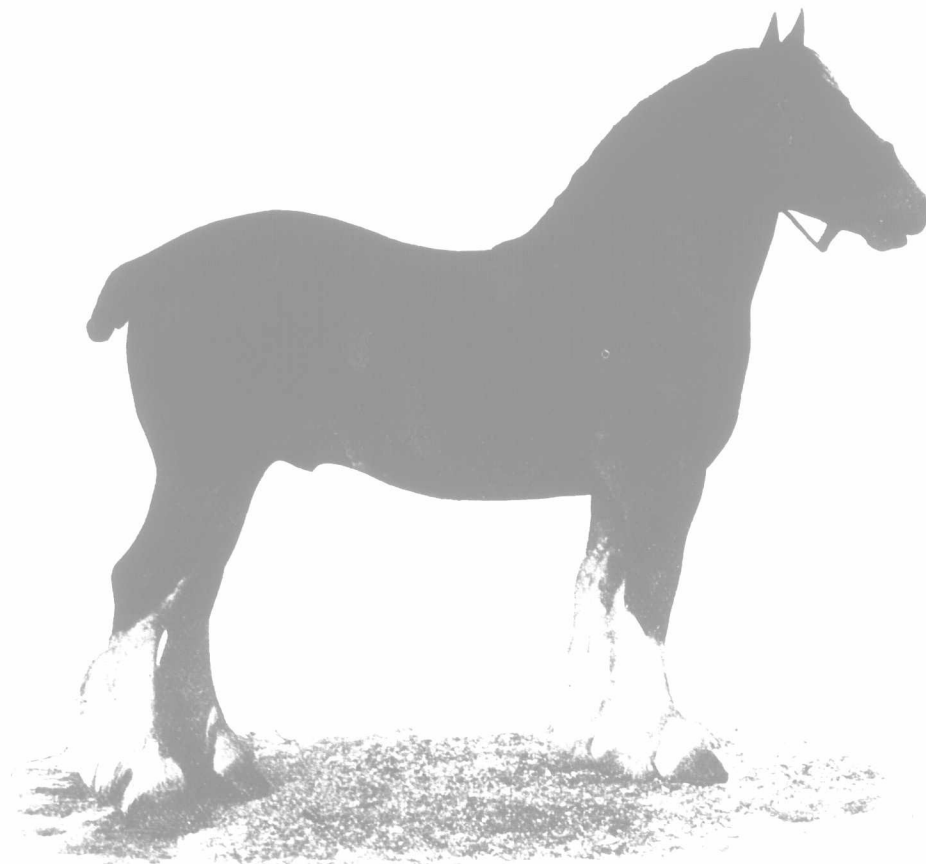
Essex Co., Ont.

Two-hundred-dollar Garden.

Editor "The Farmer's Advocate":

The size of my garden is 20 x 8 rods, enclosed by a wire fence, with a twelve-foot gate at the corner nearest the buildings. The soil is a clay loam, with a gravel subsoil; dry early in the spring, and free from frost.

The crops grown are strawberries, raspberries, grapes, currants, gooseberries—for fruit; corn, potatoes, beans, onions, beets, carrots, parsnips, lettuce, celery, salsify, parsley, tomatoes, water and musk melons, cucumbers, citrons, cabbage, cauliflower and rhubarb—for vegetables. The rows are all twenty rods long, and run east and west. All the rows are three feet apart, except the tomatoes and raspberries, which are four feet. The first row on the south side is grapes, six vines; the rest of the row, currants, gooseberries, rhubarb and parsley. I plant five rows of strawberries every spring, and take only one crop. Sow with clover after picking, and the following spring have an ideal strip for corn. I have six rows of raspberries, which will last for six or seven years if carefully cultivated; five rows of corn; five of potatoes; four of tomatoes;



Dunare Robert (Imp.), [8020] (13870).

Clydesdale stallion, bay; foaled 1906; sire Montrave Mac, by Macgregor, imported by T. H. Hassard, Markham, Ont., and sold to Mannerow Bros., Chesley, Ont. See page 454.

one of beans, one of cabbage, one-third row of parsnips, beets and carrots, one-third row of celery, lettuce and watermelons; one-quarter row of musk melons, salsify, cauliflower and cucumbers; one row of onions (a few citrons in the middle of the row); the width of the seed drill in large peas.

In 1908 the account stood: Strawberries, \$45; raspberries, \$10; tomatoes, \$40 (got 25 cents for 16-pound basket); potatoes, \$20; corn, \$15; celery, \$3; cabbage, \$1.50; watermelon, \$1; total, \$171.50. The rest of the vegetables and fruit were used, but, as there was no sale for them, I could not estimate their value.

The expenses were, \$2.80 for plants, \$1.00 for seeds, and 20 cents for Paris green. As I grow nearly all my own seeds and plants, do the work at odd times, and most of it with a horse, the cost doesn't seem to be much. You always have everything fresh, and if you don't grow it you nearly always go without.

The strawberries are Crescent, Brandywine and Williams. Raspberries—Marlboro' and Cuthbert. Grapes—Concord and Champion. Potatoes—Early Six Weeks and Rose of the North. Corn—Golden Bantam. Tomatoes—Earliana.

BRUCE COUNTY FARMER.

More Apples of Low Quality.

Further complaints regarding the quality of Canadian apples on arrival at distant markets have been reported, this time from Australasia, on British Columbia shipments. J. S. Larke, reporting to Trade and Commerce Report from Sydney, says:

"Serious complaints of some Canadian apple-packers have been received lately, and the Australian firm which has taken up the import of British Columbia apples, with excellent promises of success, advised that they were compelled to refuse acceptance of the second parcel sent to Vancouver for shipment. The writer states that, for this year he required 70,000 cases for Australia and New Zealand. Another shipper also sent very large quantities. He had hoped to take all that British Columbia could spare, but he had been discouraged. His statement is that the fruit in the last lot offered for shipment, he found, after examination in Vancouver, that only 15 per cent. were suitable for Australian markets, while the balance varied from second-quality to worthless fruit. Maxwell Smith, the Inspector of Fruit, of the Department of Agriculture, at Vancouver, has the matter in hand, and will investigate both sides of the case. Certainly, the trade cannot be carried on unless it be by thoroughly honest methods."

Soil and Length of Season Influence Keeping Quality.

Editor "The Farmer's Advocate":

In my opinion, variety has nothing to do with the keeping qualities of apples grown in different districts. Of course, each variety has its season.

Soils have some influence on the keeping quality. For instance, apples grown on clay or clay loam, with plenty of limestone, will keep longer than those grown on sand or sandy loam. The sole reason why apples grown in the northern districts, such as Lake Huron and Georgian Bay districts, keep longer, is that the season is later; hence apples ripen during the cooler weather, and the ripening process is much slower. In fact, they are not ripe, but are not matured or ready for use for some months later. For instance, the Duchess is ripe in the southern counties from ten days to two weeks before the same variety is ready in the northern counties. I have seen Ben Davis in the storehouse in the month of February, that

were grown in the district of Chatham, as soft as a Duchess in September; while, on the other hand, the same variety, grown in the Counties of Bruce, Grey and Simcoe, would be as hard and sound as could be. In these counties, winter apples are not ready for harvesting until after the 20th of October, and that is what imparts to them the keeping qualities. Then, the soils are well adapted for producing apples of high quality, being of a limestone formation. It gives to all that fine, firm texture and high flavor. Spies grown in these districts are not considered ready for use until the end of January or the first of February. The quality of apples grown in the southern districts is good, but their season is much earlier than those in the north.

Bruce Co., Ont. A. E. SHERRINGTON.

Treat yourself and your family by growing your own garden crops for home use.

THE FARM BULLETIN.

George Rice's Monster Sale.

As a farmer and stockman, George Rice has been among Canadian leaders for many years. Last week, his monster sale of pure-bred dairy cattle, Holsteins and Ayrshires, showed that his labors have brought their reward. The public frequently are apprised of the fact that some merchant-prince has been able to dispose of his stock at a fabulous figure. In the agricultural world, however, too few men have an ambition that spurs them on to be the proud possessor of something greater than has been. George Rice overcame all obstacles, and on Thursday and Friday of last week held one of the greatest sales that ever took place in America. The net returns reached a total of about \$20,000. For pure-bred Holsteins and Ayrshires, the sum of \$16,245 was realized. Including calves barely old enough to walk, 103 head were disposed of without reserve. These included 75 Holsteins and 28 Ayrshires, of all ages. The average price for the former was \$181.14, with figures ranging from \$25 to \$1,000. Thirty head went at \$200 or over, and averaged \$300.50. Top-notch figures included \$1,000 for Calamity Jane 4th, the tidy daughter of the famous nineteen-year-old cow Calamity Jane, that stood in an adjoining stable, within reach of the auctioneer's voice. The purchaser was W. A. Matteson, of Utica, N. Y., who owns another champion performer from the same old cow, and from whom Mr. Rice got the sire of the high-priced heifer calf. The handsome sum of \$700 was received for Baroness Ladoga Veeman, now two years old. She also went across the line, going to the stables of D. S. Middleton, of Cable, Ohio. In selling each of these, the bids ran rapidly from \$200 to within \$100 of the selling price, and then by \$25 to the limit. Idaline Pauline De Kol was knocked down to R. J. Kelly, of Tillsonburg, at \$500. Paladin Ormsby, the fine 2-year-old bull, brought \$365, going to F. Carr, of St. Thomas, while B. Holby, of Belmont, secured Idaline's Paul Veeman for \$345.

The 28 Ayrshires, including tiny calves that brought but \$5.00, averaged \$95. Bidding was brisk on choice animals. Jean Armour went across the line to W. P. Schanck, of Avon, N. Y., on a \$510 price. E. Cohoon, of Harrietsville, got Annie Laurie 2nd for \$330. The hammer was wielded by Colonel D. L. Perry, of Columbus, Ohio, and Major E. R. Almas, of Norwich; while T. M. Moore, of Springfield, and E. J. House and L. G. Pearce, of Tillsonburg, gave valuable assistance in the ring. Prospective buyers came from all parts of Ontario, as well as from New Brunswick, Quebec, and from some of the States of the American Union. Every available space surrounding the sale-ring within the huge brick barn was occupied. The hundreds in attendance were treated not only to the sight of some choice dairy cattle, but also to a lesson in auctioneering. One look at Col. Perry, when he was fighting for bids on an animal of merit, was worth going miles to see. There was no loss of time. During the first half hour 15 animals were knocked down at an average price of \$235. From 9.30 a. m. until 3.00 p. m., with an hour or more off for lunch, the entire lot was disposed of.

"It is the greatest sale ever held on the continent. You can't say too much about it. I'll go back across the line and tell our breeders to wake up. The big fellows in New York will be surprised when I tell them next week what we had at George Rice's sale. I never was better satisfied with a sale in my life. You have an enormous crowd, and the men are not afraid to bid for what they want." Such was the opinion of Col. Perry, expressed to the representative of "The Farmer's Advocate."

Mr. Rice, also, was thoroughly satisfied. "The prices are pretty fair," he said. "However, all the cows are in good shape, and they should bring big figures. Everything has gone fine, but it must not be forgotten that it has taken 20 years' hard work to prepare for such a sale. Judging from the inquiries I received, there are about 1,000 animals of the Holstein and Ayrshire breeds wanted in Canada. Over 200 men wrote for catalogues, and they wanted lots varying from one to five."

The many friends of Mr. Rice spent enjoyable evenings, as his guests, at the Opera House, where speeches were delivered by Prof. H. H. Dean, Guelph, Auctioneer Perry, and others. It is Mr. Rice's intention to retire from active farming or stock-raising, and settle on a small piece of land at Tillsonburg. He has reached the pinnacle of an enthusiastic breeders' ambition, and in so doing has shown to the world that a common stockman can do much to bring honor to his country if he but uses his brains during his labors. The sales made were:

HOLSTEIN FEMALES.
Calamity Jane 4th, calved June, 1908, to W. A. Matteson, Utica, N. Y. \$1,000

Calamity Jane's 2nd Posch; March, 1903; E. Laidlaw, Aylmer 350
Idaline Pauline De Kol; Sept., 1900; R. J. Kelly, Tillsonburg 500
Idaline Ladoga Beauty P.; Dec., 1908; Geo. McKenzie, Thornhill 185
Arah Veeman; Oct., 1906; P. D. Ede, Oxford Center 210
Baroness Ladoga Veeman; March, 1907; D. S. Middleton, Cable, Ohio 700
Sora De Kol Veeman; March, 1907; P. D. Ede, Oxford Centre 195
De Kol Paul Baroness Topsy; E. Laidlaw, Aylmer 240
And calf, W. McQueen, Tillsonburg 75
Ladoga Idaline Veeman; March, 1908; A. Hulet, Norwich 200
Ladoga Topsy Veeman; March, 1908; H. Dymont, Dundas 120
Houwte J. P. Inka Paul; February, 1900; Walter Limerick, Fredericton, N. B. 255
Calamity Houwte Pauline; April, 1907; Arthur Clarkson, Summerville 185
Adelaide Brooks De Kol 2nd; Oct., 1904; A. Shaver, Islington 260
And calf, W. Browning, Cairngorm 75
Calamity Brook Princess; January, 1907; B. Walker, Beaconsfield 295
Queen's Butter Girl; Dec., 1905; T. H. Dent, Woodstock 325
Canary Butter Girl; May, 1905; Jas. Rettie, Norwich 275
Canary Calamity Princess; May, 1907; W. J. Swanton, Villa Nova 270
Canary Starlight Lassie B.; Dec., 1900; R. J. Kelly, Tillsonburg 205
Canary S. Calamity Posch; Jan., 1907; Geo. W. Pallett, Summerville 260
Canary Starlight Calamity; Jan., 1908; E. Laidlaw, Aylmer 170
Mercedes Canary Pietertje; Sept., 1902; R. J. Kelly, Tillsonburg 230
Maysie Inka De Kol; April, 1906; C. E. Moore, Peterboro 205
Posch Calamity Colantha; February, 1907; Alf. Rice, Currie's Crossing 275
Duchess Calamity Posch; January, 1907; F. L. Culver, Waterford 215
Calamity Starlight Butter Girl; November, 1906; R. Brookfield, Tillsonburg 175
Calamity Ormsby Girl; Nov., 1908; A. Hulet, Norwich 80
Corinne Calamity Posch; Jan., 1907; Prof. H. H. Dean, Guelph 235
Her calf, W. Bryant, Cairngorm 25
Calamity Houwte; Feb., 1907; M. McDowell, Norwich 225
Calamity Butter Girl; May, 1905; W. H. Morgan, Palmerston 190
Daisy Texal Calamity Posch; Jan., 1906; Alf. Rice, Currie's Crossing 220
Calamity Texal Johanna; Jan., 1908; Ed. B. Purtell, Bloomfield 115
Janette; Feb., 1900; Jas. Rettie, Norwich 200
Her calf, Wm. Thompson, Goble's 45
Calamity Madonna; Nov., 1906; W. A. Rife, Hespeler 215
Her calf, A. W. Harwood, Hickson 50
Princess Calamity Pearl; Jan., 1908; Geo. Herbst, Ailsfeldt 145
Gaza Aconeth Calamity; Feb., 1907; A. Hulet, Norwich 225
Rosa Bonheur Beauty; Feb., 1907; Jas. Rettie, Norwich 275
Edith Anthony 2nd; Jan., 1906; Wesley Allen, Tillsonburg 180
Edith Ormsby; December, 1908; A. Hulet, Norwich 80
Netherland De Kol Glenice; Sept., 1903; R. J. Kelly, Tillsonburg 215
Lady Bess Boon; Jan., 1900; J. W. Allen, Tillsonburg 185
Lady Wayne Norine; May, 1896; W. Rife, Hespeler 105
Winnie R's Calamity Posch; Nov., 1905; W. D. Breckon, Bronte 225
Winnie Calamity Ormsby; Jan., 1909; W. Bryant, Cairngorm 75
Calamity Butter Girl; Jan., 1908; J. S. McCannell, Milton 170
Calamity Teake Johanna; Feb., 1908; Martin Hale, Springfield 135
Princess Calamity Cody; Jan., 1908; W. A. Patterson, Agincourt 155
Calamity Posch Rose; Feb., 1908; James Motherall, Drumbo 105
Duchess de Boer Ianthe; May, 1907; B. Walker, Villa Nova 135
Calamity Idolite De Kol; Feb., 1908; J. C. Freel, Thamesford 165

HOLSTEIN MALES.
Paladin Ormsby, calved Feb., 1907, to F. Carr, of St. Thomas \$ 365
Idaline's Paul Veeman; Nov., 1907; B. Holby, Belmont 345
Calamity Posch Johanna; Jan., 1908; E. Bishop, Norwich 75
Veeman Beauty Hartog; Oct., 1908; Alf. Rice, Currie's Crossing 65
Calamity Brook De Kol; March, 1908; John Cuthbert, Swaburg 60

Calamity King; Jan., 1908; A. W. Harwood, Hickson 100
Calamity Ormsby; Dec., 1908; J. S. McCannell, Milton 60
Calamity Canary Prince; Feb., 1908; Samuel Bisset, Salford 65
Sir Canary Ormsby; Feb., 1909; Dr. English, Hamilton Aylum 50
Daisy Texal Posch Pasma; Nov., 1907; John McKenzie, New Durham 45
Veeman De Kol Glenice; Nov., 1908; M. Breen, Ingersoll 45
Count Carlotta Coin; Nov., 1908; M. Rice, Burgessville 30
Winnie Count Pasma; Jan., 1908; John Dent, Woodstock 125
Beryl Beets Boon; March, 1908; R. Nance-skiwell, Ingersoll 70
Calamity Gaza Aconeth; Feb., 1908; W. L. Grass, Westbrooks 70
Calamity Colantha Prince; Feb., 1908; J. Mandeville, Tyrrell 65
Prince Calamity Genieve; Jan., 1908; E. Patterson, Elford 80
Prince Calamity Madonna; Jan., 1908; Jas. Fell, Powle's Corners 75
Calamity Wopke Prince; May, 1908; Wm. McLeod, Kintore 50
Boutsje Calamity Prince; March, 1909; L. H. Lipsit, Straffordville 30
Duke of Kent De Kol; April, 1908; W. J. Robinson, Snelgrove 90

AYRSHIRE FEMALES.

Jean Armour; Oct., 1901; W. P. Schanck, Avon, N. Y. \$ 510
Annie Laurie 2nd; Nov., 1901; E. Cohoon, Harrietsville 380
Her calf, Jan., 1909; Robert Lowe, Stratford 55
Annie Laurie 3rd; Nov., 1907; W. W. Ballantyne, Stratford 95
Star's Alpha; Jan., 1904; E. Cohoon, Harrietsville 150
Her calf (male), Jan., 1909; G. W. Clark, Ingersoll 15
Star's Annie Laurie; Nov., 1905; E. Cohoon, Harrietsville 200
Her calf, March, 1908; Collier Bros., Beachville 55
Her calf (male), March, 1909; A. W. Harwood, Hickson 5
Star's Sprightly; Nov., 1905; Wm. Chute, Vienna 125
Her calf, March, 1908; Percival Bursee, Oxford Centre 55
Scotland's Lucy; Oct., 1905; E. Cohoon, Harrietsville 90
Her calf, Jan., 1909; Collier Bros., Beachville 25
Eugenie Blair; June, 1900; Wm. Newton, Salford 95
White Flossy; Feb., 1904; Wm. Thorn, Lyndoch 150
Her calf, Jan., 1909; G. R. Love, Winthrop 15
Scotland's Violet; Sept., 1905; J. W. Jewson, Ridgeway 80
Old Star's Last; March, 1906; E. Cohoon, Harrietsville 205
White-Legged Kirsty; April, 1906; A. W. Harwood, Hickson 65
Lucene of Meadowside; March, 1902; F. Harris, Mount Elgin 65
Scottie's Daisy; April, 1906; J. G. Clark, Ottawa 50
Scottie's Sprightly Daisy; Oct., 1907; Luther Pinnegar, Dorchester 45

AYRSHIRE MALES

Stadacona Advancer; Dec., 1906; J. G. Clark, Ottawa 40
Advance; Dec., 1908; R. J. A. Smith, Fairfield Plains 35
Scot McKee; Oct., 1907; Luther Pinnegar, Dorchester Station 50
Mac McKee; May, 1908; J. G. Clark, Ottawa 25
Minnie's Advancer; Dec., 1908; Geo. Kilgour, Delmar 5
Spry McKee; May, 1908; Major Daniels, Verschoyle 25

Scale Inspector.

R. H. Lewis, of Hamilton, Ont., ex-president of the Ontario Vegetable-growers' Association, has been appointed Provincial Inspector for San Jose scale, to succeed J. Fred Smith. The new appointee is getting in touch with the district inspectors, and promises that every possible step will be taken to keep the pest in check.

It was reported from Washington last week that the foot-and-mouth disease quarantine was to be lifted from Maryland and Michigan on Monday, March 15th, and probably from New York and Pennsylvania, the only two States remaining in quarantine, within a short time.

Niagara Fruit-growers Hold Convention.

Cardinal principles in fruit-growing were dealt with by experts at the annual convention of the Niagara Peninsula Fruit-growers' Association last week. On Wednesday, over one hundred intelligent and enthusiastic orchardists met in Institute Hall, at Winona, for afternoon and evening sessions, while, on Thursday and Friday, similar gatherings showed their interest by attending meetings at St. Catharines.

The talent included C. E. Bassett, of Fenwick, Mich., Secretary of the Michigan State Horticultural Society; Gabriel Hiester, of Harrisburg, Penn., President of the Pennsylvania State Horticultural Society; and Professor R. Harcourt, of Ontario Agricultural College, Guelph. Each proved to be worthy of a place on the programme. The numerous queries also showed that local men had combined a study of the scientific side of fruit production with practical work. In fact, the true value of the meetings lay in the questions and ensuing discussions. On every side a great interest was manifested in spraying, and particularly in lime-sulphur wash. Full and clear as the matter was dealt with, the comparative values of the different commercial preparations and those that are home-boiled, were not arrived at. It was, however, agreed that the home-boiled lime and sulphur, properly prepared with an excess of lime, was stronger than the commercial grades mixed in proportions as directed by their manufacturers, and none had found any damage from the strongest. For this reason, growers were advised either to prepare their own, or not to dilute as much as directions suggested. By all, lime-sulphur was proclaimed the most satisfactory spraying mixture known to orchard practice.

In discussing spraying from the chemist's standpoint, Professor Harcourt explained that the boiling of lime and sulphur in water resulted in six compounds, varying in efficiency, according to the quality of the materials and the extent of the boiling. In every case it was necessary to have an excess of lime, and 20 of lime to 15 of sulphur was found to give the desired combination, with the use of the minimum quantity of lime. Three sulphides were formed as the boiling went on. The lowest sulphide, Ca S, was weak, and, as boiling was continued, higher forms, Ca S₂ and Ca S₃, were formed, either of which were effective, and the former desirable because of economy of time and heat. As the boiling was continued, these sulphides again changed to less effective forms, known as thio sulphates, sulphites and sulphates. As yet, no test had been ascertained that would inform the orchardist when he had applied the necessary heat. A bright amber color seemed to reveal the maximum strength. If iron got into the mixture from the piping, or through impurities in the lime, a green color was imparted. Tests at Guelph showed that there was but little difference in the quality of Beachville, Port Colborne or Guelph-Hamilton lime. With the last named, it was necessary to use slightly larger quantities. Repeated tests of grades of sulphur also showed that number one flour of sulphur was superior to flowers of sulphur because it combined with the lime more readily.

Analyses of commercial washes, diluted as directed, one part to eleven of water, showed an absence in uniformity of the mixtures. Of several tests, the strongest showed 115 grams of sulphides to a gallon, while the weakest contained only 53.8 grams. Samples analyzed recently ranged from 82 grams to 59 grams. Home-boiled washes, prepared according to the 20-15 formula, gave 153 grams after one-half hour's boiling, and 161 grams when boiled for an hour. As to whether direct bottom heat or steam was preferable, it was claimed that there was little or no difference, provided the boiling was sufficiently vigorous.

The Professor expressed a desire to be supplied with samples, as used by leading growers, so that he could analyze them and find out just what strength was being used in individual cases. Several of the growers stated that last year a College student had made arrangements with them to collect samples, but that nothing more was heard of it after the samples had been made ready. Professor Harcourt explained that the student had done this on his own account, as the College had not delegated any man to gather such samples. This year, however, a special effort would be made to find out particulars that would be of value to orchardists.

Apples, pears, grapes and small fruits, with the discussion of methods adopted, formed the basis for practical talks by Mr. Hiester, who had 25 years' experience. Special attention must be paid to soil and subsoil before setting out trees or plants of any kind. With the larger fruits, and with grapes, it was found necessary to have suitable subsoil, with thorough drainage. In combating black rot in grapes, he practiced clean cultivation, so that the heat from the bare soil would tend to prevent development of the fungus, and, by frequent use of Bordeaux mixture, he found little damage. He had applied

the first spray before growth began in spring, but expert opinion said that it was not necessary to spray until the third leaf was coming. Then it was advised to give a thorough application prior to each rain, because the damp weather meant soft growth that was most likely to be infected.

Low, open heading of peach trees was urged by Mr. Bassett. With him, the question of elevation received more attention than did soil. He had found that almost any soil could be made to produce peaches, if the trees were planted where there was air drainage, as well as water drainage. It was essential that cold air should flow from a peach orchard as freely as water flows down hill.

The chief objection he took to peach plantations in the Niagara district was that the tree tops were too far from the ground, and the branches were so thick as to exclude the sunlight. In order to have attractive fruit, the sunshine should reach all parts of the tree. High color and superior quality went hand in hand, and the sun had much to do with both. Growers should be satisfied with fewer baskets and higher quality. Orchardists, he said, should not be foresters.

The varieties grown in Michigan showed his choice of peaches to be: Engle's Mammoth, Conklin, Kalamazoo (similar to New Prolific), Elberta, Smock, and Lemon Free.

Mr. Bassett proved to be a most entertaining speaker, with a thorough and practical knowledge of orchard work. At the evening sessions his talks were illustrated with lantern slides, showing orchards and gardens, fruit-picking and fruit-packing scenes, and other details connected with the handling of fruits and their culture.

At every meeting the growers evinced a desire to master details. Every question had a definite and sound purpose. Frequently, experienced local men volunteered advice that would help others to avoid mistakes. Secretary C. E. Fisher, of St. Catharines, always was on hand. At Winona, Robert Thompson, of St. Catharines, presided in the afternoon, and J. H. McNeely, of Stony Creek, at night. Mr. Thompson also had charge of the afternoon and morning meetings, at St. Catharines, while Mayor Campbell was chairman in the evening.

National Bureau of Breeding.

The anti-gambling legislation—which is almost tantamount to saying the anti-racing legislation—adopted by numerous States of the American Union, is having the effect of discouraging the breeding of Thoroughbred horses in the neighboring Republic, and a large number of breeders of the English blood horse are closing out their studs, or transferring them to Europe and Canada. The opportunity thus offered to infuse a strain of Thoroughbred blood into the light-legged horse stock of Canada seems to have appealed to Mr. Ryan, of Montreal, a newspaper man of some means, who is and has been for some years extremely friendly with a large number of leading Thoroughbred owners in the United States. In order to procure and disseminate Thoroughbred blood, Mr. Ryan has interested a number of his friends, and organized what he calls a National Bureau of Breeding, the object of which is to place Thoroughbred stallions in various quarters of the Dominion, except in those counties where privately-owned Thoroughbreds already stand for service.

Quixotic as the scheme appears, we have been assured that it is bona-fide and genuinely public-spirited in its aims. It appears, however, rather to have outgrown the original intentions of its founders, and those behind the enterprise are now looking to the Dominion, and may, perhaps, later appeal to the Provincial Governments for aid.

On March 4th, a deputation, consisting of Mr. Ryan, a number of horsemen interested in the light-legged breeds, and a large contingent of Members of Parliament favorable to the work of the Bureau, waited upon Hon. Sydney Fisher, Minister of Agriculture, and asked for a grant of \$25,000 (not \$50,000, as appeared in the daily papers), contingent upon Mr. Ryan being able to put in service this year 50 Thoroughbred stallions in different parts of Canada, to be placed in the hands of reliable farmers throughout the country, on certain very easy conditions prescribed, all accounts and expenditures to be subject to the close supervision and control of the Government, all horses, to be of a class suitable for crossing with cold-blooded mares, and to be subject to the inspection and approval of experts appointed by the Department of Agriculture.

The representations made to the Minister were that it was possible, under existing conditions in the United States, for the Bureau to obtain, free of charge, or at very low prices, a considerable number of valuable Thoroughbred stallions which could be advantageously used in the improvement of the light horse stock in Canada. Mr. Ryan said he already had some sixteen horses, many of them very valuable, which had been donated to the Bureau entirely free of charge, and he felt confident that a good many more could be obtained on the same favorable terms. Mr. Ryan

while apparently regarding with favor the objects of the deputation, withheld his decision, pending fuller consideration of the matter.

Grain in Farmers' Hands.

Reporting on the quantities of grain, hay and roots on hand in Canada at the end of February, and the condition of the live stock in the country at that date, the Census and Statistics office, at Ottawa, has estimated the amount of wheat then in farmers' hands in the whole Dominion at 20.22 per cent. of last year's crops, which would be 22,747,000, out of a total of 112,434,000 bushels. Of oats, there was 43.62 per cent., being 109,222,000, out of 250,377,000 bushels. Of barley, 33.56 per cent., being 15,692,000, out of 46,762,000 bushels. Of buckwheat, 29.05 per cent., being 2,078,000 out of 7,153,000 bushels. Of potatoes, 44.10 per cent., being 32,542,000 out of 73,790,000 bushels.

In the Provinces of Manitoba, Saskatchewan and Alberta, the quantity of wheat in farmers' hands at same time was 18.93 per cent., being 17,391,000 out of a total product of 91,853,000 bushels. Of oats, 45.93 per cent., being 44,425,016 out of 96,718,000 bushels. Of barley, 33.68 per cent., being 7,722,000 out of 22,926,000 bushels.

The condition of live stock in the Dominion at the end of February was rated at 81.40 for horses, 78.70 for milch cows, 73.79 for other horned cattle, 78.32 for sheep, and 74.34 for swine, 100 being taken as a standard for comparison.

Duty on Tin Plate Again Proposed.

The proposition to foster a tin-plate industry in Canada, which aroused such vigorous opposition a year or two ago from dairy, agricultural and other users of tinware, has again been put forward. Tin plate is now manufactured intermittently on a small scale at Morrisburg, Ont., and, according to an Ottawa despatch, the infant industry is seeking the imposition of a protective duty on tin plate, galvanized plate and block plate from Great Britain and continental Europe. It is admitted that the anti-dumping clauses of the Tariff Act now give protection against imports of American material, but there is no protection from British imports, tin in blocks, pigs, bars, plates or sheets being scheduled free. So, to establish a tin-plate industry in Canada, Canadian users of tinware are asked to submit to a duty on tin plate, calculated to increase the prices of the raw material, and thus indirectly, in all probability, the cost of many useful articles manufactured therefrom. The effect would reach every farm home in Canada, as well as the dairy, canning and other industries of vital concern to large and growing sections of the agricultural community. Is the whistle worth the price? A letter or post card to the Member at Ottawa will express your convictions on the subject.

\$200,000 a Year for Protection of Crossings.

The bill dealing with the level-crossings problem, recently introduced into the House of Commons by the Minister of Railways and Canals, has met with favor. It provides (1) that a sum of \$200,000 be appropriated each year for five consecutive years, dating from April 1st, 1909, as a fund to be applied, under the authority of the Board of Railway Commissioners, to the protection of existing highway crossings of railways; (2) that the amount contributed from that fund shall not exceed 20 per cent. of the cost of the crossing protection, and that the balance be apportioned to the railway and corporation, according to decision of the Railway Commission; (3) that payments shall be limited to crossings of not more than four tracks; (4) that not more than three crossings in one municipality in one year shall receive contributions; (5) that crossings hereafter constructed shall be protected at the expense of the railway companies; (6) that the Board shall have power to order any municipality to contribute a portion of the cost of protection.

Conditions in the seed trade in Ontario have so far been found pretty good, said T. G. Raynor to "The Farmer's Advocate," in the course of a recent inspection trip. Mr. Raynor also reports that he has never found more general interest in Farmers' Institute meetings than in those he has attended this winter. Keen interest is evinced in the weed question. Alfalfa is being sown in bushels where three or four years ago it was used by pounds. While not all are succeeding, a larger proportion of success is explained thanks to the diffusion of information.

Bank of Toronto

Savings Department

A Small Sum is sufficient to open a savings account with, and small or large sums (\$1.00 and upwards) may be added to the balance at any time.

Interest is added to all balances.

Safety for your money is assured by our large capital and reserve funds and by our ample resources.

Your Account is solicited.

Capital:

\$4,000,000.

Reserve and Undivided Profits:

\$4,727,050.

Total Assets:

\$39,000,000.

INCORPORATED 1855

MARKETS.

Toronto.

LIVE STOCK.

At West Toronto, on Monday, March 15th, receipts numbered 45 cars, consisting of 886 cattle, 24 hogs, 80 sheep, 25 calves. Trade brisk, owing to light receipts. Prices firmer. Export steers, \$5.25 to \$5.60; bulls, \$4 to \$4.60; prime picked lots of butchers', \$5 to \$5.25; loads of good, \$4.75 to \$5; medium, \$4.40 to \$4.70; common, \$4 to \$4.30; cows, \$3 to \$4.30; canners and common cows, \$1.75 to \$2.65; milk cows, \$4 to \$5; calves, \$5 to \$7.25 per cwt. Sheep and lambs firmer; ewes, \$4.50 to \$5 per cwt.; rams, \$3.50 to \$4 per cwt.; lambs, \$6.50 to \$7.60 per cwt. Hogs, \$7.40, fed and watered, and \$7.15, f. o. b. cars, country points, to drovers.

REVIEW OF LAST WEEK'S MARKET.

Receipts of live stock were light last week, commencing at the Union Yards on Monday, and on each succeeding market day at the City yards.

Total receipts of live stock were 232 carloads, consisting of 3,456 cattle, 3,945 hogs, 623 sheep, 281 calves, and 205 horses.

The quality of fat cattle was generally medium to good, few well-finished, in comparison with those that were unfinished in both butcher and export classes.

Exporters.—Demand good, with prices for steers ranging from \$5.25 to \$5.50, with a few at \$5.60; some light 1,200 to 1,250 lbs. steers sold at \$5.10 to \$5.20. Export bulls sold at \$4 to \$4.50, with a very few at \$4.75 to \$5.

Butchers.—Prime picked lots of steers and heifers, 1,050 to 1,150 lbs., equal in quality to best exporters, sold at \$5 to \$5.25; loads of good to choice sold at \$4.75 to \$5.10; medium, \$4.40 to \$4.60; common, \$3.75 to \$4.30; cows, \$3.25 to \$4.30; canners and common cows, \$1.50 to \$2.65; bulls, \$3 to \$4 per cwt.

Stockers and Feeders.—Not many were on sale last week. Prices a little firmer, in sympathy with the fat cattle. Best steers, 900 to 1,000 lbs., \$3.90 to \$4.35; medium quality steers, same weights, \$3.75 to \$4.10; stockers, 500 to 700 lbs., \$3.25 to \$3.50. There was a few steers, 1,300 to 1,350 lbs., that had been brought in as exporters, but not enough to make a load, that were bought for short-keep purposes, to be fed in the distillery stables, at \$5 to \$5.45 per cwt. We merely quote these to show what faith a practical dealer, and one of the most successful exporters in past years, has for the near future in cattle prices.

Milkers and Springers.—There was a fair supply of milkers and springers, the bulk of which were of medium quality. Prices were unchanged, ranging from \$30 to \$60 each.

Veal calves.—There was a strong market for veal calves all week. Prices ranged from \$3 to \$7 per cwt., with a very few at \$7.25 to \$7.50 per cwt.

Sheep and Lambs.—Receipts light; prices firm, especially for yearling lambs. Ex-

port ewes, \$4 to \$4.50; rams, \$3.25 to \$4; grain-fed lambs, \$7 to \$7.50; common quality lambs sold at \$5.75 to \$6.50 per cwt. Spring lambs sold at \$5 to \$10 each.

Hogs.—Receipts light. Prices firm all week. Selects, fed and watered, closed strong, at \$7.15 per cwt., with \$6.90 to \$7, f. o. b. cars at country points.

Horses.—Trade at the Union Horse Exchange last week was the best of many months. J. H. Smith, manager, reports sales of over 250 horses, eight carloads of which were shipped to Manitoba, Saskatchewan and Alberta. Prices were quoted as follows: Drafters, \$160 to \$210, with a few extra-choice quality and heavy weights at \$225 to \$235; general-purpose horses, \$150 to \$180; wagon horses, for which there was a good demand, \$140 to \$210; drivers, \$110 to \$160; serviceably sound, \$35 to \$80, with some heavy weights in this class, \$100 to \$115.

The sale of imported and Canadian-bred Clydesdale fillies and mares, advertised for March 22nd, at the Union Horse Exchange, is postponed till March 26th, on account of a shipment of 25 imported 3-year-old fillies from the Old Country having been delayed in transit. This sale promises to be one of the most important of any yet held at the Union Exchange.

BREADSTUFFS.

Grain.—Wheat—No. 2 white, \$1.08, outside; No. 2 red, \$1.07 to \$1.08; No. 2 mixed, \$1.06 to \$1.08; No. 2 goose, \$1.01. Manitoba—No. 1 northern, \$1.20; No. 2 northern, \$1.17, on track, Georgian Bay ports. Rye—No. 2, 70c. bid. Peas—No. 2, 92c. bid. Oats—No. 2 white, 48c. bid, track, Toronto; No. 2 mixed, 47c. to 48c. Barley—No. 2, 58c.; No. 3X, 57c.; feed, 54c. Corn—American, No. 3 mixed, 71c., track, Toronto. Buckwheat—No. 2, 61c. bid, outside. Flour—Ontario 90 per cent. patent, \$4.10; Manitoba patent, special brands, \$5.80 to \$5.90; seconds, \$5.50 to \$5.60; strong bakers', \$5.40 to \$5.50.

HAY AND MILL FEED.

Bran.—Scarce and firm, at \$25, for car lots, in sacks, f. o. b. cars, Toronto. Shorts—Car lots, in sacks, at Toronto, \$25.50 to \$26. Flaxseed meal, in sacks, \$3 to \$3.25 per cwt. C. Caldwell & Co., Front street, Toronto, are selling a Manitoba meal, for live stock, composed largely of flaxseed, at \$28 per ton. Hay—Baled, \$10.75 to \$11 for car lots, on track, Toronto. Straw—Baled, in car lots, Toronto, \$7 to \$7.50.

COUNTRY PRODUCE.

Butter.—Receipts still continue to be heavy, with prices still lower. Creamery pound rolls, 25c. to 26c.; creamery solids, 20c. to 21c.; separator dairy, 21c.; store lots, 17c. to 19c.

Eggs.—Receipts fairly large; prices easier, at 25c. to 26c.

Cheese.—Market unchanged. Twins, 14c.; large, 13c. to 14c.

Honey.—Market firm. Extracted, 10c. to 11c. per lb.; combs, per dozen sections, \$2.50 to \$3.

Potatoes.—Receipts large. Prices easy, at 60c. to 65c. per bag, for car lots, on track, Toronto.

Beans.—Market firm. Primes, \$1.95 to \$2; hand-picked, \$2 to \$2.10.

Poultry.—Receipts light; prices firmer. Turkeys, 23c. to 25c.; ducks, 20c.; chickens, 20c. per lb.; fowl, 15c. per lb.

HIDES AND WOOL.

E. T. Carter & Co., wholesale dealers in wool, hides, etc., quote prices as follows: Hides—No. 1 inspected steers, 60 lbs. up, 11c.; No. 2 inspected steers, 60 lbs. up, 10c.; No. 1 inspected cows, 10c.; No. 2 inspected cows, 9c.; No. 3 inspected cows and bulls, 8c. to 8c.; country hides, 8c. to 8c.; calf skins, 12c. to 14c.; horse hides, No. 1, \$2.75; horse hair, per lb., 30c. to 32c.; tallow, per lb., 5c. to 6c.; sheep skins, each, \$1.10 to \$1.20. Raw furs, prices on application.

VEGETABLES.

Onions, per bag, 70c. to 80c.; turnips, per bag, 35c.; parsnips, per bag, 35c. to 40c.; carrots, per bag, 25c. to 35c.; beets, per bag, 35c. to 40c.; evaporated apples, 7c. per lb.

Apples.—Good to choice winter apples sell at \$3.50 to \$5.50 per bbl., by the lot of several barrels.

SEED MARKET.

The Wm. Rennie Co. report the market for seeds as being quiet, at steady prices,

as follows: Alsike, fancy, \$7.25 to \$7.50; No. 1, \$6.90 to \$7.20; No. 2, \$6 to \$6.50; red clover, \$4.60 to \$5.75; timothy, \$1.30 to \$2.25.

CLOVER SEED TRADE.

The following statement regarding the state of the clover seed trade has been issued by the Wm. Rennie Co., Limited, Toronto: There has not been the usual amount of export trade done in clover seed this season up to the present as has been generally experienced. With a big crop of very fine seed in the United States, Canada is not in the game. Fully 75 per cent. of the present Canadian crop should never have been saved for seed, on account of the weed seeds. What is to be done with the seed, is bound to worry the trade for the next two months. It is practically unsalable, and bound to be the source of a great annoyance to the trade.

The seedsmen have been refusing to make offers, and, although unsalable to the general trade, is bound to find an outlet to farmers themselves, who would not think of buying such qualities from dealers, but will take it from their neighbors as it is grown by them.

The low price of really fine seed should be an attraction to farmers this season to buy only the very best grades from reliable sources. A few of the large seed-houses have well-equipped cleaning plants, which enables them to furnish a first-class article at moderate prices.

Montreal.

Live Stock.—Exports from the ports of St. John, N. B., and Portland, Me., for the three weeks ending March 6th, amounted to 3,962 cattle.

On the local market last week supplies were rather larger than the previous week. This might have exerted a downward influence on prices, had it not been that there was a demand from exporters and out-of-town buyers, so that the surplus was readily absorbed. Prices, accordingly, held firm. Choice steers sold at around 5 1/2c.; a fraction more was paid in a few instances; fine steers 5 1/4c., and good 4 1/2c. to 5c.; medium stock brought 4c. to 4 1/2c., and common 2 1/2c. to 3 1/2c. per lb., lower grades being about 2c. per lb. Although the supply of sheep and lambs continued as light as ever, the demand was slightly less, and prices declined fractionally on lambs. Best sold at 6 1/2c. to 6 1/4c., and ordinary as low as 5 1/2c., while sheep ranged from 3 1/2c. to 4 1/2c., according to quality. The market for calves showed very little change, purchases being still made at \$3 to \$12 each. The market for hogs was generally firmer, and select lots changed hands at 7 1/2c., weighed off cars.

Horses.—Dealers appear to be looking forward to increased activity as the season advances. The quality of horses being asked for at present seems to be good, sound, farmers' animals, and some of these are being disposed of to outside points. Heavy draft, 1,500 to 1,700 lbs., \$225 to \$300 each; light draft, 1,400 to 1,500 lbs., \$185 to \$240 each; good blocks, 1,300 to 1,400 lbs., \$175 to \$200 each; small or inferior, 1,000 to 1,100 lbs., \$100 to \$150 each; broken-down animals, \$50 to \$75 each; and choice saddle or carriage animals, \$300 to \$500 each.

Potatoes.—Shippers were asking higher prices for potatoes, the quotation for Green Mountains being 80c. per 90 lbs., carloads, on track. Purchases, however, have been made at 75c. to 78c.

Poultry.—Prices were as high as ever, being 20c. to 21c. per lb. for fresh-killed turkeys, and 1c. less for frozen; 15c. to 16c. for fresh-killed chickens, and 1c. less for frozen; ducks were 12c. to 14c., and geese and fowl, 10c. to 12c.

Eggs.—After a period of firmness, the market for eggs showed a weaker tone, due, in part, to receipts of eggs from the United States, brought in from Chicago, mostly, and sold at around 26c., some quoting 25c. The costs included duty of 3c. per dozen, and express charges of 3 1/2c., or freight charges of 1 1/2c. Canadian eggs are always better than these imported eggs, and bring higher prices. The range for them was about 27c. to 28c. per dozen.

Butter.—The recent tendency towards lower prices appears to have been checked. Butter is cheaper than for some years past at the corresponding period of the year. It is difficult to predict what the market may do in the near future, but

IMPERIAL BANK OF CANADA

CHARTERED 1875.

Capital Authorized, \$10,000,000.00

Capital Paid Up, - 5,000,000.00

Reserve, - - - - 5,000,000.00

SAVINGS DEPARTMENT.

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

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

the general impression here last week was that prices would not decline any further. New-made creamery was quoted at 20c. to 21c. per lb., held stock being 21c. to 24c., according to quality, while dairy rolls were 18c. to 19c., and tubs 16c. to 18c.

Cheese.—Colored Ontarios, 13c. to 13 1/2c., and white, 12 1/2c. to 12 1/4c. per lb.

Grain.—The market for oats was firm last week, but trade was not very active. Prices, carloads, store, Canadian Western, No. 2 oats, 51c. to 51 1/2c.; extra No. 1 feed, 50 1/2c. to 51c.; No. 1 feed, 50c. to 50 1/2c.; No. 2 Ontario, 50c. to 50 1/2c.; No. 3, 49c. to 49 1/2c.; No. 4, 48c. to 48 1/2c.; No. 2 peas, 98 1/2c. to 99c.; No. 2 barley, 68 1/2c. to 65c.; Manitoba feed barley, 58c. to 58 1/2c.

Feed.—Official quotations for bran were from \$22 to \$24 per ton, shorts being \$21.50 to \$23.50, oil cake and cottonseed being \$32.50 to \$35 per ton.

Hay.—Prices rather firmer, at \$11.50 to \$12 for No. 1 hay, \$9.50 to \$10.50 for No. 2, \$8.50 to \$9.50 for No. 3, \$8 to \$8.50 for clover mixed, and \$7.50 to \$8 for clover.

Seeds.—Market steady and not very active as yet, dealers quoting \$13 to \$14 per 100 lbs. for red clover, \$16 to \$18 for alsike, and \$5.25 to \$6.50 for timothy, bag lots.

Hides.—The market declined 1c. per lb. for hides, owing to poor quality and lack of demand. Hides, 7c., 8c. and 9c. per lb., respectively, for Nos. 3, 2 and 1.

Chicago.

Cattle.—Steers, \$5 to \$7.40; cows, \$3.60 to \$5.50; heifers, \$3.25 to \$6; bulls, \$3.75 to \$5.25; calves, \$3.50 to \$8.25; stockers and feeders, \$3.30 to \$5.30.

Hogs.—Choice heavy shipping, \$6.85 to \$6.95; butchers', \$6.80 to \$6.90; light mixed, \$6.70 to \$6.80; choice light, \$6.75 to \$6.85; packing, \$6.75 to \$6.80; pigs, \$5.25 to \$6.10; bulk of sales, \$6.75 to \$6.95.

Sheep and Lambs.—Sheep, \$3 to \$6.25; lambs, \$6 to \$7.75; yearlings, \$5.60 to \$7.25.

British Cattle Markets.

London cables cattle at 11 1/2c. to 12 1/2c. per pound, dressed weight; refrigerator beef, 9 1/2c. to 10c. per pound.

Buffalo.

Cattle.—Prime steers, \$6.50 to \$6.75. Veals.—\$7 to \$9.50.

Hogs.—Yorkers, \$6.65 to \$7.05; pigs, \$6.30 to \$6.50.

Sheep and Lambs.—Lambs, \$5 to \$8.10.

IMPORTED CLYDESDALES AT AUCTION.

On Friday, March 26th, at Union Stock-yards, West Toronto, as announced in our advertising columns in this issue, a consignment of 35 imported Clydesdale fillies and three 3-year-old stallions, the property of the well-known importer and breeder, Mr. S. J. Prouse, of Ingersoll, Ont., will be sold, without reserve, to the highest bidder. These are said to be a high-class offering, combining breeding, size and quality in a high degree, and superior to any former offering of the owner, which is saying a good deal. With the prospect for continued high prices for heavy horses, these young mares should prove a good investment, as they can raise salable colts while doing farm work, and colts that will soon pay for the original investment.



Life, Literature and Education

At Frobisher, Sask., church union is an established fact. In this town were formerly two struggling churches, Methodist and Presbyterian; now there is but one, organized somewhat on the basis of a Congregational church, and the experiment is said to be giving very general satisfaction—unanimity promoted, no overlapping problems to be dealt with, just one prosperous church, instead of two half-dying ones. An experiment so satisfactorily worked out is likely to be copied. Already, several of the smaller towns of the vicinity are thinking of following the example of Frobisher, and the chances are that, without organization from any central head or assembly, church union may soon be an accomplished fact over a considerable portion of the West.

A Royal Commission, which has for three years been studying the condition of the English poor, has issued a report of 1,200 pages, which states that the conditions of life in London and other big towns are such as to produce a degenerate race, morally and physically enfeebled. This report may speedily find its grave as a bluebook on a department shelf. The investigation may prove to be a dead letter, as so many investigations have been before. Should the contrary prove true, it is to be hoped that some method of dealing with the problem, other than making a dumping-place of the colonies for the degenerates of the congested regions, may be resorted to; possibly, the vast extents of land held up in the British Islands as hunting-grounds for the nobility might afford a suggestion as at least a partial solution. Degenerates are a source of pollution of one kind or another, wherever they go, and it scarcely seems fair that the colonies shall be compelled to accept the onus of a product which they did not originate, and cannot receive without risk of national injury.

In the debate on level railway crossings in the House of Parliament, the question as to whether travellers along roads look enough to their own safety, was brought up. This is a point worth paying attention to. No doubt, many a serious accident might have been averted by a moment's precaution to ascertain the possibility of approaching trains. In connection with this subject, it may be interesting to note that Hon. Mr. Graham has introduced a Bill in the House of Commons, asking for a grant of \$200,000 yearly, for five years, towards a fund to do away with or protect level crossings in Canada. Doubtless, the money might be spent to a much less useful purpose.

Dr. Chown stated recently, in Winnipeg, that, at mass meetings held in Prince Rupert during the winter, to consider the license situation

there, the almost unanimous wish of the people was that no licenses to sell liquor be granted. It is indeed a hopeful sign of the times that Prince Rupert, the very newest of the important places in that land so long looked upon as "the wild and woolly West," should have declared such sentiments.

The news that steps looking toward the establishment of an efficient Provincial Police force for Ontario are actually under way, will be received with satisfaction by many who, because of recent calamitous occurrences in the Province, have become apprehensive of the public safety. The official head of the force will, it is understood, be the Attorney-General, under whom will be a general superintendent and divisional superintendents; also a strong force of secret-service men.

Recent news periodicals report a statement made by Mr. A. F. Jenkins, of Baltimore, at the annual meeting of the National Association for the Prevention of Premature Burials, held at London (Eng.), to the effect that a day or two before he left America he heard of a case in which a shriek was heard from a coffin hurrying on a fast trolley into the mouth of a crematorium. Another speaker declared he had come across 151 cases of persons who, according to medical testimony, had been interred alive. Even a few of such instances are enough to impress the necessity of being absolutely positive that death has taken place before interment, or even embalming, is permitted. No doubt, a "body," once handed over to the undertaker's care, is dead enough; the fluid used by undertakers in their work is a deadly poison. Yet, it is not pleasant to think that there may be a chance, in this way, of poisoning persons who may be still alive. As a general rule, it may be safely said, burials take place too soon. Mortification in some part of the body is the only proof-positive that death has taken place, yet most burials are hurried over with an impatience that leaves no time for this nature's proof to assert itself.

The trustees of the Wesleyan University, Middletown, Conn., have surrendered to the demands of its male undergraduates, and have voted that, hereafter, girls are to be excluded from that institution. Nine years ago a resolution was passed limiting the number of women to 20 per cent. of the total number of students, but, by a system of social ostracism, exclusion from class-meetings, etc., and deliberate insult of even a lower order, the number has been kept down to ten per cent. Even with this small number in the 1908 catalogue, the highest honors are divided equally between the sexes, and in the honors list there are two young women to thirteen young men—"A very patent reason," as N. Y. Independent notes, "why they want to rule the women out of the competition."

Judging from the fact that in Tufts College there is a small cry for a woman's executive, it would seem that the present situation

to spread in the United States; but there need be little fear that it shall cross the borders to Canada. In the Dominion there is the best possible feeling between the sexes in mixed schools, and the men have so far proved themselves manly enough to meet the women fairly on this equal ground. Even further, it is generally recognized that the presence of girls in a school conduces to the development of a spirit of justice and chivalry on the part of the boys, while the presence of the masculine element insures for the girls a teaching which embraces things of world-wide interest, with little danger of running off to branches of mere "accomplishment," the "little French, music, painting, and manners," which form, all too often, the sum total of the teaching in girls' schools.

This is the right conception. Sex is a merely physical attribute. Why, then, complicate it with things that pertain exclusively to the intellect? Sex is not of the intellect.

People, Books and Doings

The Wright Brothers, aeronauts, will visit London at the end of the month, when each will be presented with the gold medal of the Aeronautical Society of Great Britain, in recognition of his services in the science of aeronautics.

Mr. W. P. Frith, R. A., the veteran English artist, recently celebrated his ninetieth birthday, in full health of body and cheerfulness of spirit. He has led a life of marvellous artistic activity, and at the same time has found much pleasure in out-of-door exercises of all kinds, in travel and in study.

Eleven airships of various types have already entered for the airship show at the Alaska Yukon-Pacific Exposition, which opens in Seattle on June 1st.

The Society for the Prevention of Cruelty to Animals, in New York City, recently destroyed 84 Game cocks, valueless except as fighting cocks. In this respect their value was estimated at \$8,000.

Mr. Boyle Replies.

Editor "The Farmer's Advocate":

Mr. J. Dearness, in his reply, Feb. 25th, occupies one and one-half columns of your valuable journal, and utterly fails to prove his statement that English-speaking children spend one or more years longer in learning to spell and pronounce the English language than do the French or German children in learning the French or German languages, respectively. Instead, he finds fault with my grammar. The word "don't" doesn't appear to suit him. Why, I cannot quite understand, as it is on a line with his proposed "simplified spelling." Mr. Dearness says he doesn't advocate "English phonetically, and he approves of the Italian, where almost every letter is sounded. He says that Haasevelt and Caruso were not the originators of some bad spelling, and are merely imitators. He also says that the most eminent linguists of the world, such as Humboldt and Grimm, have

States (including Mr. Dearness himself). If Mr. Dearness is so anxious to cut off redundant letters, why doesn't he commence with his own name, and write it "J. Dearness"? The latest British lexicons give no support to Mr. Dearness in his raid on the English language.

WILLIAM BOYLE.

York Co., N. B.

Spelling Reform.

PAPER IV.

Interested readers of these letters on the state of our spelling have had time to verify the statements made in them. Unbiased consideration of the facts will prepare them to accept, without surprise, the great German philologist's remark, to the effect that the other nations of Europe may congratulate themselves that the English have not discovered that a whimsical spelling stands in the way of the world-spread of their language.

It is only partially true, however, that the English are ignorant of the whimsicality of their spelling. The greatest scholars in word-science in Oxford and Cambridge Universities, and the leading universities on this side of the Atlantic, have discovered and protested against the whimsicalities of our conventional spelling, with its cumbersome load of silent letters and its inconsistent and irregular use of the sounded ones. The editors of the three chief dictionaries in England, and the editors of the three leading dictionaries in America, approve of the simplification of spelling, and are officers of the organizations formed to simplify it. Four State Teachers' Associations, six Normal Schools, and three thousand teachers in colleges and universities have signified their approval of the measures adopted by the Simplified Spelling Organization. T. J. MacNamara, M.P., LL.D.; Hon. James Bryce, Ambassador to the United States; Dr. Gladstone, F. R. S., at one time a prominent member of the London (Eng.) School Board; Sir William Ramsay, the eminent physicist, are a few of the well-known names of British public men found in a list of supporters of the movement, or sympathizers with it.

Even the mass of the people may not be in ignorance of the whimsicalities in the common spelling, but, instead of regarding them as deformities, they seem to cherish them, just as the Chinese ladies cherish their distorted feet, and, forgetful or regardless of their own sufferings, inflict the deforming torture upon their helpless little girls in the "good old-fashioned Chinese way."

Limitations of space prevent more than a very brief statement of what the British and American Simplified Spelling Organizations have done, and are proposing to do. It is over thirty years ago since the British Philological Society proposed the improvement of the spelling of a long list of words. The American Association co-operated, but, although the changes and the general rules proposed were thoroughly scientific, they went too far to get a foothold in actual practice. Experience proved that success could be hoped for along the lines of more gradual change.

The first effective advance was begun in 1898, when the National Edu-

cation Association adopted the "Twelve Words" list, namely, "tho," "altho," "thoro," "thorofare," "thoroly," "thru," "thru-out," "catalog," "prolog," "dema-gog," "pedagog," and "program."

In 1906 the Simplified Spelling Board published a list of three hundred words, which, in different dictionaries, and by different authors, are spelled in two or more ways. Circular No. 5 of the said Board, published its approval of the form of each of these three hundred words, which was preferred and approved by the highest scholarship in the two countries. Anyone interested may obtain a copy of the circular by sending a postal card bearing the request to the Secretary of the S. S. B., 1 Madison Ave., New York. As samples of the recommendations, the seeker will find "abridgment" preferred to "abridgement," "arbor" to "arbour," "center" to "centre," "gage" to "gauge," "rime" to "rhyme," "strip" to "stripped," and "willful" to "willfull."

In January, 1908, a circular, proposing two general rules for simplification, was published. The first rule advised the dropping of silent final "e" in unstressed syllables containing short "i"; e. g., "reptil" instead of "reptile," "activ" instead of "active," etc. The second rule applied to words ending in "ed," pronounced "t," which should have the "t" restored or substituted for the "ed"; e. g., "cropt" instead of "cropped," "prest" instead of "pressed," etc.

The third list of simplifications, published about a month ago, advises: First, that words having "ea" pronounced short "e," should be spelled with "e," as "hed," "welth"; and "ea" pronounced as "a," before "r," should be spelled with "a," as "harth," "harken," etc.

Second.—Parts of the verb ending in "ed," pronounced "d," should be spelled as "arnd," "curld," etc. Third.—Words ending in unstressed "ice," pronounced "is," should be spelled as "practis," "cornis," etc. Fourth.—Words ending in "ve," pronounced "v," preceded by "l" or "r," should be spelled as "twelv," "carv," etc.

The changes are based on REASON, ECONOMY and AUTHORITY. There is a valid reason given for every change proposed. It is economical of time, and often of money, to reject useless, silent or misleading letters. There is the authority of the greatest scholars in word-science in Britain and the United States for the adoption of the spelling rules that are applied in the improvements suggested.

Circular No. 23, March 6th, 1909, to be had on request at the address given above, publishes the simplified forms of over three thousand words. Adopting the changes recommended would make the words easier for children to learn to spell, and would economize the time of everyone who has to write or print them.

JOHN DEARNESS.

A Goodly Heritage to Have and to Hold.

Under the caption, "The Size of Her!" the Sydney, N. B., Record tells us that "Canada is larger than the United States by about 178,000 square miles, and has a population of only one-twelfth of the latter country. Canada is as large as thirty United Kingdoms of Great Britain, and equal in size to eighteen Germanys. Canada is one-third the area of the British Empire, and half of this area is as yet not surveyed into Provinces. Only one-quarter of this vast area is occupied, and less than one-eighth is under cultivation. Canada contains approximately 3,729,635 square miles; more than one-third of this territory is at present unexplored. The unsurveyed districts of Mackenzie, Ungava and French are larger than China; the distance from Halifax to Vancouver is greater than from London, England, to Halifax, N. S. Canada ex-

tends over forty-eight degrees of latitude—a distance equal to that from Rome to the North Pole."

A goodly inheritance, indeed, but one involving very grave responsibilities on both sides of the Atlantic, for it is impossible to separate the interests of the motherland from those of the daughter-lands overseas.

Without venturing to touch upon the political aspect of this vast question, let me refer to some inspiring words, uttered in the pulpit of Christ Church Cathedral, on the occasion of the late Jubilee Synod of the Diocese of Montreal, by Dr. Paterson Smyth, now a well-known name on both sides of the Atlantic. Speaking of the prediction of the prophet Isaiah, "The nations shall come to thy light, and kings to the brightness of thy rising," he pointed out the glorious opportunities awaiting the messengers of the gospel throughout the length and breadth of our almost illimitable country. His hopeful words were perhaps uttered more from the point of view of a minister of the Church of England, but as they cannot fail to touch a kindred chord in the hearts of all alike to whom is dear the welfare of the land of either their birth or their adoption, I will quote them in full.

"I wonder," he said, "if any of you who are born Canadians can

westward stream, and think of the life before them, and of the old fathers and mothers at home listening for the postman's knock—I hear also the call of the Church calling, calling for help to wrestle with this new national life. It seems to me that never since the Acts of the Apostles was such an exciting opportunity, such an inspiring Church history as this of Canada. I heard the other day of a huge district on the Saskatchewan border, 1,000 miles by 100 miles, which, only two years ago, was practically uninhabited, and now has over a hundred townships scattered through it. I see that everywhere the Church's problem is how to follow the steels and to follow the pioneer crowds settling in all directions, at city and prairie and forest and mine. After the depression of stagnant life and dwindling parishes in the Old Country, this is the sort of prospect that stirs the blood."

Let me quote another appreciative utterance. This time the words are those of the Bishop of Stepney, who is now raised to a still more responsible position as Archbishop of the Church of England, but who was elected by the Synod of Montreal as its Bishop. Voicing his regrets that circumstances had intervened which made his acceptance of the intended honor impossible, he said, speaking



Suggestion for a Small House.

Note groups of windows, giving adequate lighting and an artistic effect.

realize how that outlook stirs the blood of a man from the quiet Old Country. I was never before at the birth of a national Church, and it is to me a very exciting thing, even at this distance from the chief seat of activity. For Canada is the joining line of two worlds. We are building our church on the central highway of the earth, between the strong, vigorous civilization of the West and the ancient nations of the East, now stirring in their sleep. I see China and Japan coming from the slopes of the Pacific. Whether they be desirable or not, God's Providence has sent them to us to give them His Gospel. And I see the Jew escaping from Russian tyranny, and the men of Central Europe coming for freedom and a home. And especially I see the races of the Old Land, English and Irish and Scotch, blending into the British Canadian race that shall be. I can stand outside the door of my own parish church (St. George's, Montreal), and see before me the two great railway stations in my parish, the great gateways of the West, and all through the season there is pouring through these gateways a continual stream of emigrants, 200,000 every season, mostly men, mostly young, mostly of our kith and kin, from over the sea. They hear the call of the West calling, calling. And as I watch the

at a great missionary gathering in the East End of Old London: "It was one of the greatest honors of my life that those dear, unknown Canadians, feeling the thrill of the great future that God seems to be opening out before their nation, should ask me to come and take a share in it. My heart has been moved by the letters, so touching and warm-hearted, that I have received from all sorts of people in that great nation of Canada. My dear London people, you think the future lies before you. Not a bit. It lies far more with those nations in Canada and Australia. There, and not here, is the pivot of the future. I wish that I could have felt it my duty to go out into this wider world."

A writer in the March Quiver closes an admirable article upon the subject, "How Canada Welcomes the Emigrant Girl," with the following words of practical common sense: "There can be no sounder bond between England and her colonies than the human bond, and there can be no fairer seed-ground for the exercise of man's privilege to help his poorer brother than Canada; but the thinker of England must rise to the height, and expand to the breadth of the giver, if there is to be life, and not death, in the gift."

H. A. B.

Appreciated in South Africa.

A reader of "The Farmer's Advocate" writes to H. A. B., from Shaftesbury, Dorset, England: "We here do so much appreciate the Home Department of "The Farmer's Advocate," and my son in South Africa values the whole of the paper. He says he finds so many useful hints suitable for their little colony in South Africa. He and his neighbors look eagerly for the copy I send them, and enjoy it much."

The Quiet Hour.

The Mystery of Fellowship.

The soul of Jonathan was knit with the soul of David, and Jonathan loved him as his own soul.—1 Sam., xviii., 1.

"I count that friendship little worth
Which has not many things untold,
Great longings that no word can hold,
And passion-secrets waiting birth.
Along the slender wires of speech
Some message from the heart is sent;
But who can tell the whole that's meant?
Our dearest thoughts are out of reach."

As the years pass, I wonder more and more over the mystery of fellowship, that strange and beautiful gift of God, by which souls are knit together and find a strange joy—a joy that is always wonderful and new—in "the open heart of a friend that can understand without a word." Surely no life is so poor as to be ignorant of the value of a real friend; therefore I write on this subject very often, feeling sure that it is one which must appeal to all our readers.

Without friends, on whom the heart leans in happy confidence, life would be sad and dreary, beyond all question. Our souls are continually reaching out to the souls of others and drawing from them the strength which can never be found in our own personality. Union is strength. Band men together and they will be far stronger than the same number of men working singly. In spiritual things the more a man gives away the more he has, so the people who give freely to others of their store of spiritual strength find themselves growing richer and stronger in the act.

Let us examine this wonderful talisman of "fellowship" which can transfigure and glorify existence, which can make the heart sing for joy in the midst of sordid surroundings, and without which no one can be really happy, though he be clothed with purple and fine linen, and fare sumptuously every day. Most people would be delighted to learn an easy and sure way of becoming rich, though—in theory—they are quite ready to own that happiness cannot be bought with money. The desire for happiness is an instinct planted by God Himself in every human heart, and He has not given the instinct without opening the way of satisfaction to it. Think back over your life and see if the brightest, sweetest hours in it were not the times of high and holy fellowship with other spirits akin to yours, or with Him who is nearest of kin to each human soul, the only Friend who perfectly understands the thoughts which cannot be translated into words.

"The human heart asks love; but now I know
That my heart hath from Thee
All real, and full, and marvellous affection,
So near, so human; yet divine perfection
Thrills gloriously the mighty glow!"

I don't understand how anyone who believes in heaven at all can put the often-repeated question, "Shall we know each other there?" Why, any of us would rather stay here, if entrance into that new life meant separation from our friends. Heartsick and lonely we should turn away indifferently from gates of pearl and golden streets, and care less than nothing for "mansions," if they were not to be "homes"—and home is where love is, and nowhere else in earth or heaven. The higher we climb in

reaching after God, the more sure we are that love—which is the heart and soul of fellowship—is the only thing which can make life worth living. As for "knowing each other," we can only really know those whose spirits are akin to ours—and how mysteriously do we recognize a kindred spirit! This recognition of our friends is spiritual even here. In one sense of the word, we may say that we never see anyone. We can see the body, but the person is hidden beneath the veil of the flesh.

"I have not seen thee, though mine eyes
Hold now the image of thy face;
In vain, through form, I strive to trace
The soul I love: that deeper lies.
A thousand accidents control
Our meeting here. Clasp hand in hand,
And swear to meet me in that land
Where friends hold converse soul to soul."

But, in another sense, we can see the invisible person, can feel the texture of his spirit with our spiritual senses, and are instinctively attracted or repelled by his personality at the first meeting. But the friendships which glorify life and inspire us with joy and strength and courage are usually the old, tried friendships which have slowly but surely woven themselves into our very being. Such fellowship is restful and satisfying. It may not show itself in many words—there is little need of speech when we are perfectly sure of our friends' loyalty, and when "as in water, face answereth to face, so the heart of man to man." It is, indeed, a joy to those who fear the LORD to speak often one to another; but speech is only outward after all, while fellowship is inward, and mysteriously unexplainable. The friend who knows our thoughts before they are spoken, is always easy to converse with, or to be silent with. Such a friend not only brings out the best that is in us, but also brings out an ideal, possible best which is not yet ours. Love is not blind, but rather has eyes so keen and far-sighted that they can see the oak acorn, the butterfly in the crawling worm. It is very discouraging to have friends—so called—who are continually finding fault, on the principle that it is wholesome to be told of faults, so that they may be corrected. On the other hand, it is grandly inspiring to have friends who see in you a beauty of holiness which is not yours. Rather than disappoint their trust, you will reach after that potential beauty until it becomes your rich possession.

Of course, I am talking of real friends, with whom real spiritual fellowship is alone possible. A friendship of convenience—a sort of partnership for business purposes—is like a marriage of convenience, there is nothing sacramental or immortal about it. Such "friends" can be cultivated or dropped without much trouble or inconvenience; but true friends are not won so easily, and a real parting with a real friend involves terrible pain. By a "real parting," I don't mean a physical parting, for friends who can be divided by distances or death, are certainly not real friends. As Hugh Black says:

"The highest love is not starved by the absence of its object; it rather becomes more tender and spiritual, with more of the ideal in it. Ordinary affection, on a lower plane, dependent on physical attraction, or on the earthly side of life, naturally crumbles to dust when its foundation is removed. But love is independent of time or space, and as a matter of fact is purified and intensified by absence. Separation of friends is not a physical thing. Lives can be sundered as if divided by infinite distance, even although materially they are near each other. This tragedy is often enough enacted in our midst." We can often be more really "in touch" with people when they are not near enough in body to irritate us with little mannerisms and uncivil habits. Those who are living in the midst of friends are often more to be pitied than those who appear to be in far more lonely circumstances. It is never wise to judge by outward appearance, for Browning is not the only person who has discovered that:

"If I think but deep enough,
You are wont to answer, prompt as rhyme;
And you, too, find without a rebuff
The response your soul seeks many a time
Piercing its fine flesh-stuff."

But let us remember the warning Tennyson gives in "Geraint and Enid," and never let the power of fellowship do harm to ourselves or others. If happiness—even the purest earthly happiness—be our aim and object in life, then the heart will be a clog and weight to the spirit, and human fellowship will be a power to drag down instead of wings to uplift the soul. To hold back—or try to hold back—another from the path of duty, because it involves pain, is to degrade the glorious God-given power of fellowship, and it can only result, as Eve's misuse of her strong influence over Adam resulted, in failure and misery. The mother who encouraged her seven sons to be faithful to their conscience and their God, though she was sending them to torture and death, was not unfeeling. Her strong, clear-sighted love saw that the "kingly spirit" must never be sacrificed to save its "servant, the body." She knew it was far better to part for a time from those she loved rather than, by word or thought, attempt to hold them back when God called them to go forward.

The power of Christian fellowship flows—as all power does—from God. To say, with S. Paul, "I have you in my heart," is to say also with him, "This we also pray for, even your perfecting." When a heart is uplifted to God, the friends whose hearts are knit with it, must be uplifted too. How often conscientious people actually try to cut out of their prayers the dear ones who are linked more closely to them by the mysterious bond of death. How the angels must wonder at such a hopeless attempt to go directly against our highest, holiest instinct. To deliberately cut the name of a departed friend out of one's daily prayers is not to cease to pray for him. God reads our unuttered desires. He does not need words. A prayer that is made of words alone, without the desire of the heart, may be meaningless to Him; but the unspoken love of a faithful, loyal heart for those who, though out of sight, are certainly not out of mind, is real prayer, and cannot fail to help in the perfecting of those who are still very members with us in the mystical body of Christ. Death was never intended to be a barrier between souls. They are not dead, but living, and while our hearts are linked indissolubly with theirs, every prayer which a loving child of God breathes into His ear, cannot fail to be a prayer to "our" Father for "our" daily bread—whether any names are mentioned or not. Though we may deceive ourselves, we can never deceive God into thinking that words without love are real prayer, neither can he fail to recognize real prayer, if love without words be held up longingly to Him. The hearts of men on both sides of the veil are bound with the living, throbbing cord of love to the Heart of God, and love—being of the very essence of God—is living fellowship and communion with Him, and therefore the only true and real prayer. For prayer is by no means necessarily asking for something.

Lastly, let us not make the mistake of under-estimating the cost of Christian fellowship. The King and Lord of Love could not be joined in closest fellowship with us without deliberately choosing the Cross, and if we link ourselves in close fellowship with others, we, too, must be prepared to pay the price of love. To some extent we must, like our Master, make our brother's burden of sin and suffering our own, and how can we tell where the path of love may lead? If fellowship is sure to bring Joy, it can hardly fail also to bring Pain, not merely an easy, sentimental emotion, but a stern, cold reality, which is not pleasant at all. There cannot be a real sharing in the joy of Christ's other members without a real sharing also in their suffering. How can we look down unconcernedly or scornfully on a sinner if we are "one with him," and his sin is, in a very real sense, our sin, too? The battle against sin is forced upon us by the misery it brings, for the sin of each member of the Body is a matter of vital concern to the whole Body, as well as to Christ, its Head.

If we do not fail our brethren, there is little fear that they will fail us. We shall be the greatest losers if we neglect to use for God's glory the wonderful power of fellowship. Life is a mirror, in prayer as in everything else, and what we give in good measure will be rendered

back richly and generously. Pray for your friends, and trust your friends to pray for you. Can you render to them grander service than that? If so, what is it?

"One friend in that path shall be
To secure my steps from wrong;
One to count night day for me,
Patient through the watches long,
Serving most with none to see."

DORA FARNCOMB (HOPE).

Dear Sir,—

I may say I am a constant reader of your valuable paper, and I think every home on the farm should have it.

I have been much interested in the many questions that have been asked by your subscribers, so I would like to see in the columns of your valuable paper, one or two blessings suitable for meal time, which I think would be of benefit to your readers. Hoping that this will be worthy of space in your paper, and oblige.

A SUBSCRIBER.

Simcoe Co., Ont.

I shall be very glad to hear from our readers on this very important subject—some people, who would like to ask God's blessing on their food, may be glad of a suitable form of words to use. D. F.

With the Flowers.

Trees and Shrubs for the Farmer's Home.

With all our wealth of native trees and shrubs, hundreds of which can be had for the digging in the woods and swamps, one often wonders why a little more attention has not been paid to planting them around the homestead. When to our native trees and shrubs are added other lovely flowering shrubs from foreign countries, easily procured and reasonable in price, why does the farmhouse and surroundings remain bare and uninviting? The planting of a few trees and shrubs takes but little time. If you want a tree or a few shrubs, you will have to plant them and wait for them to grow; you will never have them if you don't plant them; hence, the sooner they are planted the sooner you will have the pleasure of seeing them grow. You cannot put up a tree as you would build a barn, or a house, in a few months' time. Time only will put up a tree on your farm, or a few shrubs on your lawn. The pleasure and comfort these give to a house, aside from their commercial value, cannot be too highly estimated. Farms well planted with trees, and the grounds around the house with shrubs, etc., will sell any day for a thousand to fifteen hundred dollars more than the same farm without them. I could name you a farmer who got \$60 damages from a company who cut the limbs off some of his trees on the roadside. Another party recovered \$70 for loss of a handsome tree.

In order to assist the readers of "The Farmer's Advocate" in selecting a few of these desirable trees and shrubs, I give your readers a few of the best and most desirable. The success and good results so largely depend on the way those trees or shrubs are planted and cared for during the first two years, that a few hints on this part of the work will not be out of place. In the first place procure good stock, much prefer good nursery stock. If you go the right way about it, you can buy pretty reasonably. In planting trees and shrubs, prepare the ground by making a good large hole. If the soil is not very good, throw out the poor and replace with good soil. Plant your tree about four inches lower than when in the nursery, fill in around the roots, finally tramping and packing solidly, then give your tree or shrub a good mulch of four or five inches of good strawy manure. Keep this well around the roots all summer. This will keep the ground cool and retain the moisture around the roots. If this is well attended there is no reason for watering.

Now, as to varieties, I can give you many. I would like to see a farm with one or two good trees and shrubs.

A dozen poor ones. The real pleasure in all this line of work is in having something good; something that you can look at and show your friends or neighbors with pride and pleasure. I know many flower lovers who only grow two, three, or four kinds, at the most, but these are extra varieties, good, and worth going a long way to see. I can recall a bed of tuberous begonias that was well worth a ten-mile trip to see.

I would strongly advise putting in a few trees that are out of the ordinary, such as one or two cut-leaved weeping birches, also two or three Oriental Plane trees. These are very pretty in the winter, their white bark standing out and blending with the leafless trees. Then a Sweidler Norway maple, a Catalpa Speciosa, a Camperdown elm, will be a great novelty, as will also a Huntington elm. Don't cover your lawn up with these; plant them along the front of your home, or up the driveway to the house and barn. These, with a few Norway spruce, will fill in the frame of your picture; then the house, with some shrubs and flowers around it, will make your picture complete. Make your house and its surroundings your picture, with the trees and shrubs as the frame.

Now for a few shrubs: The first one I would name is Spirea Van Houttii. This is a hardy, beautiful shrub, flowers pure white, hanging most gracefully in small, compact clusters. A graceful, beautiful shrub when in bloom, which is about the last week in May to first week in June.

Barberry Thunbergii.—A dwarf, compact shrub with bright green leaves, changing in autumn to deep red, with scarlet fruit, which is very ornamental through the winter.

Dogwood, Red Siberian.—A pretty, low-growing shrub, with bright red bark in winter.

These three, placed around the sides of your house, with a few low-growing perennial flowers in front of them, will give your house a cozy, comfortable, homelike appearance. Plant them fairly close, about three or four feet apart, the perennials eighteen inches, in groups of three or four or more, according to situation and your taste.

Another shrub we must not forget is the Hydrangea paniculata grandiflora. This is a most beautiful shrub, blooming late in August and early September. This shrub wants special care and treatment, and when this is attended to, you will have something you will be proud of. Plant them as a border in a sunny place, or as a bed on the lawn in clumps of four or six or more. Before setting these, take out about eighteen inches of the soil, and then fill in with at least one half well-rotted manure with the soil. Set your shrubs on this; keep them well mulched with good manure every fall. Keep the shrubs low down by cutting well back, and don't fail to cut back the new wood every fall to two or three buds. This is very important. I have seen shrubs of this variety with over 300 blooms. When the bloom is setting, give them plenty of water.

These few trees and shrubs are all hardy, and easy to grow. I would again urge. Keep your trees and shrubs well mulched the first two years. Don't allow the chickens to scratch this all away; lay some brush about the roots.

Some time in the near future I may give your readers a list of a few good perennials. Every farmer's home should be surrounded with shrubs and perennials; they are so modest, homelike, and what is more, they show that the owners and the family have good taste.

J. S. PEARCE,
Parks Superintendent, London, Ont.

The Light at the Gate.

There's aye a licht at our wee gate,
Gang by at any hour ye maun;
It's never dark or eerie,
But aye bricht and cheerie,
At our wee gate.

Let the air be thick wi' snaw,
And the win' blaw snell;
Ye'll tire oot yersel'
Gin ye gang by the licht
At our wee gate.

Noo, freens, let yer licht aye shine
That nae may tyme the road
Let the beacon ever burn;
Keep the wanderin' aye frae harm
At the licht at your wee gate.

The Ingle Nook.

Sandwiches—Ginger Cakes.

Dear Dame Durden,—Can you tell me, through your valuable paper, the way to make peanut sandwiches? I have eaten them quite often, but never knew how the dressing was made.

Did any of your readers ever hear of sea-foam icing? It is made with brown sugar, boiled on the stove until it hairs, and the beaten white of an egg beaten in last, and flavoring also. Use the same quantities as you would with white-sugar icing.

Here is also a cheap recipe for ginger cakes, which I find very nice:

One cup brown sugar, half cup baking syrup, one cup butter or lard, spices to taste, two teaspoons ginger, one cup sour cream, one teaspoon soda, flour to thicken. "AENONE."

Middlesex Co., Ont.

To make peanut sandwiches simply run the peanuts through a meat chopper, and spread on buttered bread as ordinary sandwich filling. Some mix the nuts with salad dressing, others simply sprinkle with salt. A lettuce leaf may be placed in the sandwich also, if liked, or peanut butter may be used instead of the chopped nuts. For a more fancy sandwich, mix the chopped nuts with whipped cream and place between slices of gingerbread, or Boston brown bread. As for the dressing, any ordinary salad dressing may be used. A very good recipe is the following: Beat 2 eggs well, then beat in with them 2 tablespoons sugar, 1 tablespoon (level) of mustard, mixed in a little milk; a little salt. Next add 1 cup vinegar, and heat in a double boiler until smooth and creamy, stirring one way steadily. Add a piece of butter the size of an egg. This dressing will keep for some time in a sealer. When you require to use it, take out as much as you require and whip it with a little good cream. Use just enough cream to give a mild, pleasant flavor.

A Letter from "Anxious Mother."

Dear Friends of the Ingle Nook,—You will think I have been very tardy answering your kind letters, but I have been waiting to see what the results would be from feeding Baby "modified milk." Now, I think she is improving quite nicely already, so I wish heartily to thank Jack's Wife, Another Mother, Mrs. R. L. S.; also the lady who so kindly offered to loan me her book, and all others who were so kindly interested in my query. The food given to Baby previously, I believe, was too strong for her, and it was very hard at first to satisfy her with the milk. The doctor said she had inherited a great appetite, he believed, and now, at three months' old, she will not be satisfied with less than five ounces, and often cries so hard and chews her little hands so ravenously I have to feed her every two hours.

She is troubled greatly sometimes with gas and constipation, and, although I have tried Castoria, Cascarets, and Cascara, nothing seems to give lasting relief. I use a Glycerine Suppository almost every day, but even that does not effect a cure. I have been advised to use Milk of Magnesia. I would like to know if any of the Nookers have used it, and if they can recommend it.

I should like to tell Alpha Beta that I agree with her in all she wrote on the question of wedding presents. It always appeared to me that a wedding festivity should be confined to the very immediate relatives of the contracting parties; those whom we knew would offer their gifts whether invited or not.

Now, I am afraid I shall claim too much space in print if I write much more, but if the following recipes are not printed, and my letter finds the waste-basket, I shall not blame dear Dame Durden in the least.

Walnuts may be quickly chopped for cakes or Waldorf salad by placing them in a tough paper bag and rolling firmly with the rolling-pin.

Hermit Cookies.—2 eggs, 1 large cup sugar, ½ cup shortening, ½ cup sour milk, ½ teaspoon of soda, ½ teaspoon of cinnamon, 2 cups oatmeal, 2 cups flour, ½ cup chopped raisins, 1 cup chopped walnuts. Drop from the spoon and bake in a moderate oven. These cookies keep excellently.

Oatmeal Macaroons.—White of 1 egg

beaten stiff, large half cup sugar, 1 cup oatmeal, 1 teaspoon baking powder, 2 teaspoons vanilla. Roll with wet hands into balls as large as marbles; then bake.

Graham Wafers.—3 cups rolled oatmeal or graham flour, 2 cups flour, 1 cup butter, 1 cup sugar (coffee sugar preferred, but use 1½ cups), a little cinnamon, 1 teaspoon soda, dissolved in 1 cup boiling water. Roll thin and cut in squares. If desired, these cakes make very good jam-jam. ANXIOUS MOTHER. Middlesex Co., Ont.

Discussion Asked For.

Would like a discussion on how a woman could save time and steps. Huron Co., Ont. DINAH.

This is a question which is almost perennially up for discussion in this Department, but perhaps Dinah is a new subscriber, and so has not been able to take advantage of past talks on the subject. Will someone who has the solution of the problem satisfactorily worked out, please answer?

Sponge Taffy.

Mr. J. H. M. asks how to make sponge taffy. Can anyone answer?

Our Scrap Bag.

There is no excuse for going about with an untidy collar-fastening at the back. Put the collar around your neck with the back of it to the front, but without putting the arms in the sleeves of the waist. Fasten the collar neatly, then turn waist around and insert arms in sleeves. A loose blouse or shirtwaist buttoned down the back may be buttoned in the same way with perfect ease. Turn the back to the front, button, then turn the waist around to its proper position and insert arms. Of course, this will not work with a tight waist.

I discovered a very good way of poaching eggs the other day. Let the water come to a boil, salt it a little, then remove to a spot where it will keep quite hot, but neither boil nor simmer. Drop the eggs in, cover closely, and let stand eight or ten minutes. They will come out delicately cooked, without undue hardening of the white, and in very good form for slipping on toast.

Keep a knitting needle in the kitchen for testing things with when cooking. A fork makes too many holes.

Recipes.

Candied Orange and Lemon Peel.—Collect the peel by placing in mild salt and water until the desired quantity has been secured, then cut in strips, place in cold water, and boil. As soon as the water tastes salty and bitter, change, and repeat with cold water again. When clear, make a thick syrup and boil down until the syrup is gone. Turn on plates and partially dry, then roll in granulated or powdered sugar.

Pickled Eggs.—Boil the eggs quite hard, for half an hour, and when cool shell them and place them in wide-mouthed sealers. To 1 qt. vinegar add 1 oz. each of ginger and salt, ½ oz. allspice, and 2 oz. black peppers, well bruised. Bring this to a boil, then take at once from the fire, let stand a minute, then pour over the eggs, covering them completely. Seal tightly.

Veal Loaf.—3 lbs. veal and ¼ lb. salt pork, chopped fine. Season with salt, pepper, and sage, and add 2 eggs and 1 cupful powdered crackers. Mix all well together, and pack in a loaf-pan which has been well greased. Bake one hour, and serve cold, cut in thin slices.

French Mustard.—1 egg, 1 teaspoonful sugar, 1 teaspoonful mustard, ½ teaspoonful flour. Beat all to a cream, then add 1 teaspoon vinegar. Put on the stove and stir until it thickens.

Lady's Fingers.—2 eggs, 1 cup white sugar, ½ cup butter, ½ cup sweet milk, 2 teaspoons baking powder, enough flour to make a soft dough. Twist off small pieces of dough and roll with floured hands into rolls as large as your finger. Cut into 4-inch lengths, put in buttered tins, and bake quickly.

Omelet.—2 eggs, well beaten, 1 cup milk, pinch salt, 1 small dessertspoon corn-starch, cream tartar to cover a five-cent piece, half as much soda, moistened with

a little milk. Add to eggs and immediately put into a warm, buttered pan; cover tightly, and cook.

Answer to Jack's Wife.

Dear Jack's Wife,—In reading your letter in issue March 4th, of "The Farmer's Advocate," the "spirit" moved me to write to you at once, and send on my recipe for omelette, with which I am tolerably successful, without a "witch's incantation." I may say I obtained it from a first cousin, a full-fledged, trained nurse, later a matron in a U. S. hospital. It was the way she was taught to make omelettes for her patients while training in New York.

Plain Omelette.—Beat whites and yolks separately, add one tablespoonful of water or cream for every egg used—to the yolks, also salt, pepper, and a pinch of parsley. Have your pan hot, and a little butter in it. If possible, ask Mr. Jack to pour the yolks slowly on to the dish of well-beaten white, while you continue beating, and then slip quickly into hot pan. Don't turn, but put on top of oven for a minute or two. I truly hope you and Mr. Jack will relish the result.

Please remember the yolks must be poured on to the whites, not the reverse, which is usual.

I must add a line to the rest of the "Chatterers." In buying my seeds at this time of year, I always buy ½ or ¾ lb. of "Lazy Wife's Pole Beans," for the express purpose of salting them for winter use. I have been told my beans in winter taste like freshly-picked ones. I know we are all very fond of them ourselves. I use a stone crock, and put a liberal sprinkling of salt for every inch or so of sliced beans. They must have a large plate and heavy weight on top all the time, or else the top beans will start to mildew before the pickle is formed.

One word more about eggs. One spring, in April, or May, I packed fully thirty dozen of eggs in lime water, in stone crocks, and I used them exactly one year later and found them perfect. A boarding-house lady in the "Capital" used to buy fifty dozen eggs every April for about 10 cents per dozen, and gave them to her boarders every morning, all the year through, and they were certainly good. Remember there is "lime water" and "lime water." One cousin of mine cooked her twenty dozen almost ready for the table.

Sincerely hoping these suggestions may be useful, I will now make my

EXIT.

So you have been to the Capital! Did you attend "Normal" there?—You write like a school-ma'am. If so, shake hands over it, won't you?

"The Farmer's Advocate" Fashions.



6230 Plain Shirt. Waist, 32 to 46 bust.

6230.—The plain shirt waist is one which every woman needs. This one can be made, as illustrated, with regulation sleeves or with plain ones that extend in points over the hands, and can be utilized for the simple, mannish, tailored waist, or as a foundation for daintier ones that are either tucked to suit the fancy, or cut from already tucked material. In this case, butcher's linen is simply stitched, and the waist is one of the plain, useful sort. If it were cut from tucked material, and made with the plain sleeves shown in the back view, it would take on an entirely different aspect, yet the same model is correct for both.

The quantity of material required for the medium size is 3½ yards 21 or 24, 2½ yards 32 or 1½ yards 44 inches wide.



6265 One Piece Corset Cover, 32 to 42 bust.

6265.—The simple corset cover that involves little labor in the making is one that appeals to the greater number of women. This model is just full enough to be pretty under the fashionable blouses and is especially designed for flouncing. When made from that material, it means only the sewing up of the shoulder and under-arm seams, but it can be made from plain lawn, batiste, cross-barred dimity, or any material of the sort, and the upper edge either embroidered by hand or trimmed with lace frills, or finished in any way that fancy may suggest.

The quantity of material required for the medium size is 1½ yards 16 inches wide, with ½ yard of plain material 36 for the poplin and sleeves, 1½ yards of beading, 1½ yards of edging.



6268 Boy's Overalls, 4 to 8 years.

6268.—The quantity of material required for the medium size (6 years) is 2½ yards 24, 2½ yards 27 or 2 yards 36 inches wide.

The above patterns will be sent to any subscriber at the very low price of ten cents per pattern. Be careful to give Correct Number and Size of Patterns Wanted. When the Pattern is Bust Measure, you need only mark 32, 34, 36, or whatever it may be. When Waist Measure, 22, 24, 26, or whatever it may be. When Misses' or Child's pattern, write only the figure representing the age. Allow from one to two weeks in which to fill order, and where two numbers appear, as for waist and skirt, enclose ten cents for each number. If only one number appears, ten cents will be sufficient. Address: "Fashion Department," "The Farmer's Advocate," London, Ont.

A Mistaken Situation.

A rather elderly gentleman stepped on a Fifth Avenue car in Pittsburg about 11 o'clock the other night, and after giving the conductor explicit directions to wake him when the car reached Federal street, seated himself in a corner and was soon sound asleep. When he had ridden about half a dozen blocks beyond Federal street a sudden lurch of the car awakened him.

Rubbing his eyes, he looked out of the window, and, seeing where he was, angrily accosted the conductor thus: "Conductor, why didn't you wake me up as I told you? Here I am a half-mile past my house."

"I did try, sir," responded the conductor, "but all I could get you to say was, 'All right, Mary, get the children their breakfast and I'll be down in a minute.'"

Bright Housekeepers Appreciate DIAMOND DYES

Bright housekeepers all over the country are learning really to appreciate the true helpfulness of Diamond Dyes.

They have learned that

- dressing children is simple and inexpensive with the help of Diamond Dyes.
- old dresses can be made bright and new and up-to-date.
- waists can be re-colored and made over into new, stylish creations.
- partly worn clothes can be ripped up and dyed and made into skirts, waists, or something for the children.
- faded curtains and portieres can be colored some pretty shade and made to look like new.
- old spotted or faded ribbons can be colored and made exactly as fresh as new.
- stockings, trimmings, etc., can be transformed into new, fresh colors.
- rugs and carpets can be made to look like new.
- hundreds of other things can be done with Diamond Dyes to solve the dressing problems and brighten the home.
- the new Diamond Dye Annual tells of these things and many more Diamond Dye secrets.



"My Little Daughter's Spring Clothes."

"I send you a photograph of my little daughter and the Norfolk knit-jacket I dyed and made over for her. I think it is only right that I should write and tell you how much Diamond Dyes mean to me. They mean that dressing my little girl and myself doesn't worry me any more the way it used to.

"My little girl's spring clothes are all finished, and I only bought the material for one dress. I made her three dresses, three waists, one extra skirt and the jacket she has on in the photograph. I made over things of her aunt's and mine and used Diamond Dyes. That's how she is one of the very best dressed girls in her school to-day." *Mrs. B. K. Crocker, New York City.*

Important Facts About Goods to be Dyed:

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.

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

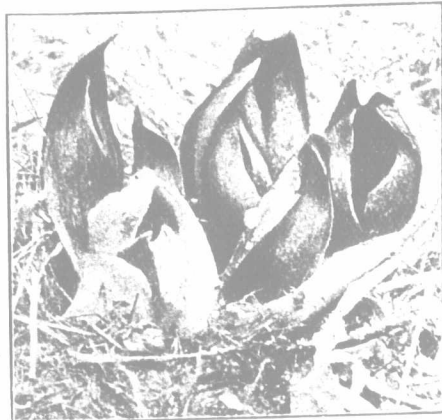
Diamond Dyes for Cotton are especially adapted for Cotton, Linen, or other vegetable fibres, which take up the dye slowly.

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

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.

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The Beaver Circle.



Our Next Competition.

What is this? Tell what you know about it. Send letters in so they may reach this office on or before April 3rd.

Read This, Beavers!

Dear Girls and Boys,—It has been a great satisfaction to me to find that so many of you are interested in the birds, and anxious to protect them as far as you can. And now I am going to tell you what I am going to do for you. In my den, I have three books, which I value very much, so much that I wish every boy and girl in Canada could have books like them. They are: (1) "Bird Neighbors," which contains a full description, with large colored plates, of nearly all the birds you are likely to see in a lifetime—the smaller birds, at least. (2) "Bird Homes," which gives pictures (many of which are colored) of birds' nests and birds' eggs, with full written descriptions of each. (3) "Guide to the Wild Flowers"—a fine volume, with descriptions of the wild flowers, accompanied by pictures (some colored) of each kind. Each of these books is a well-bound volume, printed on good paper, and simply filled with pictures—a veritable treasure for any home. By owning them, you learn to know and to love the birds and flowers when you see them, and such a love is sure to fill you with a wish to protect and spare these loveliest possessions of our land.

I thought first of offering these books as composition prizes, but that would not do, since only two or three at most could succeed in winning them, and I wanted every single Beaver to have a good chance. Of course, we could not give every boy and girl one free—they are too expensive for that—so I hit on a next best plan. Now, listen: To every boy or girl who sends us three new subscribers for one year, for "The Farmer's Advocate," at \$1.50 a year each, we will send one of these handsome volumes, postpaid. All three names, accompanied by the \$4.50 to cover subscriptions in full, must be sent to us at the same time, not at different times, and enclosed must be a letter from you stating which volume you prefer as premium. Address the envelope to me, and I will see that your book is sent you right away, and that the money finds its way at once to the business department.

Now, girls and boys, I want you to understand that there is no "fake" about this offer. The books are large, and the colored plates beautiful, in fact, quite the handsomest things of their kind that I have seen, and when you have won one of them, you will have the chance to work for another. They are books that you will be proud to have, and that will give you something to watch out for all summer long. Seeing the birds or flowers in the book, you will know what to watch for in the fields and woods, and you will soon be able to astonish your playmates and the folk at home by being able to tell the names of so many birds and flowers.

Now, get busy right away, won't you? Surely you can find three good farmers who will give you a subscription each, and you don't know how glad I shall be to mail you the book. Yours sincerely,
ERRETT KING.
"The Farmer's Advocate," London, Ont.

Our Letter Box.

Errett King, Peepabun, Ont., wishes Flossie Stager would send some more games. Flossie must have got a wireless telegram from him, I think, for here they are. By the way, Erratt, what a peculiar name your post office has! How did it get it, do you know?

Some Games.

Dear Puck,—I saw in one of your issues that Helen Perfy wanted me to send some more games.

1. "Magic Music."—One of the players leaves the room, and the rest hide something. One of the company seats himself at the piano and plays. The absent one is called in and proceeds to hunt for the object. The music grows louder as he gets near it, growing softer as he goes away from it. This finally guides to the exact place, after which another player takes his place.

2. "Bookbinders" is a good game. The leader stands in the center of a circle. Each one holds out his hands, palm upwards, and upon them is placed a book. The leader then goes around catching up the books in turn, and trying with each book in turn to strike the hands that hold it. Each one tries to withdraw his hands before they are struck. He continues till he succeeds in striking one, when he must take the leader's place.

Well, really, I must not take any more room in this precious Corner, as I think I have taken too much already.

If Helen would like to correspond with me, I would gladly do so.

FLOSSIE STAGER (age 14).

Hespeler, Ont., Box 56.

Don't you think that "Bookbinders" game is rather hard on books, Flossie? How would it be to use pasteboard instead?

An Interesting Letter.

Dear Puck and Cousin Beavers.—I have been a silent reader of this Circle, but I cannot hold my pen from writing any longer. We have taken "The Farmer's Advocate" for about ten years, and since I have been able to read the letters in it, I have seen about three or four from this county (Essex). There is scarcely a man in this county that does not take your paper, and perhaps the girls will be more willing to correspond with the "Beavers" after they see that one girl near them has written. I will write again in the spring, when nature has awakened from its dream, and will describe the pretty little islands that lie west and north of us.

As I write, I am sitting in my own little room by the windows, which were stained by Jack Frost. In his paintings I can trace the form of a horse struggling up a steep hill, while the bright stars shine above him, and the tall and slender trees around are tinted with sparkling jewels. In the other window I trace a valley, with spotless snow upon it, and in the distance short, stubby trees. This differs greatly from the Australian "Beaver's" land. I am sure she would like to know what we folk do in the winter time.

There are little ponds, which, after they are frozen, are very nice to skate on. Little animals about the size of a cat, which are known as rabbits, are very common in Ontario, and all over Canada. The boys find it great sport hunting these little animals.

When the roads are good I drive a Shetland pony to school, which is two miles from my home. I have a pony cart to which I hitch him, and when it is good sleighing I use a cutter. He has a white spot on his forehead, and a soft, long mane. The people that had him before us called him "Snow Ball," but I thought that was too long and changed it to "Prince."

I will close my letter, wishing the "Beavers" success.

EDNA COYLE (age 14).

Vereker P. O., Ont.

Riddles Sent by Various Contributors.

What is the difference between a bad day and a dose of medicine? Ans.—One you shake before you take, and the other you take before you shake.—James S. Hester.

Why is the letter "Q" like the sun?



THE object of all expert bakers and cooks is to make a pure white loaf. And this object is attained by the use of

PURITY FLOUR

Purity is a hard-wheat flour of decidedly superior whiteness. It bakes into a pure white loaf. So, you see, to get the really beautiful white loaf you must use PURITY hard-wheat flour.



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Moles, warts, ruptured veins, etc., by our reliable method of antiseptic Electrolysis is safe, certain and practically painless. We assure satisfaction in each case. Come at Easter for treatment. All skin, scalp, hair and complexional troubles cured. Consult us free at office or by mail. Get Booklet "F."

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The Lamp that, without oil or wick, chimney or mantle, odor or soot, smoke or dirt, gives a 40-candle power clear, white light at lowest cost. Self-contained—absolutely safe. Price \$10. Call and see it, or write for booklet.

92 Notre Dame Street West MONTREAL

A Woman's Sympathy

Are you discouraged? Is your doctor's bill a heavy financial load? Is your pain a heavy physical burden? I know what these mean to delicate women—I have been discouraged, too; but learned how to cure myself. I want to relieve your burdens. Why not end the pain and stop the doctor's bill? I can do this for you and will if you will assist me. All you need do is to write for a free box of the remedy which has been placed in my hands to be given away. Perhaps this one box will cure you—it has done so for others. If so, I shall be happy and you will be cured for 2c (the cost of a postage stamp). Your letters held confidentially. Write to-day for my free treatment, MRS. F. B. CURRAH, Windsor, Ont.

Subscribe for "Farmer's Advocate"

Ans.—Because it is the center of light.—Jennie Murray.

The following are from William J. Hume, Marvelville, Ont.:

What goes before a horse? Ans.—Its breath.

Why is a young man's lip like a cow's tail? Ans.—Because it grows down.

I went to the woods and got it, I sat down and looked at it; the more I looked at it the less I liked it; I took it home because I could not help it? Ans.—A thorn.

There was a man who had no eyes. He went abroad to view the skies. He saw a tree with two apples on it. He took no apples off it, and left no apples on it?

Ans.—The man had one eye and took one apple off it, and left one apple on it.

What is the difference between Charon's boat and the oldest hen in existence?

Ans.—One is a foul old wherry, and the other a werry old fowl.

What has four legs and only one foot?

Ans.—A bed.

What side of a pitcher is the handle on?

Ans.—Outside.

What goes through and under the water with its head always down?

Ans.—The nail in the bottom of a ship.

What has only one foot?

Ans.—A stocking.

What crow is most useful to man?

Ans.—Crow bar.

Of what trade is the sun?

Ans.—A tanner.

Beaver Circle Notes.

Dear Girls and Boys.—Just a word to tell you that from this time henceforth we can only publish the most interesting letters. Never mind telling how many acres of land you have, or how many horses, sheep, and cows, but do tell us about anything curiously interesting or beautiful in your neighborhood, of the wild birds and flowers that you see; of anything unusual that you do; of the books you read; and of any fine new games that you learn.

Now, I think Eugene Proctor, who passed into the fourth book at Christmas, might tell us how he likes his new work; what study he likes best, and why. He must be a very studious little boy to get into the Fourth book at eleven. . . . Then, James S. Hunter might tell us about his Welsh pony, and Jennie Murray, Pictou, N. S., about the ocean, or the straits near her home. You know, Jennie, thousands of our "Beavers" never saw salt water. James Tuplin, too, might write us a very interesting letter about Prince Edward Island.

James R. Hardie (age 11), Listowel, Ont., would like some of the Beavers to correspond with him.

Several interesting letters must be held over until a later date.

Our Junior Beavers.

Dear Puck.—I would like to know whether Puck means a man or woman. I think of you as a hard rubber ball, which we always treat to a good hit with a hockey stick. Now, which do you think I am, a boy or a girl? I am in the Fourth book at school. My only pet is a large cat, called Charles Dickens.

I got a pair of skates for Christmas, but have not had as much skating as I would like; there are no ponds on our farm, and we don't have the use of rinks in the country.

An interested new Beaver, PEGGY IKE (aged 10), Aylmer, Ont.

You must think me a fine, tough old fellow, Peggy. Never mind—I bounce, anyway. Which are you, a boy or a girl? You write like a boy—but I give it up! What do the rest of the Beavers think about this?

Dear Puck.—I have not written to you before. I take great interest in our little Circle. We have a new bird around this winter that we have never seen before. It is a little larger than a sparrow, and looks something like a cedar wax-wing. It stays around the evergreens and seems to pick something off the branches.

We have a dog named Cleo. He is trained to do tricks. He will sit on his hind legs, and hold his front ones up; he will roll over, and sit on a chair and shake paws.

We live on a farm and have quite a few evergreen trees on our lawn. A creek runs along the bottom of our garden. In the winter time I go skating, and in the summer I go bathing, and sometimes we go fishing. We have a gully running by our barn, and in the summer time I can gather violets, cowslips, buttercups, and a few other kinds of flowers.

Yours truly, RUTH ERB (age 9), Sebringville, Ont.

Am delighted to find one Junior Beaver who is interested in the birds and flowers. I wish you could have given a more particular description of your visitor, and perhaps we could have found out what it was for you. It might possibly have been one of the grosbeaks.

The Golden Dog (Le Chien D'Or.)

A Canadian Historical Romance.

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CHAPTER XI.—Continued.

Lady de Tilly listened uneasily, and said:

"Don't quarrel with him at all, Pierre Philibert! Judge him and avoid him, as a Christian man should do. God will deal with Bigot as he deserves; the crafty man will be caught in his own devices some day."

"Oh, Bigot is a gentleman, aunt too polite to insult anyone," remarked Le Gardeur, impatient to defend one whom he regarded as a friend. "He is the prince of good fellows, and not crafty, I think, but all surface and sunshine."

"You never explored the depths of him, Le Gardeur," remarked La Corne. "I grant he is a gay, jesting, drinking and gambling fellow in company; but, trust me, he is deep and dark as the Devil's cave that I have seen in the Ottawa country. It goes story under story, deeper and deeper, until the imagination loses itself in contemplating the bottomless pit of it—that is Bigot, Le Gardeur."

"My censitaires report to me," remarked the Lady de Tilly, "that his commissaries are seizing the very seed corn of the country. Heaven knows what will become of my poor people next year if the war continues!"

"What will become of the Province in the hands of Francois Bigot?" replied La Corne St. Luc.

"They say, Philibert, that a certain great lady at Court, who is his partner or patroness, or both, has obtained a grant of your father's sequestered estate in Normandy, for her relative, the Count de Marville. Had you heard of that, Philibert? It is the latest news from France."

"Oh, yes, Chevalier! Ill news like that never misses the mark it is aimed at. The news soon reached my father!"

"And how does your father take it?"

"My father is a true philosopher; he takes it as Socrates might have taken it; he laughs at the Count de Marville, who will, he says, want to sell the estate before the year is out to pay his debts of honor—the only debts he ever does pay."

"If Bigot had anything to do with such an outrage," exclaimed Le Gardeur, warmly, "I would renounce him on the spot. I have heard Bigot speak of this gift to De Marville, whom he hates. He says it was all La Pompadour's doing from first to last, and I believe it."

"Well," remarked La Corne, "Bigot has plenty of sins of his own to answer for to the Sieur Philibert, on the day of account; without reckoning this among them."

Colorings that make Home look Cheerful

THERE are certain Colorings in which *Cheerfulness* is as inherent as it is in certain temperaments.

And, there are other Colorings that seem to have in them the very microbe of depression.

No one could long be cheerful in a room painted black, for instance.

And, no one could long resist the cheering, comforting uplift of a log-fire burning brightly in an open grate.

The dreary color of "A gray day" creeps into one's spirits and depresses them, just as surely as the golden-yellow color of a sunshiny day cheers and gladdens.

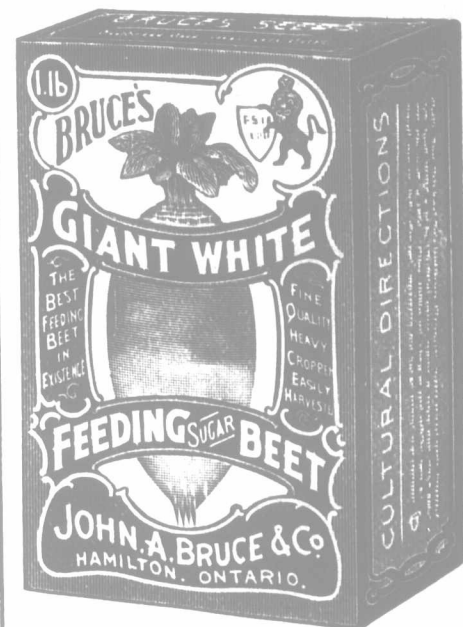
These subtle influences of Color are of much greater importance in making the Home feel cheerful, comfortable and restful, or gloomy and irritating, than we are likely to at first sight suppose.

But, any Home-maker who will thoughtfully read Brightling's new book entitled "Wall-Paper Influence on the Home" is pretty sure to discover a few things on this subject which he would gladly pay many times its price for.

The book, in addition to its chapters on Color, covers the Influence of *Design* upon size, width, height, dignity, or coarseness, of a room.

The subjects throughout have been treated in a simple, untechnical way which makes the information easily understood, and ready to apply toward inexpensive and effective decoration of the average home.

Published by the Watson-Foster Co., Ltd. (Ontario St., East, Montreal), and sold by mail, cloth bound, at twenty-five cents per copy, or from your wall paper dealer at same price.



Cowan's Perfection Cocoa

Is absolutely pure, strong and healthful. Delightful in flavor, nourishing, economical. Cocoa should be boiled three or four minutes in either milk or water to produce best results.

The Cowan Co. Limited, Toronto. 86

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LOOK AHEAD, DAIRYMEN!



Stop and think how good the **MAGNET Cream Separator** is, while other makers are obliged to advertise a new machine every year on account of **short-comings**, in past years so called perfect machine. The **MAGNET**, because of it being built on mechanical lines, with **solid stand, square gearing**, the same as is used to drive locomotives, threshing machines and heavy work of every description, the **large bowl** supported at both ends (cannot wobble and wear), the **skimmer** in one piece, giving **perfect skimming**, its **Glass-hard ball-race drive**, the machine being easy to clean and turn (children operate it), all parts strong and rigid, there is no wear and **no repairs**. The **MAGNET** user sits back and **laughs** at the yearly changes in the other machines and **big bills for repairs**. It is very easy to account for the difference, because the **MAGNET** standard machine is 40-gallon size, which has stand and gearing and all other parts strong enough for the 100-gallon size. **How different** from others, which are **made from large machine models, lightened and cheapened down to suit the price**. A **skinned-down** machine can be sold for **very little**. **Is it cheap, or can it be good?** If so, Why the **frantic changing** every year? **The MAGNET stands the test of wear**. Can you afford to be without it? Catalogue and free trial by sending a postal card to:

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ORGAN CO.,
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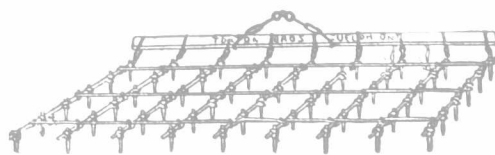
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A Sherlock-Manning Organ in order to make it complete. Handsome in design, with a beautiful piano finish. The Sherlock-Manning Organ is not only an object of beauty in itself, but actually sets off the furnishings to better advantage. Catalogue showing different designs mailed free.

Sherlock-Manning
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Section and Flexible All-Steel Harrows with an unequalled record.

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Write for it to-day. Address Dept. H.

OUR MOTTO: "Not How Cheap, but How Good."

Tolton Bros., Ltd., Guelph, Ont.

We also manufacture the most up-to-date unloading outfits for hay and grain, comprising rod, wood or steel tracks.

HAVE YOU SECURED ONE OF "THE FARMER'S ADVOCATE" PREMIUMS

The loud report of a cannon shook the windows of the room, and died away in long-repeated echoes among the distant hills.

"That is a signal for the Council of War, my Lady," said La Corne. "A soldier's luck! just as we were going to have music and heaven, we are summoned to field, camp or council."

The gentlemen rose and accompanied the ladies to the drawing-room, and prepared to depart. Colonel Philibert took a courteous leave of the ladies of Tilly, looking in the eyes of Amelie for something which, had she not turned them quickly upon a vase of flowers, he might have found there. She plucked a few sprays from the bouquet, and handed them to him as a token of pleasure at meeting him again in his own land.

"Recollect, Pierre Philibert!" said the Lady de Tilly, holding him cordially by the hand, "the Manor House of Tilly is your second home, where you are ever welcome."

Philibert was deeply touched by the genuine and stately courtesy of the lady. He kissed her hand with grateful reverence, and, bowing to both the ladies, accompanied La Corne St. Luc and Le Gardeur to the castle of St. Louis.

Amelie sat in the recess of the window, resting her cheek upon her tremulous hand, as she watched the gentlemen proceed on their way to the castle. Her mind was overflowing with thoughts and fancies, new, enigmatical, yet delightful. Her nervous manner did not escape the loving eye of her aunt; but she spoke not—she was silent under the burden of a secret joy that found not vent in words.

Suddenly Amelie rose from the window, and seated herself, in an impulsive way, at the organ. Her fingers touched the keys timidly at first, as she began a trembling prelude of her own fantasy. In music her pent-up feelings found congenial expression. The fire kindled, and she presently burst out with the voice of a seraph in that glorious psalm, the 116th:

"Toto pectore diligam
Unice et Dominum colam.
Qui lenis mihi supplicii
Non duram appulit aurem.

Aurem qui mihi supplicii,
Non duram dedit; hunc ego
Donec pectora spiritus
Pulset semper, amabo."

The Lady de Tilly, half-guessing the truth, would not wound the susceptibilities of her niece by ap-

CHAPTER XII.

The Castle of St. Louis.

The Count de la Galissoniere, with a number of officers of rank, in full uniform, was slowly pacing up and down the long gallery that fronted the Castle of St. Louis, waiting for the Council of War to open; for, although the hour had struck, the Intendant, and many other high officials of the Colony, had not yet arrived from Beaumanoir.

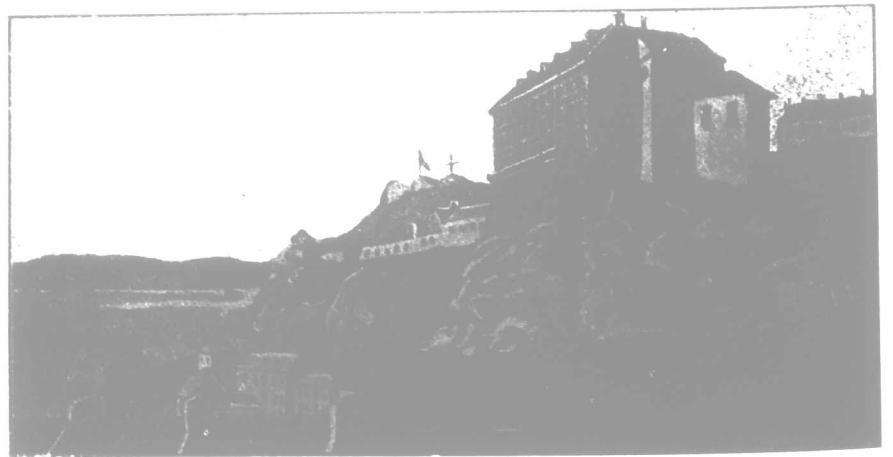


Count de la Galissoniere.

The Castle of St. Louis, a massive structure of stone, with square, flanking towers, rose loftily from the brink of the precipice, overlooking the narrow, tortuous streets of the lower town. The steeple of the old Church of Notre Dame des Victoires, with its gilded vane, lay far beneath the feet of the observer as he leaned over the balustrade of iron that guarded the gallery of the Chateau.

A hum of voices and dense sounds rose up from the market of Notre Dame, and from the quay where ships and bateaux were moored. The cries of sailors, carters and habitants in thick medley floated up the steep cliffs, pleasant sounds to the ear of the worthy Governor, who liked the honest noises of industry and labor better than all the music of the Academy.

A few merchantmen which had run the blockade of the English cruisers lay at anchor in the stream, where the broad river swept majestically round the lofty cape. In the midst



Chateau St. Louis.

Destroyed in 1834. Almost upon the site of this old chateau now stands the Chateau Frontenac.

pearing to do so, she rose quietly from her seat and placed her arms gently around Amelie when she finished the psalm. She pressed her to her bosom, kissed her fondly, and, without a word, left her to find in music relief from her high-wrought feelings. Her voice rose in sweeter and loftier harmonies to the pealing of the organ as she sang to the end of the joyful yet solemn psalm, in a version made for Queen Mary of France and Scotland when she was exiled here all brightness and dark shadows of their world had passed.

of them, a newly-arrived King's ship, the Fleur-de-Lis, decorated with streamers, floated proudly, like a swan among a flock of teal.

Le Gardeur, as an officer of the garrison, went to report himself to the military commandant, while La Corne St. Luc and Colonel Philibert proceeded to the gallery, where a crowd of officers were now assembled, waiting for the Council.

The Governor at once called Philibert aside, and took his arm. "Philibert," said he, "I trust you had no difficulty in finding the Intendant?"

"No difficulty, whatever, your Excellency. I discovered the Intendant and his friends by ear long before I got sight of them." An equivocal smile accompanied Philibert's words, which the Governor rightly interpreted.

"Ah! I understand, Philibert; they were carousing at that hour of daylight? Were they all—? Faugh! I shame to speak the word. Was the Intendant in a condition to comprehend my summons?" The Governor looked sad, rather than surprised or angry, for he had expected no less than Philibert had reported to him.

"I found him less intoxicated, I think, than many of his guests. He received your message with more politeness than I expected, and promised to be here punctually at the hour for opening the Council."

"Oh, Bigot never lacks politeness, drunk or sober; that strong intellect of his seems to defy the power of wine, as his heart is proof against moral feeling. You did not prolong your stay in Beaumanoir, I fancy?" remarked the Governor, dinting the point of his cane into the floor.

"I hastened out of it as I would out of hell itself! After making prize of my friend De Repentigny and bringing him off with me, as I mentioned to you, I got quickly out of the Chateau."

"You did rightly, Philibert; the Intendant is ruining half the young men of birth in the Colony."

"He shall not ruin Le Gardeur, if I can save him," said Philibert, resolutely. "May I count upon your Excellency's co-operation?" added he.

"Assuredly, Philibert! Command me in anything you can devise to rescue that noble young fellow from the fatal companionship of Bigot. But I know not how long I shall be permitted to remain in New France; powerful intrigues are at work for my removal!" added the Governor. "I care not for the removal, so that it be not accompanied with insult."

"Ah! you have received news today by the frigate?" said Philibert, looking down at the King's ship at anchor in the stream.

"News? Yes; and such news, Philibert!" replied the Governor in a tone of despondency. "It needs the wisdom of Solon to legislate for this land, and a Hercules to cleanse its Augean stables of official corruption. But my influence at Court is nil—you know that, Philibert!"

"But while you are Governor your advice ought to prevail with the King," replied Philibert.

"My advice prevail? Listen, Philibert; my letters to the King and the Minister of Marine and Colonies have been answered by whom, think you?"

"Nay, I cannot conceive who, out of the legal channel, would dare to reply to them."

"No! no man could guess that my official despatches have been answered by the Marquise de Pompadour! She replies to my despatches to my sovereign!"

"La Pompadour!" exclaimed Philibert in a burst of indignation. "She, the King's mistress, reply to your despatches! Has France come to be governed by courtesans, like imperial Rome?"

"Yes! and you know the meaning of that insult, Philibert! They desire to force me to resign, and I shall resign as soon as I see my friends safe. I will serve the King in his fleet, but never more in a colony. This poor land is doomed to fall into the hands of its enemies unless we get a speedy peace. France will help us no more!"

"Don't say that, your Excellency! France will surely never be untrue to her children in the New World! But our resources are not yet all exhausted; we are not driven to the wall yet, your Excellency!"

"Almost, I assure you, Philibert! But we shall understand that better after the Council."

"What say the despatches touching the negotiations going on for

peace?" asked Philibert, who knew how true were the Governor's vaticinations.

"They speak favorably of peace, and, I think, correctly, Philibert; and you know the King's armies and the King's mistresses cannot all be maintained at the same time—women or war, one or other must give way, and one need not doubt which it will be, when the women rule Court and camp in France at the same time!"

"To think that a woman picked out of the gutters of Paris should rule France and answer your despatches!" said Philibert, angrily; "it is enough to drive honorable Frenchmen mad. But what says the Marquise de Pompadour?"

"She is especially severe upon my opposing the fiscal measures and commercial policy, as she calls it, of her friend the Intendant! She approves of his grant of a monopoly of trade to the Grand Company, and disputes my right, as Governor, to interfere with the Intendant in the finances of the Colony."

Philibert felt deeply this wound to the honor and dignity of his chief. He pressed his hand in warmest sympathy.

The Governor understood his feelings. "You are a true friend, Philibert," said he; "ten men like you might still save this Colony! But it is past the hour for the Council, and still Bigot delays! He must have forgotten my summons."

"I think not; but he might have to wait until Cadet, Varin, Deschenaux and the rest of them were in a condition fit to travel," answered Philibert, with an air of disgust.

"O Philibert! the shame of it! the shame of it! for such thieves to have the right to sit among loyal, honorable men," exclaimed, or rather groaned, the Governor. "They have the real power in New France, and we the empty title and the killing responsibility! Dine with me to-night after the Council, Philibert; I have much to say to you."

"Not to-night, your Excellency! My father has killed the fatted calf for his returned prodigal, and I must dine with him to-night," answered Philibert.

"Right! Be it to-morrow, then! Come on Wednesday," replied the Governor. "Your father is a gentleman who carries the principles of true nobility into the walks of trade; you are happy in such a father, Philibert, as he is fortunate in such a son." The Governor bowed to his friend, and rejoined the groups of officers upon the terrace.

A flash, and a column of smoke, white and sudden, rose from the great battery that flanked the Chateau. It was the second signal for the Council to commence. The Count de la Galissoniere, taking the arm of La Corne St. Luc, entered the Castle, and, followed by the crowd of officers, proceeded to the great Hall of Council and Audience. The Governor, followed by his secretaries, walked forward to the vice-regal chair, which stood on a dais at the head of a long table covered with crimson drapery. On each side of the table the members of the Council took the places assigned to them in the order of their rank and precedence, but a long array of chairs remained unoccupied. These seats, belonging to the Royal Intendant and the other high officers of the Colony who had not yet arrived to take their places in the Council, stood empty.

The great hall of the Castle of St. Louis was palatial in its dimensions and adornments. Its lofty, coved ceiling rested on a cornice of rich frieze of carved work, supported on polished pilasters of oak. The panels of wainscoting upon the walls were surrounded by delicate arabesques, and hung with paintings of historic interest—portraits of the kings, governors, intendants, and ministers of state who had been instrumental in the colonization of New France.

Over the Governor's seat hung a gorgeous escutcheon of the royal arms, draped with a cluster of white

Imp. Clydesdales

AT AUCTION

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The get of noted Scottish sires, of the best breeding, selected for size, with quality to match. The best lot ever offered by the owner. All will be sold, positively, and without reserve.

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IMPORTANT DISPERSION SALE

OF PURE-BRED AND GRADE

Holstein Cattle,

The Property of R. S. Stevenson & Son, "Brockholme Stock Farm," Ancaster, Ont., on

Thursday, April 1st, 1909.

The herd consists of 32 head of registered cattle and ten grades, also the grandly-bred young stock bull, **Gano's Favorit Butler Boy**, whose dam, Sherwood Gano, produced last year 17.6 9 lbs. of milk, containing 657 lbs. of fat, under Dominion Government supervision. Sale will be held at the farm, lots 41 and 42, cor. 2, Ancaster Township, Hamilton and Brantford electric cars stop every hour 1/2 mile from buildings. Purchasers can get off car at Ancaster village or Station II. Send for catalogue. Terms: Eight months' on approved joint notes, or five per cent. per annum off for cash. Sale to commence at one o'clock p. m.

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OUR ANNUAL AUCTION SALE OF

Registered Clydesdales

FRIDAY, MARCH 26, 1909.

Imported and Canadian-bred Mares and Stallions, all ages, will be offered. Anyone having entries for this sale are requested to send in their entries at once and get full particulars by return mail from us how the sale will be handled. Entry books close March 17th for this sale.

At the request of a number of drovers, dairymen, farmers and others, we have started a weekly Auction Sale of Milk Cows, which will be held every Tuesday at one o'clock in the Horse Sale Arena. Consign your cows to us for quick cash sales.

HERBERT SMITH, Manager.

flags sprinkled with golden lilies, the emblems of French sovereignty in the Colony.

Among the portraits on the walls, besides those of the late and present King—which might be seen the features of Richelieu, who first organized the rude settlements on the St. Lawrence into a body politic—a reflex of feudal France; and of Colbert, who made available its natural wealth and resources by peopling it with the best scions of the motherland—the noblesse and peasantry of Normandy, Brittany and Aquitaine. There, too, might be seen the keen, bold features of Cartier, the first discoverer, and of Champlain, the first explorer of the new land and the

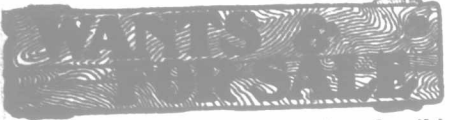
founder of Quebec. The gallant, restless Louis Buade de Frontenac was pictured there side by side with his fair countess, called by reason of her surpassing loveliness "the divine"; Vaudreuil, too, who spent a long life of devotion to his country, and Beauharnais, who nourished its young strength until it was able to resist not only the powerful confederacy of the Five Nations, but the still more powerful league of New England and the other English Colonies. There, also, were seen the sharp, intellectual face of Laval, its first bishop, who organized the Church and education in the Colony; and of Talon, wisest of intendants, who devoted himself to the improvement of agriculture, the increase of

Important to Farmers

WHITE CAP YELLOW DENT SEED CORN. EARLY AMBER SUGAR CANE SEED.

Buy corn on cob and string as a guarantee of quality and vitality. My corn is perfectly acclimated to this northern section, and improved by 17 years of continuous careful selection.

EDGAR M. ZAVITZ, Coldstream, Middlesex Co., Ont.



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

BRITISH COLUMBIA LANDS—Very handsomely illustrated catalogue of fruit and farm lands.

FARM for sale, containing 100 acres. Is in A1 condition and extra well fenced.

PEDIGREED CHERRY TREES—We have a nice assortment of very fine two-year-old sweet cherries.

SITUATION wanted by a married man as herdsman. Thoroughly understands his work.

SINGLE man seeks situation with good class farmer. Disengaged shortly.

STRAWBERRY Plants for Sale—A1 stock; prices and terms on application.

TO RENT 160 acres in Moosomin district; 70 acres under cultivation, balance can all be broken.

VETERAN land scrips wanted. Write, giving us spot cash price.

WANTED A THE DELHI TANNERY Hides, Skins and Furs to tan for Robes, Coats and Gauntlets.

WANTED Farm for Sale. Rare bargain on very easy terms in productive 200-acre Madison Co. farm.

Insurance \$2,700. Price \$2,200. 75 ACRES, productive soil, income last year \$1,000.

Married Man Wanted to engage by the week and stock feeding; must be experienced along these lines.

Geo. D. Fletcher, Wellington Co. Binkham P.O., Ont.

trade, and the well-being of all the King's subjects in New France. And one more striking portrait was there, worthy to rank among the statesmen and rulers of New France—the pale, calm, intellectual features of Mere Marie de l'Incarnation.

(To be continued.)

Current Events.

The Parliament of Iceland is asking for complete separation from Denmark in all government affairs.

Great Britain has taken over the railway and Port of Lorenzo Marquez, in Portuguese East Africa.

A scheme is afoot to build a great union station on the site of the Windsor and Bonaventure stations, Montreal.

An Order-in-Council has been passed at Ottawa prohibiting the exportation of black bass, maskinonge and speckled trout for five years.

The Mohammedans in India are asking for complete separation from the Hindus in all stages, from the petty Rural Boards to the Legislative Council.

Mr. J. A. D. McCurdy last week made five successful flights over the ice on the Bras d'Or Lakes, C. B., in his aerodrome, Silver Dart.

The growing spirit of friendliness between France and Germany, which arose in the satisfactory settlement of the Moroccan question, is proving a source of much satisfaction in Europe.

QUESTIONS AND ANSWERS.

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

Miscellaneous.

HENS EATING EGGS—COMBS DROOPING.

1. How can a flock of hens be effectually cured of the egg-eating habit? Our hens are eating their eggs as fast as they lay them.

2. What causes their combs to droop? G. H. C.

Ans.—1. When a flock of hens have once become confirmed in the egg-eating habit, it is not easy to stop them.

made in a row without much labor or expense.

2. It is natural for the combs of some chickens to droop.

OBTAINING PAYMENT OF NOTE.

A has a note against B for so much. B's wife backed the note. In case of B dying without a will, where would A get his money? SUBSCRIBER.

Ontario. Ans.—In the event of the note being dishonored by B, by non-payment, the matters of notice thereof to his wife or her estate and the usual protest must be promptly attended to; and then, if necessary, she may be sued, or, if deceased, then the action might be brought against her administrator.

UNTHRIFTY BULL.

Have a bull that will not eat only a little; a valuable animal; tried prescription given in "The Farmer's Advocate" in a January number, but seems no better.

Ans.—Without fuller particulars, no reply could be made to this question that would not be largely a guess. Give the bull exercise, place no more feed before him than he will take; feed a balanced ration, containing two or three pounds of bran and one or two handfuls of oil cake per day.

WEED IN CLOVER SEED.

I raised red clover last year. There is some wild timothy in it. Could that be cleaned out? M. W.

Ans.—Wild timothy is a colloquial name for buckhorn, rib grass, or English plantain. A bulletin issued by the United States Department of Agriculture, describes a simple method of separating rib-grass seed from clover, by taking advantage of the mucilaginous character of the seed of this weed.

CARBOLIC ACID FOR ABORTION.

Supposing abortion is in the herd, is there any benefit in feeding carbolic acid to cows due to calve in from one to five months, as a preventive? If so, how much per day would it be safe to feed a pregnant cow? How long should its use be continued? SUBSCRIBER.

Ans.—Some stockmen have faith in feeding carbolic acid as a preventive of contagious abortion, notably Mr. Geo. Rice, who recommends giving 25 drops twice a day, diluted in a pint of water, and mixed with bran or other feed for three days, then skip two or three days, and repeat for two or three days.

BEEF RINGS.

1. Is there an Act passed pertaining to beef rings? If there is, kindly let me know where I can find it in the Statutes.

2. What we mean by "beef ring" is this: Twenty men meet and appoint a chairman and secretary, also a man to butcher and distribute the meat; they make several motions, such as required weight and quality of beef, cattle supplied to the butcher, etc., but sign no document.

NORTH ONTARIO SUBSCRIBER.

Ans.—1. We are not aware of any in force that applies in a direct way to the subject mentioned.

2. Hardly, and yet it is possible that there may be sufficient evidence to be gathered from the minutes of meetings, and statements of parties present therein, to establish a moral contract, such as would be enforced in a court of justice upon an action being brought thereon for the purpose by an injured party.

NO SPECULATION

BUT A SAFE AND SURE PROPOSITION

FARMING is the most natural and reasonable method of earning a living, a home and a competence for old age. Many of the farms in Ontario which we have to sell can be bought at a very low price and on very reasonable terms.

It is no speculation, but a sure and profitable investment to buy one of these farms. Call, telephone or write for our catalogue of the farms we have for sale in any county in Ontario.

THE WESTERN REAL ESTATE EXCHANGE, LTD. 78 Dundas St. London, Ont. Phone 696.

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words.

BARRED Rock, Buff Orpington Fertile eggs from best laying strains \$4 per 100; \$1 per 13.

BUFF Orpingtons, Barred Rocks, White Wyandottes. All high-class stock, carefully mated.

BARRED Plymouth Rock eggs for hatching from winners at Toronto, London and Guelph. A few cockerels for sale.

BARRED ROCKS—A number of A1 quality cockerels (hen hatched), bred from second prize bird at Eastern Poultry Show.

CLARK'S Buff Orpingtons—25 good colored, vigorous cockerels and females for sale, \$2 to \$5 each.

EGGS for hatching, White Wyandottes. Good laying strain. \$2 per setting. L. Turnbull, Pt. Colborne, Ont.

EGGS—White Wyandottes, Martin and Massey strains, one dollar per fifteen, five dollars per hundred.

EGGS from grand laying Indian Runner ducks. 10c each. Single-comb Brown Leghorns, \$1 per 15.

FREE BOOKLET—Eggs, broilers or market poultry—which? Tells why and wherefore. Gives in detail facts.

FOR SALE—Puro-bred S.-C. White Leghorn eggs. Settings, \$1 and \$1.25. R. Hughes, Collingwood, Ont.

HIGH-CLASS White Wyandotte eggs for hatching from prizewinning stock. \$1.50 per 15; \$2.50 per 30.

RHODE ISLAND REIDS—Roses comb. Bred by ten years from carefully selected heavy winter layers of large brown eggs.

TRY Rose-comb Rhode Island Reds. The great business fowl. Good stock. Eggs one and one-half per dozen.

WHITE Rock eggs for sale, also a few cockerels. Apply to Howard Smith, Winona, Ont.

WHITE Wyandotte cockerels from Martin's best pens. Prices reasonable. A. F. Post, Colby's Bay, Ont.

WHITE Lechons, single comb large size; good layers. Eggs one dollar setting. Cockerels one twenty-five. A. E. Donahy, Colborne, Ont.

212-EGG STRAIN (Kulpi) Brown Leghorns, single and rose comb, fifteen eggs \$2; twelve live chicks \$2.50.

Write for Our Free Catalogue. Eggs for hatching from the following breeds: Buff Orpingtons, R. I. Reds (either comb), S.-C. White Leghorns, S.-C. B. Minorcas from Canada's best. Eggs \$1.50 per 15; \$2.50 per 30.

HORSES! AUCTION SALE OF Clydesdales, Hackneys, Welsh Ponies

On Wednesday, March 31st, 1909, at 2 o'clock p. m., Sharp.

There Will Be Offered for Sale by O. Sorby, at His Farm, Lot 8, Con. 5, in the Township of Puslinch, the following Horses:

CLYDESDALES:

1. The Stallion, "Attraction," by "Prince Attractive," aged, brown, with white face and legs.
2. The stallion, "Scotland's Model," by "Acme," 4 off, dark brown, white face and legs.
3. The mare, "Priory Maid," by "Baron's Pride," foaled July 2, 1906, brown, white face and legs.
4. The mare, "Marinetta," by "Benedict," foaled June 26, 1906, brown, white stripe on face, hind fetlocks white.
5. The mare, "Phillipa," by "Prince Sturdy," foaled April 25, 1906, white face, near fore and hind legs white.
6. The mare, "Corona," by "Baron Mitchell," foaled May 8, 1906, bay, strip on face, white fore foot and near hind leg.

These horses are all imported stock, and are of extra quality, by the best sires in Scotland, viz.: Baron's Pride, world renowned, and Benedict is his most famous son and an exceptional producer, having been sold for a large sum to a Chicago party, and a larger sum paid to have him returned to Scotland, where he is eclipsing his sire's record. The certificates of registration will be produced at the time of sale.

PONIES:

1. The chestnut mare, "Dinarth Mary," foaled 1906 by "Eddwen Flyer," with filly foal at first, foaled March 11th, 1909, by "Dinarth Hero."
2. The black mare, "Jet," foaled 1901, by "Mountain Pony."
3. A yearling bay stallion imported in utero, out of "Jet."

The certificates of registration with the Welsh Pony and Cob Society of the first two of these ponies, which are imported animals, will be produced at the time of sale. These animals were carefully selected for importation, and are show animals of HIGH QUALITY.

Each purchaser shall pay 20% of the amount of purchase at time of sale, and secure the balance by approved joint and several lien notes, at 10 months', without interest. For purchaser over \$200.00, additional time will be given, or payment by instalments, as may be arranged. Conditions and particulars in full will be given at time of sale.

THOMAS ROBSON, AUCTIONEER.

HACKNEYS:

1. The Hackney mare, "Bygrave Diploma," foaled 1904, chestnut, white hind and near fore leg, sired by Diplomatist, in foal to Warwick Model, a pure-bred registered sire of extra quality, who has been very successful in stud, also twice champion Hackney Stallion at London, Ont., Exhibition, and also first at Toronto Spring Horse Show. The certificate of registration of this mare will be produced. She is extra fine conformation, with show qualifications.

2. The aged chestnut Hackney mare, "Langton Lily," white blaze and four white legs, in foal to "Warwick Model." This mare has been repeatedly a winner of the best shows in England, especially Gold Medal and Special at Norfolk Co.; Cup for best bred mare, and Challenge Cup for Best Hackney at Tunbridge Wells; 1st and Silver Medal, Royal Counties, and in Canada has been twice Champion Hackney Mare at London, Ont. This mare is a producer of winners both in England and Canada.

3. The chestnut mare, "Brentwood Queen," off hind foot white, star on forehead, foaled 1904, and is by "Middleton King." This mare was only shown twice, and was first each time. She is a superb mare, with splendid action and beautiful conformation, and is supposed in foal.

4. The aged dark bay Hackney mare, "Stella," star on forehead, and white off hind foot, by "Square Shot," out of celebrated "Miss Baker," in foal to "Warwick Model." This mare is a regular breeder and a producer of foals of great quality.

5. The brown Hackney mare, "Jubilee Beauty," star on hind fetlock, foaled June 7th, 1902, by "Jubilee Chief," (imported) out of the famous mare, "Stella," above mentioned, is in foal to "Warwick Model." This mare has extra fine and rugged conformation and has held regularly to service.

Certificates of registration of the last three of these, with Canadian Stud and of the First English Hackney Society will be produced.

O. SORBY, PROPRIETOR, GUELPH, ONT.

GOSSIP.

THE NORVAL JERSEY SALE.

On March 31st, as announced in our advertising columns, the fine herd of 35 pure-bred Jersey cattle, and 15 high-grade Jerseys, belonging to Mr. S. J. Lyons, of Norval, Halton Co., Ont., will be dispersed by auction. This herd has been selected and bred for business purposes, and comprises many choice dairy cows, carrying well-balanced and business-like milk vessels of large size, with good-sized and well-placed teats. The grand cow, Dinah of Lawncroft, whose picture appears elsewhere in this issue, and her three charming daughters in the sale, will prove attractive features, as will others of similar type and character in the herd, while the young bulls, heifers and calves, bred from deep and rich milking dams, give promise of keeping up the reputation of the breed for high-class dairy production. Norval is a station on the G. T. R. main line, some three miles from the farm, while Georgetown Junction, G. T. R., is about the same distance.

SHORTHORNS AND SHROPSHIRE SALE.

As announced in the advertisement in this issue, the excellent Shorthorn herd of Mr. Henry Stead, of Wilton Grove, Middlesex County, Ont., six miles from London, comprising 30 head of richly-bred animals, will be dispersed by auction on April 7th, at the farm, one mile from Westminster Station, on the P. M. railway, between London and St. Thomas, where teams will meet the morning trains. The offering includes excellent representatives of such choice families as the Crickshank Village, Bruce Rosebud, Buchanan Lassie, and Golden Drop, sired by such noted bulls as Royal Prince (imp.), Langford Eclipse (imp.), Philosopher of Dalmeny (imp.), and Queen's Counsellor (imp.), the latter included in the sale. Most of the females of breeding age are bred to or have calves at foot by Queen's Counsellor. Others are bred to Village Prince, half-brother to the champion sisters, Fair Queen and Ideal.

At the Birmingham, England, Spring Show and Sale of Shorthorn bulls, some pretty high prices were realized, a half dozen selling for \$500 to \$2,730 each, the latter price being paid by an Argentine buyer, for Lord Lovat's first-prize roan junior yearling, Overstone. The second highest price, \$1,050, was paid by an English buyer, for Messrs. Dyke Bros.' red yearling, Duke of Charmingland CIV.

At the Ontario Provincial Live-stock Sale, held at Guelph on March 3rd, 28 Shorthorn cattle sold for an average of \$72.14. The top price, \$125, was paid by J. C. Dixon, Rockwood, for Eden Boy, contributed by Jos. W. Barnett, Brooklin, Ont. The second highest price, \$120, was realized for Eramosa Beau, contributed by John Currie, Eramosa, and sold to R. Bean, Carlow, Ont. The third highest price, \$117.50, was obtained for Blair Athol, contributed by A. T. & G. Auld, Eden Mills, Ont., and sold to John Kirby, Marden. The fourth highest price, \$102.50, was paid for Count Wimple, contributed by R. & S. Nicholson, Sylvan, and sold to Fred Warnica, Painswick, Ont.

"The receipts of horses at the Chicago market," says R. B. Ogilvie, Secretary of the American Clydesdale Association, "never were larger than they have been since the beginning of the present year. Desirable types never brought better prices, while the undesirable class (which far outnumber the former) never brought near as much as they are at the present time. With the growth and development of our industrial interests, there is a corresponding increasing demand for draft horses of weight and pulling power. For every choice draft mare or gelding offered on this market, there are a dozen buyers eager and anxious to buy them. This situation has become so intense that the best are picked up as soon as they are unloaded from the cars, and only an occasional good one of 15,000 horses received at Chicago since January 1st has been put through the sale ring, so that the prices best drafters command are not given to the public.

POSTPONED SALE.

The auction sale of Clydesdales advertised in a former issue to take place at Union Stock-yards, West Toronto, on March 22nd, has been postponed to March 26th, on which day two important consignments of Clydesdales will be sold, making the occasion doubly attractive.

HOLSTEINS AT AUCTION.

On Thursday, April 1st, as advertised in this issue, the dispersion sale of the noted herd of 32 head of registered Holstein cattle of Messrs. R. S. Stevenson & Son, of Ancaster, Ont., will take place at the farm. Hamilton and Brantford electric cars stop near the farm. See the advertisement and send for catalogue. This is one of the oldest and best-known Holstein herds in the country, and Mr. Stevenson, Sr., is acknowledged to be one of the best judges of the breed in Canada.

NEW IMPORT REGULATIONS.

On March 1st, new regulations came into force governing the importation of range horses and mules from the United States into Canada. After that date the regulations state that "no branded range Western horses or mules can be imported into Canada from the United States. Those which have been broken to saddle and harness, if passing the tests, are not to be excluded, however. The horses and mules, other than those comprising the settler's personal effects, must be inspected and must submit to a mallein test signed by the Inspector of the United States Bureau of Animal Industry. A similar certificate from the Inspector of the Canadian Agricultural Department is also required. If the stock shipped has not passed such test, the test will be made at the point of destination, or where entry is made. If any reactors are found, they will be slaughtered at the point of entry, and all stock accompanying this condemned animal will be returned to the United States. All animals affected with a contagious disease will also be returned to the United States.

The imported Clydesdale stallion, Adonis, by Baron's Pride, having travelled six seasons in one district, is advertised for sale by John McDougall, Jr., Mount Forest, Ont.

At the dispersion sale on March 4th, of the Hereford herd of Cornish & Patton, at Osborn, Mo., 24 bulls sold for an average of \$306.90, 93 females for an average of \$181, and the whole, 117 head, for an average of \$206.90. The highest price, \$1,080, was paid for the 3-year-old bull, Beau Carlos, by a Montana company. Six other bulls sold for \$400 to \$505 each. The highest price for a female was \$760, for the 4-year-old, Poinsettia, paid by G. M. Howles, of Texas.

MORE CLYDESDALES FOR CANADA.

Mr. Thos. Mercer, Markdale, Ont., sailed from Glasgow on March 6th with a consignment of very select Clydesdale stallions from two to six years old, all big, deep-ribbed, flashy-legged horses, claimed to be without doubt the best he has ever brought over. An invitation is extended to all interested in high-class Clydesdales to visit his stables and see for themselves that the importation is as represented, and that Mr. Mercer's motto, "Not numbers, but character and quality," is fully justified in the new arrival.

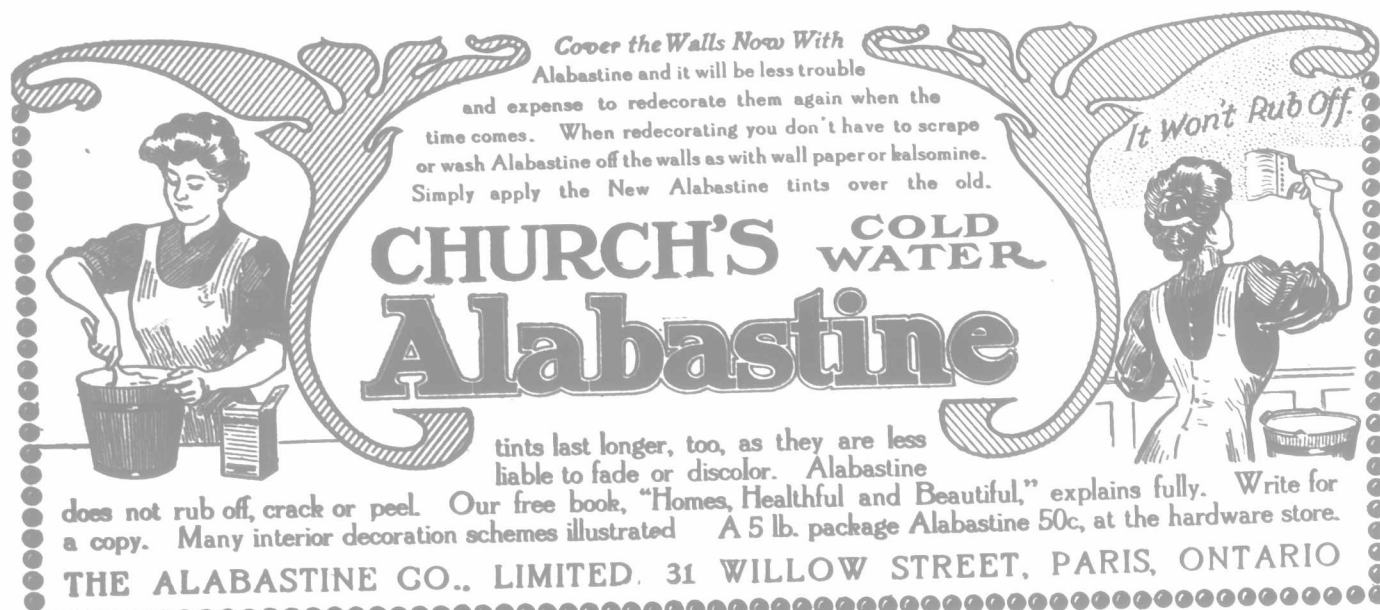
Official records of 151 Holstein-Friesian cows were accepted by the American Holstein Association, from February 9th to March 4th, 1909. This herd of 151 animals, of which nearly sixty per cent. were heifers with first or second calves, produced in 7 consecutive days, 58,844.4 lbs. of milk, containing 2,026.306 lbs. of butter-fat; thus showing an average of 3.41 per cent. fat. The average production for each animal was 389.7 lbs. of milk, containing 13.419 lbs. of butter-fat, equivalent to 55.7 lbs., or nearly 27 quarts of milk per day, and 15½ lbs. of the best commercial butter per week. This is a very large average production for so young a herd; being the largest, considering the age, ever yet reported.

Cover the Walls Now With Alabastine and it will be less trouble and expense to redecorate them again when the time comes. When redecorating you don't have to scrape or wash Alabastine off the walls as with wall paper or kalsomine. Simply apply the New Alabastine tints over the old.

CHURCH'S COLD WATER Alabastine

tints last longer, too, as they are less liable to fade or discolor. Alabastine does not rub off, crack or peel. Our free book, "Homes, Healthful and Beautiful," explains fully. Write for a copy. Many interior decoration schemes illustrated. A 5 lb. package Alabastine 50c, at the hardware store.

THE ALABASTINE CO., LIMITED, 31 WILLOW STREET, PARIS, ONTARIO



TRADE TOPICS.

Mr. Geo. Keith, Toronto, the old and reliable seed merchant, advertises for sale seed oats of the most approved varieties; also clover seed and Gold Brand alfalfa, the price of the latter being reduced by one dollar a bushel in the changed advertisement this week. See the advertisement and send for catalogue.

The Climax Cultivator, manufactured by the Frost & Wood Co., of Smith's Falls, Ont., commends itself to the farmer wanting an implement that will thoroughly move and loosen the soil preparatory to the sowing of the seed. It is a stiff-tooth cultivator, and with its pressure and tilting levers, any depth desired can be reached. It is strong, substantial, durable and easily managed. The same company manufacture the Champion seed drill, with ball-bearing hubs in a dust-proof case, easily operated and accurate as to amount of seed sown per acre. Frost & Wood mowers and binders have also made for themselves a first-class reputation for strength, ease of draft, efficiency of work, and durability. Farmers needing anything in these lines will do well to write to the company for their catalogue, or consult their agent in the nearest town or city.

Writing to Troy Chemical Co., who advertise "Save the Horse" in this issue, the manager of Ajax Decorating Co., of New York, says:

"About two years ago our horse, driving through the park, made a misstep and fell on the macadam road, cutting both knees very badly. They healed up after some time, but left both knees very large and unsightly. We tried in every way to get something or somebody to give us something to remove the eyesore, but did not succeed. Doctors claimed it was too long-standing and nothing could remove it. 'Save the Horse' was recommended to us. We procured a bottle, and after using almost the entire contents, we could see the enlarged parts gradually disappearing, so purchased another bottle, and to-day the knees are in their normal state. We also used it on a very bad splint, and that also disappeared. In all the treatment in both cases our horses were not laid up one day. We found out that it will do all that is claimed for it."

GOSSIP.

Sap buckets are in season, and the Ontario Wind Engine & Pump Co., Toronto, advertise a snap in a job lot of galvanized buckets worth 12 cents each, but will be sold for less money, and guaranteed satisfactory. See the advertisement and order promptly.

SHORTHORNS AND SHROPSHIRE AT AUCTION.

On April 7th, as advertised in this paper, Mr. Henry Stead, Wilton Grove, Ont., six miles from London, will sell at auction 30 head of registered Shorthorn cattle, imported and home-bred; also 15 registered Shropshire shearing ewes, bred to imported ram. Catalogue may be had on application, and further information may be looked for in our next week's issue.



The EDISON PHONOGRAPH

It entertains you with a song well sung, a piece well played, an amusing dialogue, or any of the other things of which the Edison Phonograph is so easily capable.

If you own a Phonograph time will never hang heavy on your hands, and it is so easy to own one.

Go and hear the Edison Phonograph today, and be sure to ask to hear

the New Amberol Records

which are Records that play twice as long as the old Records, and a great deal better.

There is an Edison dealer near you who will be glad to show you the Phonograph and enable you to hear it.

FREE. Ask your dealer or write to us for illustrated catalogue of Edison Phonographs, also catalogue containing complete lists of Edison Records, old and new.

We Want Good Live Dealers to sell Edison Phonographs in every town where we are not now well represented. Dealers having established stores should write at once to

National Phonograph Company, 112 Lakeside Ave., Orange, N.J., U.S.A.



Subscribe for "The Farmer's Advocate and Home Magazine." \$1.50 per Year in Advance.

GOSSIP.

Mr. Robert Miller, Stouffville, Ont., makes a change in his advertisement, in which he offers for sale Shorthorn bulls and females, and Shropshire and Corswold ewes.

HOLSTEINS AT AUCTION.

On March 24th, Mr. John Hill, of Canboro, Ont., will sell by auction, as advertised in this issue, 20 head of registered Holstein cattle, including 11 mature cows, and a number of heifers and calves. Trains will be met at Canfield Station, G. T. R., by notifying Mr. Hill.

Mr. Wm. Smith, of Columbus, Ont., writes: "I made a nice sale of eighteen Shorthorns the other day to Messrs. Herr Bros. & Reynolds, of Lodi, Wisconsin, and I understand that Messrs. George & Stanton have already taken most of these over, and some of them may go into their sale on April 9th. Still have some young bulls on hand."

A CORRECTION.

In the February 4th issue of "The Farmer's Advocate," owing to mistaken identity, appeared a cut of a Clydesdale horse over the name Dunure Nikko (imp.), owned by Mr. T. H. Hassard, Markham, Ont., whereas the cut was made from a photograph of the imported horse, Dunure Robert, and should have been so labelled. The cut is reproduced in this issue as that of Dunure Robert, recently sold to Mannerow Bros., Chesley, Ont., while imp. Dunure Nikko, foaled in May, 1906, second at Ontario Horse-breeders' Exhibition, 1909, and sired by Hiawatha, is in Mr. T. H. Hassard's stables at Markham.

QUESTIONS AND ANSWERS.

Miscellaneous.

KNUCKLING.

I have a horse that knuckles on hind feet. He is all right when going, but when he stands he seems to go forward on knuckles. T. B.

Ans.—Repeated blistering of the weak joints is the only effective treatment known. This, of course, means giving the horse rest for several weeks. If he must work, the best treatment is showering with cold water frequently, and applying bandages when in the stable.

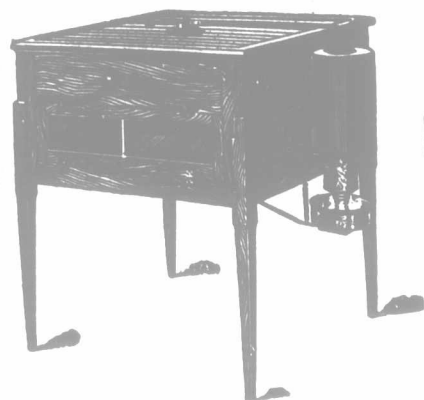
CORN IN HILLS—POTATOES IN HILLS OR DRILLS?

1. In planting corn in hills, how far should they be apart, each way; also how many kernels to a hill?

2. Have you had any experience with planting potatoes the same way? If so, what distance, and would you recommend it? W. A. H.

Ans.—1. Three and a half feet is a good spacing. For husking, three to four kernels per hill of good seed corn is sufficient, three stalks being about ideal. If more come up it is better to hoe the others out. For fodder or ensilage purposes, five or six kernels are ample. This will, ordinarily, result in the production of a strong, fairly well-earred crop. If tests show defective germination, allowance must be made in the quantity of seed planted.

2. We have grown potatoes in hills spaced about a yard apart between rows, and the hills some two or two and a half feet apart in the rows, with fairly satisfactory results, and have also seen them grown in squares thirty-three to thirty-six inches apart each way. Where the ground is very dirty with grass or weeds, this system may be advisable, but ordinarily drills are to be preferred. An experiment conducted in duplicate on the experimental plots at O. A. C., Guelph, for seven years in succession, resulted in an average yield of 179.6 bushels per acre from potatoes planted in drills, 25 25 inches apart, with the sets one foot apart in the drills, as compared with 142.3 bushels from planting the same quantity of seed in squares 33 inches apart each way. These experiments would seem to indicate the wisdom of planting potatoes in drills as close together as might be convenient for cultivating, say 33 inches.



MODEL

Incubators and Brooders

AWARDED HIGHEST HONORS AT
Toronto Industrial, Ottawa
and
Winnipeg Exhibitions.

Twelve Reasons Why YOU Should Use Model Goods:

- 1st. Because there are no other goods on the market just as good as the Model Goods.
- 2nd. Because we give about double the value for money that other manufacturers do.
- 3rd. Because you have no trouble in hatching good, strong, healthy chicks with the Model Incubators.
- 4th. Because the Model Regulators are as near perfect as it is possible to make them. We claim we have the best regulator on earth.
- 5th. Because you will find the Model the most simple machine to handle; no cut-offs or other devices. Model Incubators regulate themselves; once set will run a whole season without change.
- 6th. Because you can go to your rest at night perfectly satisfied that the lamp and regulator will take care of the machine without the least anxiety or care on your part.

- 7th. Because all our machines are manufactured of the best hardwood (chestnut) with double walls, and packed with wool.
- 8th. Because the Model Goods are built for business, and to last a lifetime.
- 9th. Because we do not attempt to compete with a lot of the poor trash there is on the market.
- 10th. Because we want you to try us just once. We know if you do we have made a life-long customer.
- 11th. Because the Model Brooders take care of the chicks when hatched and rear them.
- 12th. Because we could fill a book with reasons why you should purchase Model Goods, but don't know one reason why you should not send us along your order and give us a trial.

Our 1909 catalogue is out, and it's free for the asking. Address:

The Model Incubator Co., Ltd., River St., Toronto.

QUESTIONS AND ANSWERS. Miscellaneous.

SEED CORN.

Last season I had a good crop of ensilage corn from the two varieties, White Cap Yellow Dent and Longfellow, grown mixed. Both varieties matured well, and I have selected a quantity of the best ears for seed for next season. What kind of a crop may I expect. Would you advise growing crop from seed which has been grown mixed? A. K.

Ans.—This year you will have "just corn." If the varieties have crossed, as it is a moral certainty they have done, the resulting seed may be expected to produce corn showing a wide diversity of type and character of growth. We would not advise using this seed. Purchase other seed true to some one variety.

COW FROTHS AT MOUTH.

Cow, seven years old, has frothed at the mouth for about six weeks, and has become very thin, seems to have a hard time to eat. Would she have lost her cud? If so, is there any way in which I can replace it? H. K.

Ans.—There is probably something wrong with her mouth or teeth. Sometimes a roll of barley awns, or chaff, or hay, gets fixed in the cheek, or at the root of the tongue, and prevents the cow chewing her food properly. A diseased or displaced tooth may have the same effect. It would be well to make a thorough examination of the mouth and remove the cause, if found. There is no such thing as losing and replacing the cud. It is when the cow is out of health that she ceases to ruminate.

HAMILTONIAN HORSE.

I would like some information on the Hamiltonian horse. Was he a pure-bred horse, or does he belong to some family of a registered breed? G. M.

Ans.—The Hamiltonians were descended on the male side from imported Messenger, an English Thoroughbred, through his son, Mambrino, also a Thoroughbred, and Mambrino's son, Abdallah, out of a mare of unknown blood, who in turn got Rysdyk's Hamiltonian, out of a mare by Bellfounder (an imported Norfolk trotter), and his second dam probably having two crosses to imported Messenger. The blood of Rysdyk's Hamiltonian is largely represented in the trotting-bred stock of the present time, registered in the Studbook of the American Trotting Register Co., either by lineal descent or by record of performance. There is no pure breed or family known as Hamiltonian.

TITLE TO LAND—LINE FENCING

A owns west half and B east half of a certain lot containing 200 acres, more or less. The line between the two farms was surveyed 42 years ago by a surveyor not having any license, but the line was not disputed till last fall, when A had the line surveyed again, and found his half was over two rods narrower at blind line than it is at front of farm.

1. Can A compel B to give him two rods, B having his farm completely fenced in for over eleven years?
2. Can a man claim the same width of land at the blind line of his farm as he has at the concession?
3. Can A force B to straighten line fence, which has been up for over eleven years?
4. Can a brush fence in a bush be called a lawful fence if it is built to stop stock?
5. If A refuses to build his half of line fence, which is partly burnt down, what legal steps should B take to compel him to build it? SUBSCRIBER, Ontario.

Ans.—1 and 3. Probably not, but in order to giving a definite answer to these questions, it would be necessary to make a careful investigation of the title to the two parcels of land in question.

2. The answer to this question must be, substantially, the same as that to questions 1 and 3.

4. It largely depends upon local municipal by-laws. See your township clerk as to same.

5. He should propose to A to call in the fence-viewers, and, if necessary, proceed in that way—under the Line Fences Act (Revised Statutes of Ontario, 1897, Chap. 284).

Nitrate of Soda

(Plant Food)

NITRATE SOLD IN ORIGINAL BAGS

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1103 Temple Building
Toronto, Canada

Orders Promptly Filled—Write for Quotations and Literature

SEED OATS

REGENERATED BANNER

THE old Banner Oat has more friends in Ontario than any other oat. New variety after new variety has been brought in and put to test, but the old reliable Banner, taken all round, generally is the best. Of the 63 different varieties entered in the crop competition of the Dominion Government, the variety with the greatest number of entries was the Banner. The variety that won out the most times was the Banner. Out of the 36 districts in Ontario the Banner came first in 13. A couple of years ago we were fortunate to get from an oat specialist in Scotland some regenerated Banner oats; these we brought out to Canada, and have tested them in several districts of Ontario. They have all the good qualities of the old Banner, with the advantage of the new vigor and life of a new oat.

We offer seed grown by ourselves in Ontario from imported seed at \$1 per bushel; 10-bushel lots, 85c. Good cotton bags 25c. each. You cannot do better than to secure some of these oats and work into seed. As far as we can see, there is nothing better. Would advise a seeding of not less than 2 bushels per acre and not over 2½ bushels.

Present prices for our best

RED CLOVER, ALSIKE and TIMOTHY:

"Sun" Brand Red Clover, \$ 7.75 bus.
"Ocean" " Alsike " 11.00 "
"Gold" " Alfalfa " 12.50 "
"Diamond" Brand Timothy, \$3.25 "

These Grade No. 1. Government Standard. PURE. CLEAN. THE BEST.

Ask for samples and judge for yourself. We have selected these seeds first and last for their purity. You cannot get cleaner seed in Canada.

SEEDS FOR THE GARDEN FOR THE FARM

Send for catalogue.
Geo. Keith & Sons
124 King St., East.
TORONTO, ONTARIO.

Graphic Demonstration of Experiment by the
ONTARIO AGRICULTURAL COLLEGE, GUELPH, ONT.

RAISED FROM
CANADIAN GROWN SEEDS BEST IMPORTED SEEDS

YIELD 53.5 STONS PER ACRE
YIELD 39.7 TONS PER ACRE

INCREASE IN YIELD PER ACRE ABOUT 25% OBTAINED BY SOWING CANADIAN GROWN SEEDS

TYPE OF "OUR IDEAL" MANGEL.

SUPPORT HOME INDUSTRY.

We don't ask you to take our unsupported word as to the superiority of Home-grown Seeds, we give you FACTS, as demonstrated by experts of the Ontario Agricultural College. To make you acquainted with

R. R. R. S.

Reliable Red Ribbon Seeds

We will send you FREE, a package of Canadian Grown White Icicle Radish, and our new catalogue, if you ask for same. Also kindly send us names of friends who are buying seeds this spring.

ONTARIO SEED CO.,
37 King Street, Waterloo, Ont.
Pioneer Canadian Seed Growers.

CAN YOU SPARE SIX MINUTES?

This is all the time it takes to wash a whole tubful of clothes with a "1900 Gravity" Washer. Makes the clothes spotlessly clean, and without wear or tear.

30 Days' Free Trial of "1900 Gravity" Washer to any responsible woman. Don't send a cent of money until you have tried it. We pay the freight. Write to-day for illustrated booklet. Address me personally, FAP Bach, Manager

THE 1900 WASHER

357 Yonge Street, TORONTO, CAN.

SAVE 20c PER SHEEP

With the **NEW STEWART SHEARING MACHINE** With 4 combs & 4 cutters, only \$12.75 at your dealer's. If you have but five sheep it will pay you to own this wonderful shearing machine. It does not cut or hack sheeplike hand shears, and gets one pound and over more wool per head. It shears any kind of wool easily and quickly. WE GUARANTEE IT FOR 25 YEARS. All gears are cut from solid metal, not cast; all wearing parts are file hard; spindles are ground and polished, and the driving mechanism is enclosed from dust and dirt and runs in oil. 95 per cent of all the shearing machines used in the world are Stewart patents. If your dealer does not have it, send \$2 and we will ship c.o.d. for balance. Send for a copy of our free book "How to Shear Sheep," and our big new catalogue showing the largest line of shearing machines on earth. Write today.

Chicago Flexible Shaft Co., 110 La Salle Ave Chicago

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MANITOBA, ALBERTA SASKATCHEWAN

By Canadian Pacific direct line

For Settlers travelling with livestock and effects	Settlers and families without livestock should use
Special Trains will leave Toronto Each TUESDAY in MARCH and APRIL at 10.15 p.m.	Regular Trains leaving Toronto 10.15 p.m. daily Tourist Sleeping Cars Fastest Time

COLONIST CARS ON ALL TRAINS
No Charge for Berths
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Only Through Service to the West

Apply to nearest agent for full information and free copy of "Settlers' Guide" or write R. L. Thompson, D.P.A., C.P.R., Toronto

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MENDETS

They mend all leaks in all utensils—tin, brass, copper, graniteware, hot water bags, etc. No solder, cement or rivet. Any one 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. K, Collingwood Ont.

THE "DILLON" Hinge-Stay Fence has the greatest strength

The High-Carbon Hard Coiled strand wires on the **Dillon** will lift one-third more weight before breaking than will the hard steel wires on ordinary fences.

And, as the short, stiff stays are hinged to the laterals, the **Dillon** is given ten times the elasticity of ordinary fences—therefore no broken stays.

Any pressure on the **Dillon** brings the hinge-stays into

action. When the pressure is removed the fence springs back into shape again.

This hinge-stay system, together with the superior quality of the wire, makes the strongest, most flexible, longest-lasting fence in the world.

Write for interesting catalogue describing and illustrating the different styles of **Dillon Hinge-Stay Fence**.



Our "Monarch" Stiff-Stay Fence

The **Monarch** is easily the peer of all stiff-stay fences.

All No. 9 hard-drawn steel wires.

When making the **Monarch**, the lock is driven **DIAGONALLY** with the laterals, instead of being

applied by heavy **DIRECT** pressure at the point of crossing. This heavy direct pressure is responsible for much of the broken-wire troubles of ordinary fences.

Complete explanation furnished in free booklet. If you are wise you'll write for a copy.

WILL YOU ACT AS OUR REPRESENTATIVE ?

You can quickly work up a big fence trade in your locality with our line of fencing and gates.

No other agent has two such superior and different fences as

DILLON HINGE-STAY and **MONARCH STIFF-STAY**.

Our agents expect this to be their bumper year. You'll be wise to join them now.

The **OWEN SOUND WIRE FENCE CO'Y, Limited.**
Owen Sound, Ontario.

RENNIE'S

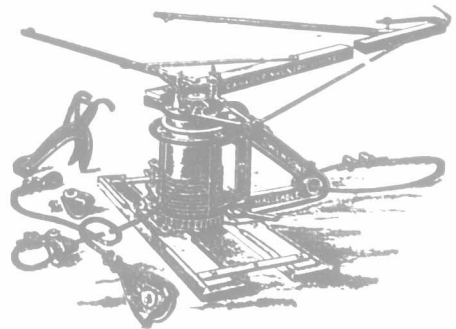
PURE, CLEAN

Best XXX Clover

IN SEALED BAGS. PRICE VERY LOW TO-DAY.
Ask your dealer, or write us direct.
WM. RENNIE CO., LTD., TORONTO.

SEEDS

STUMP AND TREE PULLERS



Made in five different sizes. The only malleable iron stump puller made. It is manufactured here and warranted here. It is the only stump puller made on which you have a chance to try it without making full advance payments. Catalogue A.

Write for further particulars to:
CANADIAN SWENSONS,
Limited.
Lindsay, Ontario, Canada.

GOSSIP.

Mr. Jos. A. Smith, of Belle Plaine, Sask., recently purchased from A. V. Carefoot, Redwing, Ont., the Clydesdale stallion, **Baron's Crown** [3335], by **Baron's Model** (imp.), by **Baron's Pride**, dam **Sally** (imp.), by **Marathon**. **Baron's Crown** was bred by Robert Davies, Toronto, and has proved a very successful sire.

At an auction sale of Berkshire swine at Whitehall, Ill., on February 23rd, an average price of \$177 for 47 head is reported, the highest price, \$675, paid by G. G. Council, for the four-year-old sow, **Lee's Artful Belle**, and the second highest, \$630, paid by A. J. Lovejoy, for the two-year-old sow, **Duke's Eunice 2nd**. Six other sows sold for prices ranging from \$200 to \$425.

The directors of the Central Canada Exhibition at Ottawa have been greatly encouraged at the manner in which their decision to establish a process department, commencing with the next fair, has been received by the manufacturers. As the result of the personal solicitation of Secretary McMahon, a considerable portion of the space devoted to this purpose has been taken, and the feature promises to be one of the most successful ever tried by the Ottawa Exhibition.

REID'S SHORTHORN SALE.

Notwithstanding the stormy weather and bad condition of the roads, and also the fact that the Woodstock sale was being put through on the same day, which probably kept a number of buyers from attending, the sale of young bulls and heifers of R. H. Reid & Sons, Pine River, Ont., on March 4th, was a success. Although no fancy prices were paid and every buyer secured a bargain, yet the bidding was brisk from the start, especially in bulls, and a number more of the sort offered could have been disposed of at fair prices. Mr. John Purvis, auctioneer, opened the sale with an address, complimenting the Messrs. Reid on the quality offered. Mr. Thomas Grundy, auctioneer, of Goderich, who was present as a visitor, in a short address, said that he had driven over thirty miles of bad roads to see the herd and the equipment at Clover Lea Stock Farm. He felt he was well repaid for the extra effort he had put forth to get there. The cattle were brought out in choice condition, although some of the heifers were rather young to bring what they were worth. Six bulls averaged \$122 each, the two toppers going to John Barr, Blythe, and Wm. Cullen, Owen Sound. Ten females averaged \$84, the whole lot bringing an average of \$98.

The Alaska-Yukon-Pacific Exposition will be held in the city of Seattle, Washington, the coming summer, opening in June and continuing to the end of October. It was the first boast of the directors that the live-stock show to be given during the month of September would be the largest ever held on the Pacific Coast, but the prospect is that it will be, instead, the largest ever held west of the Mississippi, and, if not the largest in the country, certainly the most representative. The Exposition will be along the lines of the Columbian, the Pan-American, and the Louisiana Purchase events. Premium announcements from various breeders' associations continue to pour in, the last to be heard from being the American Shorthorn Breeders' Association, which will give \$2,500 for special premium purposes. To this sum will be added another \$2,500 by the Exposition, making \$5,000 for special premiums in this class. The American Aberdeen-Angus Association has sent notice of a special premium offer of \$1,000, and the Exposition will add a like amount in this case also. Very liberal prize lists are being offered in all the principal breeds of horses, cattle, sheep and swine, and many breeders have already signified their intention of exhibiting. Special reduced railway excursion rates will be arranged, and a grand opportunity afforded visitors of seeing the Great West and the Pacific Provinces and States at a moderate expense.

HAD BACHACHE.

Was Unable To Do House-work For Two Years

Many Women Suffer Untold Agony From Kidney Trouble.

Very often they think it is from so-called "female disease." There is less "female trouble" than they think.

Women suffer from backache, sleeplessness, nervousness, irritability and a dragging down feeling in the loins. So do men, and they do not have "female trouble."

Why, then, blame all your trouble to "female disease"?

Most of the so-called "female disorders" are no more or less than "kidney disorders," and can be easily and quickly cured by **Doan's Kidney Pills**.

Mrs. C. Dupuis, Bellevue Village, N.B., writes: "I was unable to do my house-work for two years on account of backache. I could not get up the stairs. **Doan's Kidney Pills** cured me permanently after doctors failed to even relieve the pain. I can highly recommend them to all sufferers from kidney trouble."

Price 50 cts. per box or 3 boxes for \$1.25 at all dealers or mailed direct on receipt of price by **The Doan Kidney Pill Co., Toronto, Ont.**

GOES LIKE SIXTY
SELLS LIKE SIXTY
SELLS FOR
\$65

GILSON
GASOLINE
ENGINE
For Pumping, Cream
Separators, Churns, Wash
Machines, etc. **FREE TRIAL**
Ask for catalog—all sizes

GILSON MFG. CO., 150 York St., Guelph, Ont.

For Sale: Imported Clydesdale Stallion

ADONIS (10953), sired by the noted **Baron's Pride** (9122). Bay in color. He has travelled six successful seasons in this vicinity. Five and a half miles from Mt. Forest station, G. T. R., or three and a half miles from Holstein station, G. T. R.

John McDougall, Jr.,
P. O. Box 238, Mt. Forest, Ont.

Seed Barley—A quantity of the famous No. 21 barley, which is the best at O. A. C., and also most popular throughout the Province since first distribution in 1906.

JOHN ELDER, Hensall, Ont.

He—These glasses give me a very intellectual appearance, don't you think?
She—Yes. Aren't they powerful!

"Does your wife ever ask your advice about anything?" asked the impertinent relative.

"Certainly," answered Mr. Meekeston. "She frequently consults me as to whether her hat is on straight."

Need no Longer Fear the Knife

Gravel Easily and Naturally Cured by Dodd's Kidney Pills.

Joseph Pelrine, who Suffered the Tortures of this Terrible Complaint for Nine Months, tells how the old Reliable Kidney Remedy Cured Him.

Port Felix East, Guysboro Co., N. S., March 15.—(Special).—That you need no longer fear the knife if troubled with gravel or other urinary troubles is the glad news that **Joseph Pelrine**, a well-known young fisherman here, is telling his friends.

"I suffered intense pain from gravel and other urinary troubles for nine months," Mr. Pelrine says. "But seven boxes of **Dodd's Kidney Pills** cured me completely. I heartily recommend **Dodd's Kidney Pills** to anyone who is suffering from gravel or urinary troubles."

Dodd's Kidney Pills cure gravel by curing the kidneys. The urinary organs are entirely dependent on the kidneys. If the kidneys are not in good working order they cannot filter out the uric acid, and it combines with other products of the body and causes gravel. Healthy kidneys dissolve the stones, and they pass off in the urine. That's why **Dodd's Kidney Pills** always cure gravel.

FREE Lightning Insurance Policy With Every Roof Covered With SAFE LOCK SHINGLES

EVERY Canadian farmer who expects to build or re-roof his house or barn should write us to-day for details of our Free Lightning Insurance Policy in connection with Safe Lock Metal Shingles.

We give it to you without any conditions whatsoever, except that you roof with Safe Lock Shingles.

Such an offer is unprecedented, but we can afford to make it because we know absolutely that Safe Lock Shingles will insure safety from lightning.

It is absolutely free. You do not have to pay one cent for this protection, either directly or indirectly.

Insurance records show that nearly one-half the fire losses on barns in Canada result from lightning. This loss, running into the hundreds of thousands of dollars, can be entirely prevented if Safe Lock Shingles are used.

We know this, and we back up our statement with a Free Insurance Policy payable under its terms in cash.

Safe Lock Shingles are sold at the same price as shingles known to be inferior in quality of steel, galvanizing and construction.

We have been manufacturing Safe Lock Shingles for over ten years, and roofs laid when we started in business are still "as good as new," to quote from hundreds of letters we have on file in our office from our pleased and satisfied customers.

In all this time these roofs have not cost one cent for repairs of any sort.

In all these years no building covered with Safe Lock Roofing has ever been destroyed by lightning.

Do you know that Safe Lock Shingles fully meet the rigid requirements of the British Government for Admiralty and other public service. Think what that means. Let us illustrate.

Every farmer knows from experience that ordinary galvanized fencing seldom lasts longer than two or three years without showing signs of rust. On the other hand, galvanized wire for Government use gives years and years of service, owing to the splendid galvanizing insisted upon.

Safe Lock Shingles are galvanized the same as Government wire, and therefore may be depended upon to give long service. We really do not know how long they will last. Safe

Lock Shingles in use for more than ten years show no signs of wear.

To-day we are using better material in their construction than ever, the steel is of higher grade, and the galvanizing is heavier. We have also made several improvements in manufacturing. For instance, every shingle is cut accurately to size before it is galvanized, thus protecting the edges of the shingles instead of leaving them raw and exposed to the decaying action of moisture.

We want you to remember the

thus causing a leaky roof.

Safe Lock Shingles cannot be blown off, nor can they be pulled apart by warping of the sheeting, or any other cause.

Study the small illustrations on this page, and you will be convinced of the truth of this statement.



FIG. 1 In Fig. 1 the solid black line shows the top lock, the shaded line the bottom lock. Notice that a

contraction due to heat and cold. They cannot unlock.

Illustrations 3, 4 and 5 show the construction of other metal shingles.



FIG. 3 No. 3 is the old-fashioned cleat shingle now almost entirely driven from the market by the Safe Lock. These do not always shed water, and it is almost impossible to keep them from leaking after they have been on for a season or two.



FIG. 4 Note in No. 4 that the nail is only about half way driven into the sheeting, leaving a large surface exposed to the weather. This makes a very insecure fastening for a roof, and this is still further weakened by the springiness of the steel, which has a tendency to pull out the nails, causing a loose, leaky, rattling roof.

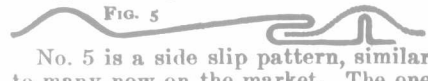


FIG. 5 No. 5 is a side slip pattern, similar to many now on the market. The one shingle slips into the other, but does not lock. Shingles constructed in this way pull apart easily and must not be confused with the positive lock in our Safe Lock Shingles, as shown in Fig. 2.

Safe Lock Shingles are absolutely uniform. We have spent time and money to perfect their construction, which is fully protected by patent. They are now easier than ever to lay, and a Safe Lock roof cannot leak, if the shingles are laid in accordance with our printed instructions.

SAFE LOCK SHINGLES are the only shingles that—

1. Give you a positive guaranty against Lightning, backed up by a policy signed and guaranteed by the manufacturers.
2. Meet fully the rigid requirements of the British Government for Public work.
3. Lock on four sides, and cannot be pulled apart.
4. Have three (3) thicknesses of metal along upper edge at point of greatest strain.
5. Completely protect nails from weather.
6. Have edges galvanized after being cut to exact size.

name Safe Lock. No other shingle has that name.

No other shingle is a Safe Lock Shingle.

Safe Lock Shingles lock positively on all four sides. Other shingles grip only on two sides. This is not enough for a permanent, durable roof. We know of many instances of buildings covered with these shingles being entirely unroofed in a stiff breeze. Another objection is that these shingles are apt to spread apart owing to the warping of the sheeting to which they are nailed,

double fold forms the top lock instead of a single fold, thus giving twice the strength at the point where the greatest strain comes.

With Safe Lock Shingles the nails are driven full length into the sheeting, and are protected by the peculiar lock construction from any possibility of water backing up and starting rust.



FIG. 2 Fig. 2 shows the side locks. Note the deep firm grip which allows ample room for expansion and

The Metal Shingle and Siding Co.

Limited
Roofers to the Farmers of Canada
Queen St. Factory
Preston, Ont.
Branch Factory
Montreal

THE METAL SHINGLE AND SIDING COMPANY Limited
Queen Street Factory
PRESTON, ONTARIO

Please send me your booklet "The Truth about Roofing," with full particulars of your Free Safe Lock Lightning Insurance Policy.

CUT OFF THIS COUPON AND MAIL TO US

I expect to build a..... Kind of Building
State when you propose to build.....
Size of Roof..... If interested in any other Metal Building Goods, please state such fact here.....
Name.....
P. O..... Province.....

GOSSIP.

H. THOMPSON'S SHORTHORNS.

That there are still high-class show Shorthorns left in Ontario was realized by a representative of "The Farmer's Advocate" on recently visiting the home of the veteran importer and breeder, Mr. Hugh Thompson, of St. Mary's, Ont. Previous experience had taught us to expect to see something pretty nice when visiting Mr. Thompson's stables, but the bunch now on hand are certainly exceptional. Belmar Wimple is a roan two-year-old, sired by the Toronto junior champion, Marigold Sailor, dam Imp.

Vanda 2nd, a Wimple-bred cow. This heifer is put up on show-ring lines, a grand, good, thick, mellow-handling heifer, extra-good on top and through the heart. Lancaster Pride 2nd is another two-year-old, by Imp. Gold Cup, dam Lancaster Pride, by Imp. Cicely's Pride. This is also something nice, and due to freshness to that splendid bull and excellent sire, Roan Champion 64617, by the Cruickshank Clipper bull, Cornelius (imp.), a full brother to the great Corner Stone, dam Broadhocks 20th. We mention this bull's breeding, as he is the sire of several of the young things. Maid of the Valley 2nd is a Cruickshank Vil-

lage, by Imp. Lucerne, dam Imp. Village Maid 29th. Here is another two-year-old, a roan, and a right good one; she is low-down, thick-fleshed and even, and has a bull calf at foot. Village Maid 2nd is a red-roan four-year-old, by Royal Prince, the great breeding son of Imp. Royal Sailor, and the sire of the two champions, Fair Queen and Queen Ideal, dam Village Maid, by Challenge. Here is a great cow, and a greater breeder, she has a bull calf by Roan Champion. But the cream of the bunch is her yearling daughter, Village Flower, sired by the Broadhocks bull above mentioned, Roan Champion. Here is probably a dead sure

winner at Toronto next fall in the senior yearling class, her form being perfect, her shoulder, top and heart wonderful; one of the very best heifers in the country. Another big, good one is a roan four-year-old English Lady, sired by Imp. Royal Archer, dam English Lady 6th; she has a heifer calf by Roan Champion. Parties wanting choice females should get after these.

Young Hereford bulls of the most desirable type, also a few choice heifers, are offered for sale in his advertisement by Mr. H. D. Smith, Ingleside Farm, Hamilton, Ont.



What La Grippe Did.

Mr. G. D. Colwell, of Walkerville, Ont., was stricken down with La Grippe in 1906 and it left him in very bad condition. He says: "I was all run down and bordering on Consumption. I could not sleep at nights, had awful sweats, and coughed nearly the whole time. This is how I was when I began to take PSYCHINE, in a low nervous state; but from the first bottle I began to improve. It did marvels for me and brought me back to health in no time, making a new man of me."

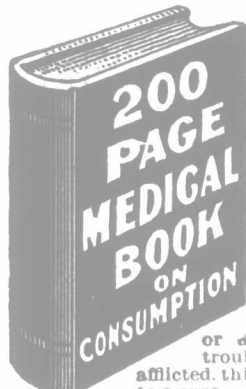
"It fortifies the body against the attacks of La Grippe and is a sure preventative. I always take PSYCHINE if I feel a cold coming on and it puts me right in no time."

PSYCHINE tones the system and keeps the body in good physical condition. No one can afford to be without it. All Druggists and Stores sell at 50c and \$1.00. Send to DR. T. A. SLOCUM, Limited, Spadina Ave., Toronto, for a TRIAL FREE.

For Coughs, Colds, Throat, Lung and Stomach Trouble take Psychine.

PSYCHINE
PRONOUNCED SI-KEEN
THE GREATEST OF TONICS FOR HEALTH AND ENERGY

Consumption Book



FREE

This valuable medical book tells in plain, simple language how Consumption can be cured in your own home. If you know of any one suffering from Consumption, Catarrh, Bronchitis, Asthma or any throat or lung trouble, or are yourself afflicted, this book will help you to a cure. Even if you are in the advanced stage of the disease and feel there is no hope, this book will show you how others have cured themselves after all remedies they had tried failed, and they believed their case hopeless.

Write at once to the **Yonkerman Consumption Remedy Co.**, 1299 Rose Street, Kalamazoo, Mich., and they will send you from their Canadian Depot the book and a generous supply of the New Treatment, absolutely free, for they want every sufferer to have this wonderful cure before it is too late. Don't wait—write today. It may mean the saving of your life.

Hereford Bulls!

One two-year-old. Three 12 months old. All low-set, beef bulls, and in fine condition. Prices right. A few choice heifers for sale.

H. D. Smith, Hamilton, Ont.
"INGLESIDE FARM"

Clydesdale Stallions FOR SALE: Barons, Model (imp.), rising 4 years; six Baron's Pride; dam by Prince Robert. This is a coming champion, and 80 per cent getter. Also the imported All Gold, rising 3 years old, and a Canadian-bred rising 5 years. Address:

A. ROSSITER, CRAMPTON, ONT.

Subscribe for "Farmer's Advocate"

QUESTIONS AND ANSWERS. Miscellaneous.

GARGET IN COWS.

Cows have inflammation in the udder. Symptoms: The udder is feverish and hard and gives thick milk. They calved about two weeks ago, and came to their milk in good shape, and were doing nicely until this set in. Now they do not give one pint. SUBSCRIBER.

Ans.—Give to each cow 1 pound Epsom salts, 1 ounce (say four tablespoonfuls) spirits of nitre, and 1 teaspoonful of saltpetre. Mix in a quart of water and give as a drench, slowly. Bathe the udder well and long with very warm water, not scalding, three times a day, then bathe with hot vinegar, and lastly rub with goose grease. Milk out three times daily, and give for a week a teaspoonful of saltpetre twice a day in feed.

MILK RECORDS OF SHORT-HORNS.

Can you give me any data or references of the milk and butter-fat records of any milking Shorthorns in Canada or Ontario? G. D. M.

Ans.—The most noteworthy official milk records of Shorthorn cows available are those of the few which have competed in the Ontario Winter Fair trials, at Guelph, and which are probably not a fair representation of the best milking Shorthorns, since, with few exceptions, cows of this breed are not milked, but allowed to nurse their own calves.

The official reports of the Guelph Show for the five years, 1904 to 1908, inclusive, show that eight of the prizewinning Shorthorn cows yielded an average of 47.50 lbs. milk, and 1.7 lbs. butter-fat; equivalent to 1.9909, or practically 2 lbs. butter per cow per day. The highest individual record of a cow in the trials mentioned was 54.28 lbs. milk, and 2½ lbs. butter.

BUTTERCUP FOWLS.

I have read that there is a new breed of chickens known as "Buttercups." Do you know of such a breed? Are they so far ahead in every respect of all other breeds as some would have us believe? J. H. S.

Ans.—Wm. McNeill, of London, says that he has read of the Buttercup fowls, but in all his forty years' experience he never ran across them. If they were superior, they would have forged ahead. According to a description of the new breed appearing in print recently, some of them have legs of a willow-green color, while others have them of a yellowish color. The comb is their peculiar characteristic. It is neither rose, pea nor single, but is formed like a cup or saucer on top of the head, with points resembling a flower, hence the name "Buttercup." Plumage of the cock is a butter-ash-red, to a red, with black main tail and wing flight feathers, very much the color of the Rhode Island Red. Weight from 5 to 7½ lbs. Hens are solid buff, or somewhat spangled or laced, after the manner of Golden Spangled Hamburgs. Weight of hens, 4½ to 6½ lbs.

PREPARING FOR POTATOES—PEAS AS GREEN MANURE.

1. I have six acres of light, clay loam, which was manured last spring for potatoes. I intend to sow peas and plow them down for green manure, and put in potatoes again this year. How do you think this will do, or do you think it will be too rich?

2. Which is best to plow down for manure, cow peas, or ordinary field peas? W. T. C.

Ans.—1. You most likely would get better returns from this field without attempting a pea crop prior to potato planting. The potatoes should be planted by the end of May, and the peas would have made little growth by that time. If you put on a liberal coat of manure last year, and the land was not too greatly lacking in plant food and humus, it should be possible to get a fair crop without green manuring. In fact, you have not time for a green crop. Well-rotted manure, or special fertilizers, might give satisfactory results.

2. Ordinary field peas are more satisfactory in Canada than cow peas. The latter thrive a little farther south, but can not be depended upon in this latitude.

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are made for you.
Be economical—buy them.
Don't use cheap paints.
Get a brand with a reputation.
Every painter knows Ramsay's Paints are the standard for house painting.
You can prove it yourself.
Every tin fully guaranteed and mixed ready for use.
Anybody can apply Ramsay's Paints.
Ask your dealer for color card and write us for folder showing cuts of painted houses.

A. RAMSAY & SON CO. Montreal.
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THE MOST COMPLETE LINE OF

IRON STABLE FITTINGS

IN CANADA. ALSO A COMPLETE LINE OF
Stewart Horse-clipping and Sheep-shearing Machines.

Knives Sharpened and Returned Promptly.
Before fitting up your stable write us for information and prices.
Our knowledge, gained by years of experience, is at your disposal.

THE TISDALE
IRON STABLE FITTINGS CO., LTD.
19 TEMPERANCE ST. TORONTO, ONT.
Send for Stable Fitting Catalogue.

High-class JERSEYS at Auction

On Wednesday, March 31st, 1909,

The property of MR. S. J. LYONS, Norval, Ont.

35 pure-bred Jersey cattle and 15 high-grade Jerseys, 50 head in all, including the great cow, Dinah of Lawndridge 127799, and three of her daughters, besides a number of other deep-milking and heavy butter producing cows, and heifers, the produce of such cows. Also three good young bulls. Farm three miles from Norval station, and about the same distance from Georgetown Junction, G. T. R. Sale to commence at 1 o'clock.

TERMS: Seven months' credit on approved joint notes.

Benjamin Petch,
Auctioneer.

S. J. LYONS, Prop.,
Box 19, Norval, Ont.

Clip Your Horses in the Spring

It Pays—Clipped horses look better, feel better and do better work—Clip With the Stewart Ball Bearing Clipping Machine

The only ball bearing clipping machine made. Do not buy a frail, cheaply constructed clipping machine that will last you only a season or two, and give trouble all the time, when you can get this splendidly made, enclosed gear ball bearing machine for less than \$2.00 more. Every gear in this machine is cut from solid steel bar and made file hard. They all run in an oil bath, so friction and wear are practically done away with. It turns easier, clips faster, and lasts longer than any other clipping machine made. WE GUARANTEE IT FOR TWENTY-FIVE YEARS. Price all complete, at your dealers, only \$9.75. Write for our big free catalog. Try this machine out side by side with any other machine on the market, at any price, if this is not worth three times as much, send it back at our expense both ways, we will refund every cent you paid. Send today.

CHICAGO FLEXIBLE SHAFT COMPANY, 110 La Salle Ave., Chicago

Buy at First Hand

DEAL WITH US DIRECT, and secure handsome, well-made, first-class carriages and high-grade harness at first cost. Dealers' profits cut off.

Our catalogue will help you to choose from the biggest and best assortment of vehicles and harness. It accurately pictures and describes all the many styles, gives prices, and fully explains our method of selling direct. Mailed free.

No. 10 Piano Box Buggy
Price, \$57.00

INTERNATIONAL CARRIAGE CO., BRIGHTON, ONTARIO.

A WAR CORRESPONDENT'S NARROW ESCAPE.

Mr. Frank Scudamore, the great war correspondent, who sent many of the Canadian dispatches during the late Boer war, owes his health to Zam-Buk. He has passed unscathed through twenty-nine battles, but a scratch which turned to blood-poisoning nearly ended his days. Zam-Buk saved him, and he writes as follows:

"I have proved Zam-Buk such a blessing that I want others to know of its merits. The poisonous dye in some underclothing I was wearing got into a scratch I had sustained and blood-poisoning set up. Inflammation was followed by great pain and swelling, and then ulcers broke out on my legs. For some time I could not walk a few steps, nor even put my feet to the ground. On my left leg, below the knee, I had seventeen ulcers, which caused holes into which I could put my thumb. On the right leg I had fourteen ulcers. Medical treatment failed to relieve, homely remedies were applied in vain. Week followed week, and I gradually grew worse, until I was worn out with pain and lack of sleep. On the advice of a friend I obtained some Zam-Buk and left off everything else while I tried it. It seemed to give me almost instant relief from the pain, and in a few days I noticed that it was healing the ulcers. This was cheering indeed, and gladly I persevered with the Zam-Buk treatment. Bit by bit the poisonous matter was drawn out. The ulcers were healed, and new, healthy skin grew over the previously diseased places. I am now quite cured, and in gratitude I mention these facts that other sufferers from skin disease may know of something which will cure them.

Zam-Buk is a sure cure for eczema, ringworm, ulcers, abscesses, piles, bad leg, suppurating wounds, cuts, burns, bruises, chapped hands, and cold cracks, and all skin injuries and diseases. All druggists and stores sell at fifty cents box, or post free from Zam-Buk Co., Toronto, upon receipt of price.

QUESTIONS AND ANSWERS. Miscellaneous.

CEMENT FOR STABLE FLOOR—LIME AND SAND FOR STONE WALL.

1. How many barrels of cement would it take to floor a cow stable thirty-six by thirty-seven feet?

2. About how much each of lime and sand would it take to a cord of stone for lacement wall, 20 inches thick. We intend to use most all sizes of stone that can be handled conveniently? G. C.

Ans.—1. A layer of two inches of concrete, mixed one of Portland cement to five of high-grade gravel and sand, is sufficient for stable floors, and even less does in alleyways. At this thickness a barrel of cement covers 120 square feet. Your stable comprises 1,332 square feet, so that you would require about 12 barrels of cement.

2. In building stone walls, a cord of stone is required for about 100 cubic feet of wall. For every cord of stone, about one-eighth of a cord of sand is needed. This, of course, will vary with the quantity of stone used. Sand and lime are mixed in the proportion of three or four of the former to one of the latter. That is, for every 128 cubic feet of stone, there would be 16 cubic feet of sand; or the mortar required would comprise, approximately, 16 cubic feet of sand and 4 or 5 cubic feet of lime.

TRADE TOPIC.

Another roofing on the market in Canada, and advertised in these columns, is manufactured by the Canadian H. W. Johns-Manville Co., Ltd. The basis of this roofing is asbestos, the greatest fire-resistant known, and practically indestructible. The asbestos fibres are felted in sheets, and cemented together with asphalt, an excellent waterproof material, with the result that the manufacturers have reason to claim this roofing is not affected by changes in temperature, rust, rot or decay. The cost of maintenance of a roof should be carefully borne in mind when purchasing. Owing to the mineral construction, it requires no painting or coating at any time in order to preserve its life. Recently a fire-test was made by the Fire Chief and City Architect of Toronto. A temporary construction was covered with J-M Asbestos Roofing. A brisk fire was built on top of this, and it took one hour and ten minutes before it did any serious damage. This roofing is manufactured by a reliable firm, having branches throughout Canada and United States, and asbestos mines at Danville, Que. They would be pleased to forward catalogue of special interest to farmers.

BOOK REVIEW.

PROGRESSIVE POULTRY CULTURE.—A practical, progressive and systematic exposition of the science and best methods of poultry culture, by a veteran teacher, investigator, and acknowledged authority, who writes from large experience, giving the results obtained from practice, study, and observation gained while resident at different times in six States of the Union, as well as in Germany and Japan. This is the publisher's comment on a neat 289-page illustrated cloth-bound book, by Arthur A. Brigham, B.Sc., Ph.D., Principal of the South Dakota School of Agriculture. Perusal of its pages establishes the moderation of the claim. While paying particular attention to the utility side of poultry culture, the author does not neglect the interests of the fancier, exhibitor, or breeder, and the teachings are of general application. The scope of the book is gratifying to the seeker after information, the directions are plain and practical, the language non-technical and straight to the point. As a text-book, reference work, or manual for the practical poultry-keeper, the work is deserving of high praise. It is published by the Torch Press, Cedar Rapids, Iowa. Price, \$1.50.



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.

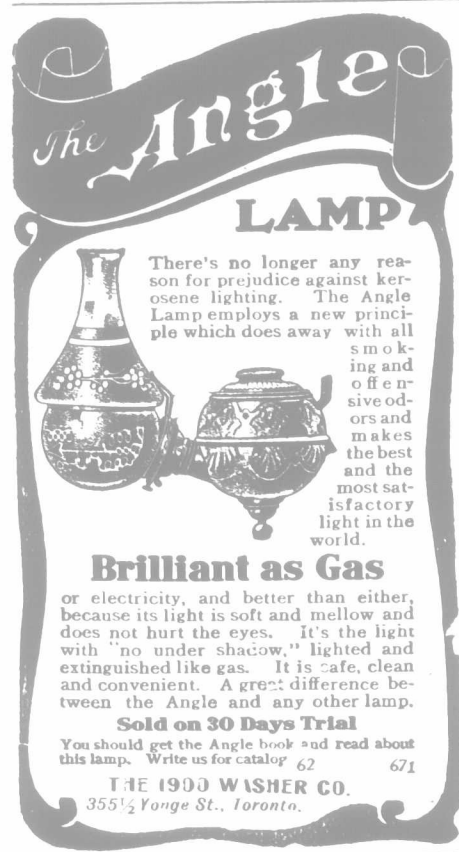
All corrugations are straight and true, assuring an accurate fit at both side and end laps without waste. Special hip and ridge covers make tight, neat joints at these points.

Where warmth is not important "Galt" Corrugated Sheets save three-fourths of the wood sheathing 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.



The Angle LAMP

There's no longer any reason for prejudice against kerosene lighting. The Angle Lamp employs a new principle which does away with all smoking and offensive odors and makes the best and the most satisfactory light in the world.

Brilliant as Gas

or electricity, and better than either, because its light is soft and mellow and does not hurt the eyes. It's the light with "no under shadow," lighted and extinguished like gas. It is safe, clean and convenient. A great difference between the Angle and any other lamp.

Sold on 30 Days Trial

You should get the Angle book and read about this lamp. Write us for catalog 62 671

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355 1/2 Yonge St., Toronto.

IF YOU'VE NEVER WORN TOWER'S Slicker

you've yet to learn the bodily comfort it gives in the wettest weather

MADE FOR HARD SERVICE AND GUARANTEED WATERPROOF AT ALL GOOD STORES

TOWER CARBAMER Co. TORONTO CAN.

You Fertilize! Why not Fumigate The Soil?

Countless millions of Slugs, Moths, Ants, Lice, Flies and Beetles live in the ground and are hatched out in warm weather.

These millions live by feeding on and destroying your crops.

They can easily be killed, **IN THE GROUND**, by using **APTERITE**—the wonderful soil fumigant.

Fumigating your fields with

APTERITE

Fumigation is just as important as fertilization. As a rule, the richer the soil, the more insects it contains.

APTERITE means bigger crops and absolute protection against Eelworms, Lice and other soil insects.

FREE BOOK

"The Eradication of Plant Pests" sent free if you tell us where you saw this advertisement—how many fruit trees you have and what crops you grow.

For sale by druggists and dealers generally or direct from

WM. COOPER & NEPHEWS TORONTO.

CUSTOMERS FROM NEWFOUNDLAND TO B. C. WRITE US.

Yes, we ship **DIRECT** to customers the best Trees, Ornamentals, Roses, Shrubs, Small Fruits in verity we can grow. Send for our priced catalogue.

Mr. Parsons, of Newfoundland, writes us: "Box trees received in excellent condition. Well pleased."

Mr. Hill, B. C.: "We have the 1,348 trees all planted, and must say they are the finest lot of trees I have seen from any nursery. Mr. Harry is much pleased with his trees and wants more."

Yes, we can please you, too, if ordered at the **CENTRAL NURSERY** in good time. **TRY US.**

A. G. HULL & SONS, ST. CATHARINES, ONT.

ROOFS THAT NEVER WEAR OUT

Sea Green or Purple Slate

is nature's own product—not man made. Quarried from solid rock—split into convenient form for laying, and then in its natural state ready for the roof.

SOLID ROCK CAN NOT WEAR OUT

It can't burn, rust, warp, crack, tear or decay. That's why Sea Green or Purple Slate Roofs never wear out and never require painting and repairing like all other roofing. Sea Green or Purple Slate Roofs are suitable for any building, new or old. Give perfect protection. Reduce insurance rates because spark and fire-proof. Afford clean clear water. Not affected by heat or cold. First cost—only a trifle more than short lived roofing. Settle your roof question for all time. Don't spend more money for poor roofing. Write to us for our free book "ROOFS"—it will save you money. Give name of your local roofer. Write today.

AMERICAN SEA GREEN SLATE CO.
Box 3 Granville, N. Y.

Boo Spavin

Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Boo Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be imitated. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser

describes and illustrates all kinds of blemishes and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write. FLEMING BROS., Chemists
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Cure That Horse With Tuttle's Elixir

Lame horses Veterinarians have given up and which other preparations have failed to help, have been cured, made as sound as a dollar, with Tuttle's Elixir. It produces better results than anything else because it acts on a different principle. It is something more than a mere liniment. Let us explain and show you the proofs of its value in cases of Curb, Splint, Spavin, Sprains, Swellings of any kind. Also for internal ailments.

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Write for it today. 100 pages, illustrated, filled with information valuable to every horse owner. Dealers keep Tuttle's Remedies. Don't experiment. Get Tuttle's.

Tuttle's Elixir Co.
66 Beverly St., Boston, Mass.
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Tobacco Habit.

Dr. McTaggart's tobacco remedy removes all desire for the weed in a few days. A vegetable medicine, and only requires touching the tongue with it occasionally. Price \$2.

Liquor Habit.

Marvellous results from taking this remedy for the liquor habit. Safe and inexpensive home treatment; no hypodermic injections, no publicity, no loss of time from business, and a cure guaranteed. Address or consult Dr. McTaggart, 75 Yonge Street, Toronto, Canada.

Ormsby Grange Stock Farm, ORMSTOWN, P. Q.

DUNCAN McEACHRAN, F. R. C. V. S., D. V. S., Proprietor.

Importer and breeder of high-class pure-bred CLYDESDALES. Farmers or ranchmen starting breeding Clydes, pure or grade, specially invited to correspond.

CLYDESDALE STALLION FOR SALE

Rising three years; breeding the best, and a bargain for some one. Come early, or write: MOSES DOOLITTLE, COLUMBUS P. O., ONT. BROOKLIN, C. T. R.

Shires, Shorthorns and Lincolns

We are now offering eight specially good young bulls, richly bred, and will be priced right; also a dozen heifers. Some choice young Shire fillies. And Lincolns of both sexes.

John Gardhouse & Sons, Highfield, Ont. Weston Station.

Dr. Bell's Veterinary Medical Wonder cures inflammation of lungs, bowels and kidneys. The 20th-century wonder. Agents wanted in every county. Write for terms. DR. BELL, V. S., Kingston, Ont.

PLEASE MENTION THIS PAPER

QUESTIONS AND ANSWERS. Miscellaneous.

A HORSE DEAL.

R. D. sold a mare in foal to B. C. last June, and if the mare had a living colt, B. C. agreed to pay \$15 for horse service, but if the colt died R. D. was to pay for it himself. But in February last B. C. had an auction sale, and sold the mare. B. C. got up at the sale and told them that the man who bought the mare was to pay horse service if the colt was living, but if it died he paid nothing. Now R. D. claims that B. C. broke the bargain with him, and wants B. C. to pay horse service. B. C. claims that he broke no bargain at all. Which of these men are right?

Ans.—B. C., Ontario.

AN OLD MORTGAGE.

A father took a second mortgage on his son's farm and let him have it for three years without interest, but the son got careless and never paid any interest at all for twenty-five years. The father did not like to press him for it; but now the son does not want to pay anything, and the father needs it, as he is old, and would like to get things straightened up. Would that mortgage be legal yet, after so long a time running without interest?

A SUBSCRIBER.

Ontario.

Ans.—Probably not, as the matter stands at present, and the father would do well to see a solicitor at once, and instruct him to arrange for what is necessary to be done in order to have the security put in proper shape.

DANGEROUS DOG—YOUNG BULL

1. What oats, when sown with goose wheat, will ripen at the same time as the wheat?

2. A and B are neighbors. A came to visit B, and while at the door, B's dog bit A. Can B lawfully keep this dog running loose?

3. Is it legal to let a one-year-old bull run in a pasture-field, lawfully fenced?

Ontario.

Ans.—1. Daubeney oats should give fairly good satisfaction in this way. Prof. Zavitz, at the Ontario Agricultural College, finds a mixture of one bushel Daubeney oats and one bushel Mand-scheuri barley per acre gives larger yields of grain than either kind sown alone, and larger than any one of numerous combinations of grains tried in comparison with it on the plots.

2. We do not see that he can be prevented from doing so, unless there is a local municipal by-law to meet the case. You should inquire concerning the by-laws, if any, on the subject, of the clerk of the municipality. Of course, though, in allowing such a dog to run, B takes the risk of incurring liability to damages in a civil action at the suit of A, or of some one else whom the animal may injure.

3. Yes.

PEAFOWL—DEALERS IN FARM PRODUCE.

1. Do peafowl lay many eggs?

2. Will a hen hatch and rear peafowl successfully?

3. Where could the eggs be got, and about what price would they be?

1. Please give the name and address of a reliable firm in (a) Toronto, (b) Montreal, buying farmers' produce, such as butter and eggs, and would accept woody consignments. J. B. H.

1. As a rule, five to ten eggs are laid, but sometimes the number is greater.

2. Common hens will hatch peafowl but they are not advisable foster mothers because of the fact that they leave the young birds too soon. The peafowl remains with the young, and provides much protection for nearly six months.

3. We cannot give you names of persons who raise peafowl eggs for sale. Perhaps it would be for your interest to send peafowl eggs to an advertiser in "The Farmer's Advocate."

1. Let's see, Mr. Henry Gately, 352 Dufferin St., West Montreal, got tired of an old hen, and in whose nest he had other peafowl eggs, and sold profit by the time he found out that they were peafowl eggs. He was very successful.

You'll Smile, Too

when you examine the "STANDARD" Fence—note the weight and strength of the wires—and the perfection of "The Tie That Binds."

Standard Woven Wire Fence

is all No. 9 hard drawn steel wire, well galvanized. "The Tie That Binds" is the one lock that holds the fence without injuring the wires.

Our book tells all the facts. Write for free copy and sample lock.

THE STANDARD WIRE FENCE CO. OF WOODSTOCK LIMITED, WOODSTOCK, Ont. 6

Choice Farm Lands

FOR SALE ON EASY PAYMENTS.

In Western Canada there are great opportunities for the willing farmer. He can make money and success of farming. We have for sale the very choicest of Farm Lands in Saskatchewan, and guarantee to please the most particular. Let us tell you about them, and how others are making money here. Write at once for maps and pamphlets and full information. Our years of experience are at your disposal. All we want is to know if you are interested. Write at once.

TRACKSELL, ANDERSON & CO., REGINA, SASK.

British Columbia Office: 1210 Broad St., Victoria.

"TRUE" COMBINATION WAGON BOX AND RACK

Just what every farmer needs. With the "TRUE" on his wagon he has a first-class wagon-box; Hay, Stock, Corn, Wood or Poultry Rack. Instantly adjusted for any load you want to carry—the only tools you need are your hands.

No matter in what position you put the wings, it is impossible for them to get out of that position, but it would take you but an instant to change them.

We guarantee this article to be made of nothing but the best of material—Yellow Pine, Hardwood and Malleable Iron—and to carry two tons in any position. Made in 14 and 16-ft. lengths and 38, 40 and 42-inch widths.

If you need anything in the line of Planters, Seeders, Garden Drills and Cultivators, Sprayers, etc., write for our catalogue. We have dealers in your town.

THE EUREKA PLANTER CO., Limited Woodstock, Ont.

MY NEW IMPORTATION OF 23 Clydesdale Stallions

Which arrived in December, 1908, are all for sale. This lot include gets of the most famous sires. Four are by the renowned Everlasting, two are by Hicwatha. Please come and see them, or write to me. I am only two miles from the end of street car line. I also have two home-bred Hackney stallions for sale at a low price.

O. SORBY, GUELPH, ONT.

NEW IMPORTATION OF CLYDESDALES.

My new importation of Clydesdales are now in my stables: 14 stallions, 2 fillies. Visitors will find them as choice a lot as ever seen in Canada. Big, full of style and quality, and bred right royally.

T. D. ELLIOTT, Bolton, Ontario, P. O. and Station

COMPLETELY SOLD OUT!

EXPECT TO LAND MY NEW IMPORTATION OF CLYDESDALES AND HACKNEYS about March 10th. My motto is: Quality, not quantity.

THOS. L. MERCER, MARKDALE, ONT., P. O. AND STA.

IMPORTED CLYDESDALES

My new importation for 1908 has now arrived—stallions and fillies—personally selected. Richest in breeding, highest in quality; with abundance of size and character. Sold on terms to suit.

GEO. G. STEWART, HOWICK, QUE.

Imported Clydesdales

In my new importation I have the best lot I ever imported, 7 stallions, including the great sire, Baron Hood.

WM. COLQUHOUN, MITCHELL, ONT.

Imported Clydesdale Stallion to Rent

"Lord Cathart" Imp. (13064); sire: Pride of Blacoe (8000); dam: Pride of Blacoe (8000). Five years; brown; white points; sound; quiet; and easy on his feet. \$285 for season, payable Feb. 1910, with 50¢ per week for wintering. Also available Hackney yearling colts and mares.

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SAVE-THE-HORSE

Registered Trade Mark

SPAVIN CURE



"THE PEOPLE STAND AND LOOK."

Read what "Save-the-Horse" did in this remarkable case. Need one wonder why it is the only remedy made that can be sold under a signed guarantee?

Troy Chemical Co., Binghamton, N. Y.:
Gentlemen,—I wish to ask you about a horse of mine that is very lame. The doctors say he cannot be cured. He seems to be off in the right shoulder and has bad feet; they are contracted, drawn and as hard as flint. When he goes he drags his feet, is lame and gimp. When I put the brush or comb on his right side from his withers down the leg he lifts his leg and lets it hang, and if pressed too hard he tries to move away. I blistered him all over his shoulder and feet and used a dozen different remedies, and also had two of the best veterinarians; both say he cannot be cured, as he has navicular disease. Kindly advise as soon as possible if you can cure him. Yours sincerely, G. SCHLEIFENHEINER, Jr., 919 North 9th St.

Troy Chemical Co., Binghamton, N. Y.:
Gentlemen,—Received your letter, and will say that I will agree with you on the quantity of medicine I am to use. I enclose \$5 for a bottle of "Save-the-Horse." Send directions, and if you think I need anything else send it C. O. D. Yours truly, G. SCHLEIFENHEINER, Jr.

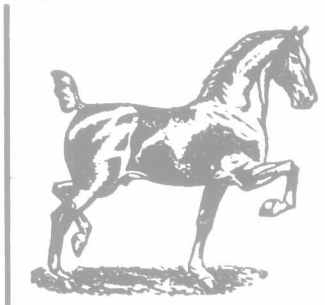
Troy Chemical Co., Binghamton, N. Y.:
Dear Sirs,—I want the pleasure of writing you a few lines about my horse on which I used "Save-the-Horse." I must say that you have the best remedy on the market to-day, and for price it is not a penny too much considering the merit it has. I do not know how to express my glad feelings for you and the liniment, as it saved me about \$400 on my pacing horse, which I can sell any day. The trainers all ask you could see him, as he is going sound, and the first time in four years, that is saying a lot. I wish the people stand and look at him. I am so proud of him I don't know what to do. The people can say all they want about other remedies, but if I have "Save-the-Horse" in the barn I am a happy man. I can hardly believe the cure you made and the way you treated me in my case.
You must excuse me of writing a letter of appreciation like this, but I can hardly do otherwise with the horse I got now. If any one wants information in regard to the cure on my horse, all they need to do is to write me. Thanking you for past favors, I remain sincerely and forever a customer of yours, G. SCHLEIFENHEINER, Jr., 919 North 9th St.

"SAVE-THE-HORSE" WILL PERMANENTLY CURE Bone and Bog Spavin, Ringbone (except Low Ringbone), Curb, Thoroughpin, Splint, Shoebill, Windpuff, Injured Tendons, and all lameness, without scar or loss of hair. Horse may work as usual.

\$5.00 per bottle, with a written guarantee, as binding to protect you as the best legal talent could make it. Send for a copy and booklet.

At Druggists and Dealers, or Express Paid.

TROY CHEMICAL CO., BINGHAMTON, N. Y., and 148 VAN HORN ST., TORONTO, ONT.



UNION Horse Exchange

STOCK-YARDS WEST TORONTO, CANADA.

The Greatest Wholesale and Retail Horse Commission Market.

Auction sales of Horses, Carriages, Harness, etc., every Monday and Wednesday. Horses and harness on hand for private sale every day.
The largest, best equipped and most sanitary stables in Canada. Half-mile of railway loading chutes at stable door. Quarter-mile on track for showing horses. Northwest trade a specialty. HERBERT SMITH, Manager. (Late Grand's Repository)

NEW CLYDESDALE IMPORTATION.

My new importation of 24 Clydesdale stallions is now in my stables. I invite inspection and comparison. I think I have the best lot for size, style, character, quality and action ever imported. 27 Clyde stallions and 8 Hackney stallions to select from. Prices right, and terms to suit.

T. H. HASSARD, MARKHAM, ONT.
POST OFFICE, PHONE AND STATION.

Clydesdale Stallions and Mares!

A fresh lot has just arrived, including many prizewinners. Some extra big ones. Prices right. Inspection invited.

DALGETY BROS., LONDON, ONTARIO.
Stables Fraser House. Address correspondence to Dalgety Bros., Glencoe, Ont.

CLYDESDALES AND SHORTHORNS.—Both Imported and Canadian-bred, at Columbus, Ont., the Home of the Winners.

Our last importation landed in August. They include the pick of Scotland, from such renowned sires as Baron's Pride, Everlasting, Baron o' Bucklyvie, Hiawatha, Marsells, Sir Everest, and Prince Thomas. We have on hand over 30 head to choose from, from the above noted sires, from 1 to 6 years old, and including stallions and mares. Correspondence solicited. Call and see them at our barns, Columbus, Ont., before purchasing elsewhere. Our prices are right. Long-distance phone in houses. Phone office, Myrtle station. Myrtle station, C.P.R.; Brooklin station, G.T.R.; Oshawa station, G.T.R. **Smith & Richardson & Sons, Columbus, Ont.**

IMP. CLYDESDALE STALLIONS AND FILLIES.—Our new importation of stallions and fillies are the best we could select in Scotland, particularly well bred, with the size, smoothness and quality that Canadians admire. Show-ring stuff. Come and see them. Will sell on terms to suit. **JOHN A. BOAG & SON, Queensville P. O. Ont.; Newmarket Sta., G. T. R.** Telegraph and telephone one-half mile from farm. Metropolitan Street Ry. from Toronto crosses the farm.

IMPORTED CLYDESDALES My new importation of Clydesdale stallions and fillies, landed a short time ago, are an exceptionally choice lot, full of flashy quality, style and character, and right royally bred. I will sell them at very close prices, and on terms to suit. **C. W. BARRER Gatineau Point Quebec** "Close to Ottawa"

IMPORTED SHIRES At their St. Thomas stables, the John Chambers & Sons Co., of England have for sale stallions and fillies from their noted Shire stud, high-class representatives of the breed. Correspondence solicited. Address **DR. C. K. GEARY, St. Thomas, 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. **HODGKINSON & TISDALE, BEAVERTON, ONTARIO.** Phone 10 and C. N. R. Long-distance phone.

QUESTIONS AND ANSWERS. Veterinary.

NAVICULAR DISEASE.

Mare has been lame for a year. The blacksmith shod her so as to throw weight upon the frog, and advised the frequent application of turpentine to the sole and walls, so as to soften them. She stands with foot slightly advanced, and resting lightly on the toe, or else bent at the knee, as though it caused pain when she puts weight on the foot. When driven she starts very lame, but improves some after being driven a while. Next day she is worse than ever. She eats and drinks well, but sweats badly some hours after being driven.

1. What causes the lameness?
2. How should she be treated?
3. How can her general health be improved?

H. R. K.
Ans.—1. She has navicular disease (coffin-joint lameness), in all probability caused by driving on hard roads.

2. Treatment will probably not effect a cure, but will ease the symptoms to some extent. She should have a long rest, and the coronet should be blistered repeatedly. Get a blister made of 2 drams each of cantharides and biniodide of mercury, mixed with 2 ozs. vaseline. Clip the hair off for two inches high all around the hoof; tie her so that she cannot bite the parts; rub well with the blister once daily for two days; on the third day apply sweet oil. Let her loose in a box stall now, and oil every day. As soon as the scale comes off, tie up and blister again, and after this blister once every four weeks, as long as you can give rest. When put to work apply bar shoes, and keep the foot soft by poulticing or standing in water a few hours daily, or by soaking pads. Do not apply turpentine, as its actions are harmful.

3. The symptoms given indicate that her general health is good. The sweating is caused by the pain in the foot.

Miscellaneous.

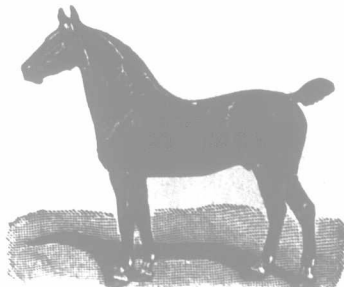
HOMEMADE CHEESE.

Can you give me information on making homemade cheese? How many quarts of new milk will it take for a ten-pound cheese? What size hoop will I need for 10-pound cheese? E. A. M.

Ans.—To make a 10-pound cheese you should have at least 100 pounds milk for each cheese. A little more will probably be needed. Warm milk to 80 degrees, and put in a tablespoonful of common rennet, or a single rennet tablet. Dissolve the tablet in a cupful of moderately warm water, temperature not to exceed 80 degrees Fahr., and stir it into the milk. Cover the milk well to keep it warm. In an hour or less the curd will be made. Cut it with a knife into pieces not bigger than an inch. Draw off the whey, leave the curd to harden a little, then dip it out into moulds of tin which have no bottom, and which should, therefore, be placed on a board. A piece of cheesecloth should also be put in the mould, so that when the cheese is formed it may be taken out without breaking. Heap the curd well above the mould, and as it settles put on more until it is level with the top of the mould, then put a circle of thin board on top, and a weight. When pressed take the mould off and also the cloth, handling very carefully. Now sew a piece of fresh cloth about the cheese, leaving a border of two inches top and bottom. Plaster this border down with butter, and set the cheese aside to ripen. Rub well with fine salt, and turn daily for ten days, then do this every other day. This keeps the moisture distributed and the cheese soft. Rub the cheese with butter several times to prevent cracking of the crust, and scrape off any mould which may appear, as the cheese must be kept in a rather moist place. In two months it will be fit for use. To keep left-over pieces for any length of time, rub with butter occasionally, and keep in a dry place. Stillton cheese, standard size, are 6½ inches in diameter, by 11 inches high. Stilltons are usually 10 pounds in weight.

Warranted to Give Satisfaction.

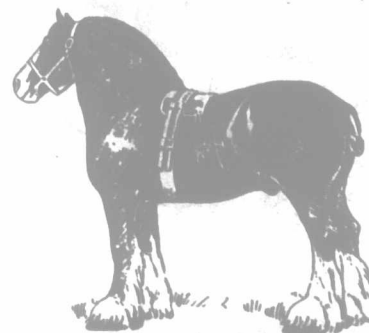
Gombault's Caustic Balsam



Has Imitators But No Competitors.
A Safe, Speedy and Positive Cure for Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address **The Lawrence-Williams Co., Toronto, Ont.**

INSURE



YOUR STALLIONS

Just as you Insure your Buildings.

The loss of a stallion represents a certain capital, the reimbursement of which comes in handy to replace the lost animal whether death be due to accident or disease.

On payment of a small premium our Company will insure your stallion, as well as your Horses, Mares, Colts, Fillies, Bulls, Cows, Calves, Hogs and Sheep, against death by accident or disease.

Booklet sent free on demand. **GENERAL ANIMALS INSURANCE CO. OF CANADA.**

R. Ness, Pres. J. d'Halewyn, Sec. Dept. C., New York Life Building, MONTREAL.

Burnett, Ormsby, Clapp, Ltd., general agents for Western Ontario, Wellington St., Toronto

Shoe Boils, Capped Hock, Bursitis are hard to cure, yet

ABSORBINE

will remove them and leave no blemish. Does not blister or remove the hair. Cures any puff or swelling. Horse can be worked 42 to 60 per bottle, delivered. Look 6 D free. **ABSORBINE, J.C.** (Franklin, \$1.00 bottle.) For Bulls, Bruises, Old Sores, Swellings, Gout, Varicose Veins, Varicose Uterus, Always Pain. **W. F. YOUNG, P.O.F., 73 Marmouth St., Springfield, Mass.** LYMAN, B. S. & CO., Montreal, Canadian Agents.

FOR SALE: Three Registered Clydesdale Stallions, rising four years old, also one registered brood mare, in foal to imported sire, four years old. One of these stallions is imported, others Canadian-bred. All three good heavy ones, with lots of quality. Apply to: **R. T. Brownlee, Hemmingford, Que.**

Clydesdale Stallion Gay Clyde, registered, imported. Good foal getter. Coming seven years. For sale **JAMES DODGE, UTOXETER, ONTARIO.**

GOSSIP.

A Clydesdale stallion, rising three years old, sired by Cornerstone (imp.) (11016), dam by The Archer (imp.), and weighing 1,800 lbs., is advertised for sale by Moses Doolittle, Columbus, Ont.

The two-year-old Shorthorn bull, Lancaster Victor =67976=, a Toronto prize-winner, a son of the sire of champions, Old Lancaster (imp.), dam Mabel of Knowledge =48447= (imp.), is advertised for sale by J. & N. McPhedran, Wanstead, Ont.

A. D. SCHMIDT & SONS' SHORTHORNS.

Four miles north of Elmira, Ont., on the G. T. R. and C. P. R., in Waterloo County, is the well-arranged and well-conducted stock farm of Mr. A. D. Schmidt & Sons, whose splendid herd of Scotch Shorthorns are always found in prime condition. On blood lines the herd is represented by such splendid-doing strains as the Crimson Flower, Mina, Wedding Gift, Juanito, Elvira, Nonpareil and Golden Gem, the get of such well-known, high-class bulls as Sunnyside King, a son of the champion, Imp. Spicy Marquis; Imp. Proud Gift; Imp. Bandolier; Imp. Lucerne; Imp. Pride of Scotland; Missie Champion, and the present stock bull, Imp. Greengill Archer. Mr. Schmidt spared no expense in laying the foundation of this herd. They are an exceptionally nice bunch, in good condition, and are all eligible for registration in the American Herdbook, and any of them are for sale. Parties wanting some real good one and two year old heifers can find them in this lot. They have also for sale two young bulls, one a red yearling, got by Davidson's Rosebud Champion, and out of Imp. Juanita 10th the other is also a red yearling, got by Chancellor's Model, and out of a Crimson Flower dam. Here are a pair of low-down, thick, sappy young bulls, that can be bought well within their value, and they are in splendid condition. Anything in the herd is for sale. Mr. Schmidt is the inventor and patentee of his system of cement stable fittings, whereby the whole interior, manger, feed-boxes, partitions, water trough, floors, etc., are made of cement, thereby ensuring stability, sanitation, cleanliness and safety. During 1908, Mr. Schmidt fitted with this system over fifty stables, and so popular has it become, that orders already closed and negotiations indicate that 1909 will reach upwards of two hundred contracts to be installed. Write Mr. Schmidt to North Woolwich P. O.

TRADE TOPIC.

For the past few years we have had repeated inquiries from parties who wished to insure pure-bred stock against death from various causes. Up to quite recently this business has only been done to a very limited extent, but we would now draw the attention of our readers to the advertisement of the General Animals Insurance Company of Canada. The representation of this company for Western Ontario has been placed in the hands of Messrs. Burnett, Ormsby & Clapp, Limited, who now advertise in these columns. Owners of valuable stallions and other pure-bred stock can protect themselves against the chances of a heavy monetary loss by insuring their horses for at least a part of their value. The need of a good, strong, home company of this description has been felt for many years, and we feel satisfied that such a company will receive the warm support of our Canadian breeders and stock farmers. A glance at the personnel of the Board of Directors shows the president to be Robert Ness, Howick, Que., the well-known importer and breeder of Clydesdales and Ayrshires. We are advised by Mr. Ormsby, of Messrs. Burnett, Ormsby & Clapp, Limited, who was himself for many years intimately connected with the live-stock industries of the country, that they have now inaugurated a Live-stock Insurance Department of their business, which has been placed in charge of Mr. J. D. Reesor, who will be pleased to furnish full particulars of the various plans of insurance rates, etc.

A \$5,000 DAN PATCH STALLION FREE

This New Picture of DAN PATCH 1:55 in Six Brilliant Colors MAILED FREE



DAN PATCH 1:55.

This new picture of Dan Patch 1:55, is the Finest I have ever gotten out for framing. It is printed in six brilliant colors and is free of advertising. It gives his age and a list of all the fast miles paced by Dan. Being made from a "Speed Photograph" it shows Dan as lifelike as if you stood on the track and saw him in one of his marvelous and thrilling speed exhibitions. You ought to have a fine picture of the King of all Harness Horse Creation and the Fastest Harness Horse the world has ever seen. I will mail you one of these Large, Beautiful, Colored Pictures of Dan Patch 1:55 free With Postage Prepaid and full particulars concerning my plan of Giving Away a \$5,000.00 Dan Patch stallion if you will simply write me.

A \$5,000 DAN PATCH STALLION FREE

An Absolutely Free Hair Counting Contest Without Money or Purchase Consideration And Open To Any Farmer, Stockman or Poultry Breeder. Can you count the number of hairs drawn in a picture of "Forest Patch," sired by Dan Patch, dam by Monaco by Belmont. Write for one of the Above Dan Patch Pictures. I will also mail you a photo engraving of "Forest Patch," the fine Registered Stallion to be given away and ALSO Drawing showing hairs to be counted and also stating easy conditions. Every stock owner will want to count the hairs on this Splendid \$5,000.00 Dan Patch Stallion because it means a small fortune free for someone. We paid \$60,000 for Dan Patch and have been offered \$180,000. We would have lost money if we had sold Dan for One Million Dollars. You may secure this \$5,000 Dan Patch Stallion Absolutely Free. "Forest Patch" might make you a fortune of \$25,000 to \$50,000 as a great stock horse for any community because he will make a 1200lb. stallion with great style and beautiful conformation. E. B. SAVAGE, Toronto, Canada.

International Stock Food Co. Toronto, Can.

Mail this Free Coupon To-Day to E. B. SAVAGE, Toronto, Can.

You MUST FILL IN THE THREE BLANK LINES IN THIS FREE COUPON

OUT OFF HERE

E. B. Savage, International Stock Food Co., Toronto. Will you please mail me Postage Paid one of the Beautiful Six Color Pictures of Dan Patch 1:55, the World's Champion Harness Horse, described above, and also full particulars of your plan of Giving Away a \$5,000.00 Dan Patch Stallion. I have filled out the coupon, giving the number of live stock I own, and my name and address.

I own..... Cattle..... Hogs..... Horses..... Sheep.....
 Name.....
 Post Office..... Province.....

"LEADER"



Fence Lock

The Double Grip

Gives Double Strength
 A brand new No. 9 hard steel wire fence with a lock doubly as strong as any previously devised for a woven fence—this is the "Leader" fence.

The "Leader" lock has a double grip (usual locks have but a single grip). The double grip makes doubly as stiff and strong a fence—the wires cannot be moved up, down or sideways under the most severe strain to which a fence could be put. The "Leader" is the leading fence investment. Buy it.

Frame & Hay Fence Co., Ltd.
 Stratford - Canada

STAMMERERS

The ARNOTT METHOD is the only logical method for the cure of Stammering. It treats the CAUSE, not merely the HABIT, and insures natural speech. Pamphlet, particulars and references sent on request. THE ARNOTT INSTITUTE BERLIN, ONT., CAN.

SEED BARLEY In 1908 field competition won by 9 1/2 points over county, and 2 points over Province. Very clean, heavy yielder, strong strawed. One dollar per bushel. J. & D. J. CAMPBELL, Fairview Farm, Woodville, Ont.



The Sunny Side HEREFORDS

For sale: 6 choice bull calves, 2 good yearling bulls. I can yet spare some cows and heifers. Special value in bulls and heifers.

Write for prices. Long-distance phone. M. H. O'NEIL, SOUTHGATE, ONT.

Aberdeen-Angus Cattle

For Sale: Cows, Heifers, Bulls.

Good strains at reasonable prices. Apply to: Andrew Dinsmore, Manager, "Grape Grange" Farm, Clarksburg, Ont.

Aberdeen-Angus For sale: The right sort, some of them by Klondyke, imp. Drumbo station. WALTER HALL, Washington, Ontario.

IMPORTANT AUCTION SALE

At BROOKSIDE FARM of registered



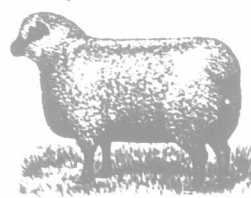
SHORTHORN CATTLE AND SHROPSHIRE SHEEP

To be held on Lot 13, Con. 4, Township of Westminster, on Wednesday, April 7th, 1909.

Commencing at 1 o'clock p.m. 30 Scotch and Scotch-topped, Imported and Home-bred Shorthorns, all recorded in the Dominion Shorthorn Herdbook. 15 Registered Shearling Shropshire Ewes, sired by Ristord Eclipse (imp.), and all bred to Mr. Beattie's imported show ram. Also a good roadster mare, 5 years old, sired by Monbars, dam by Wildbrino. The farm is 6 miles south of London, about one mile from Westminster Station, on P. M. railway. Trains will be met at the station on the morning of the sale. Trains from London station at 9:40 a.m., from St. Thomas at 11:30 a.m.

TERMS: Cash, or six months' credit for bankable paper, with interest at 6% per annum.

T. E. ROBSON, Auctioneer, London, Ont.



HENRY STEAD, Prop., Wilton, Grove, Ont.

WILLOWDALE SHORTHORNS

I have for sale some very fine young stock bulls and heifers ready to breed. Descendants of Joy of Morning, Broad Scotch and other noted sires. Also Chester White Swine and Imported Clydesdale Horses.

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

SPRING VALLEY SHORTHORNS.

Our herd is pure Scotch, imp. and home-bred. 50 head to choose from. Our present crop of young bulls are the best we ever had. All sired by the great stock bull, imp. Bapton Chancellor. High-class show things among them, including this fall Toronto winners. Nearly every one a herd header.

KYLE BROS., AYR, ONT., P. O. and STATION.

WHY NOT BUY A HIGH-CLASS SCOTCH SHORTHORN COW,

Or a Heifer, Or a Bull, Or a Few Shropshire Ewes, Or a Few Cotswold Ewes, NOW, While You Can Buy Them Low?

I can offer you something in any of them that will make a start second to none. Write for what you want. ROBERT MILLER, STOUFFVILLE, ONT.

AN OPPORTUNITY TO SECURE YOUNG Shorthorn Bulls

A few heifers will be sold cheap. One Clydesdale Stallion rising three years. MAPLE SHADE FARM. STATIONS: MYRTLE, C. P. R., BROOKLIN, G. T. R. Long distance telephone. JOHN DRYDEN & SON, BROOKLIN, ONT.

I Can Price for a Short Period Two High-class Young Bulls

One a straight Crutchbank, son of Jlt Victor (imp.); the other out of the show cow, Tiny Maude, and sired by The Dreamer, first-prize two-year-old at Kansas City. J. A. WATT, SALEM, ONT., ELORA STATION, G. T. R. AND C. P. R.



VALLEY HOME SHORTHORNS and BERKSHIRES

Our herd is strong in Nonpareil, Marchioness, Jilt, Mina, Glosterina, Rosebud and Lady Brant 1908. In order to save holding a public sale, we will sell very cheap 15 one- and two-year-old heifers and several extra choice bulls. Berkshire sows sale in pig. S. J. PEARSON & SON, Meadowvale P. O. and Sta.

Subscribe for The Farmer's Advocate

Lump Jaw



The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or 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

ROBIN HILL FARM

SHORTHORNS AND CLYDESDALES.
We offer our stock bull, Merry Master (imp.) = 45192, for sale or exchange, also 4 two-year-old heifers and 2 yearling heifers. All got by Merry Master, and all in show condition. We also offer a few registered Clydesdale fillies and mares in foal.

Wm. Ormiston & Sons, Columbus, Ontario.
Brooklin, G. I. R.; Myrtle, C. P. R.
Phone Brooklin Centre.

GEO. AMOS & SON,

Moffat, Ontario.

For sale: Imp. Ben Lomond = 45160 = 80468, that grand stock bull, sire of first-prize calf herd at Toronto, 1908; and Augustus, a good Bruce Augusta bull calf; also females, various ages. Write, or come and see us. Farm 11 miles east of City of Guelph, on C. P. R.

Greengill Shorthorns!

Our present offering consists of 10 young bulls, from 8 to 20 months. All nice reds and roans. A number of them from imp. sire and dam. Prices right.

R. Mitchell & Sons, Nelson P. O., Ont.
Burlington Jct. Sta.

Shorthorn Cows and Heifers.

I have Village Maids, Village Blossoms, English Ladies, Lancasters and Wimples for sale. Four with calves at foot, and one yearling heifer fit for any show-ring. One mile east of St. Mary's.

HUGH THOMSON, Box 556, ST. MARY'S, ONT.

CLOVER DELL SHORTHORNS



My herd are profitable milking Shorthorns. For sale are a few females and two good red bulls, of good milking dams, for spring service. **L. A. Wakely, Bolton, Ont., P.O. and Station.** Farm within 1/2 mile of station.

Scotch Shorthorns—Present offering:

Four bulls all reds. Four heifers all roans, all of breeding age, in calf to Lord Lieutenant, imp.; all are imp. or bred direct from imp. stock. Terms and prices easy.

L. K. WEBER, Hawkesville, Ont.

Scotch Shorthorns

We now offer four heifer calves 10 and 11 months old. All reds. Bred from imp. sire and dams. Will be sold right. **C. RANKIN & SONS, Wyebridge P.O., Ont. Wyevale Stn.**

Two actors were in conversation the other day.

"Hear about the peculiar accident that happened to Maxine Elliott's press agent, A. Toxin Worm, up at Rye the other day?" asked Actor No. 1.

"No, what was it?" demanded Actor No. 2.

"Well, you see, Mr. Worm was visiting a friend of his on a small poultry farm, and while strolling about the place he started to climb a fence, and—"

"And fell?"

"Yes; his foot slipped and he fell over with a crash into the poultry yard and—"

"Yes!" eagerly. "What then?"

"A chicken pounced on his name and swallowed it!"

Black Watch

Remarkable for richness and pleasing flavor. The big black plug chewing tobacco.

2257

GOSSIP.

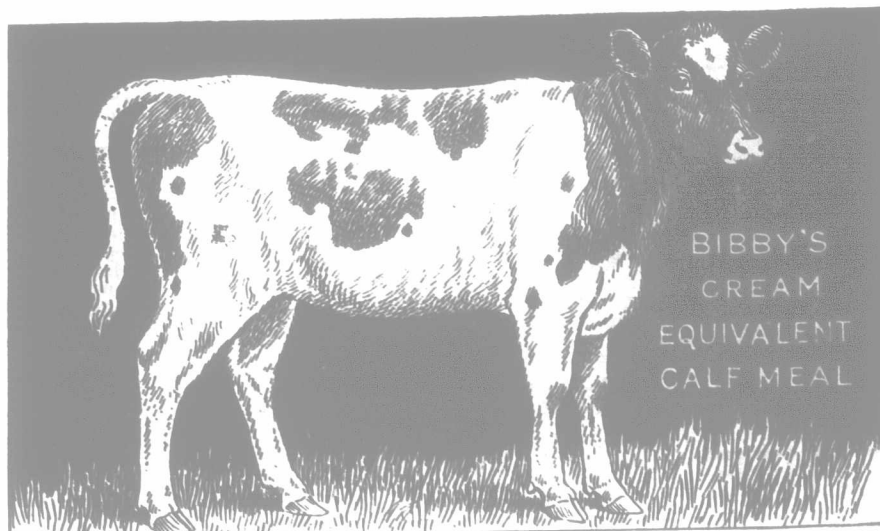
Mr. Israel Groff, Elmira, Ont., reports the sale to Mr. H. M. Vanderlip, of Cainsville, Ont., of his stock bull, Chancellor's Model, a son of that noted sire, Bapton Chancellor (imp.), and out of Imp. Marchioness 4th. Chancellor's Model proved his sterling worth as a sire in the herd of Mr. Groff, and will certainly do good at the head of Mr. Vanderlip's select herd. Mr. Groff has still for sale three yearling bulls, one a son of Chancellor's Model, out of a Marr Blythsome dam. Another is a son of Scottish Fashion, and out of an imported Clementina dam. The other is also got by Scottish Fashion, and out of a Duchess of Gloster dam. These are a trio of young bulls that will make good in any herd. The last named is one of the best young bulls in the country; he is a show bull all over; very superior. Another choice young bull of superior breeding went to E. Weber, of Elmira. He was got by Chancellor's Model, and out of a Crimson Flower dam, a cow that has produced many prizewinners, including the first-prize senior bull calf at Toronto, Crimson Hero. He is also offering a grand bunch of heifers, the best lot he ever had together.

GRAHAM-RENFREW CO.

One of the infallible signs of returned prosperity is the exceedingly active demand for big horses at almost staggering prices. The Graham-Renfrew Co. (Ltd.), of Bedford Park, North Toronto, Ont., whose reputation as importers of the best horses procurable in Scotland is unchallenged, reports that the last few months has developed a demand for high-class heavy horses for both breeding and work purposes, as decidedly the strongest in their years of experience. Nothing but the very best seems to satisfy the present-day demand. Within a comparatively short time they have sold to Cameron & Co., Etobicoke P. O., Ont., the splendid Clydesdale stallion, Craighair (imp.), a brown four-year-old son of Lothian Again; to Phillips & Son, Essex, Ont., the Toronto first-prize winter-show winner, Celtic Laird (imp.), a brown five-year-old son of Argus; to Patterson Bros., Islington, Ont., Baron Hamlet (imp.), winner of second prize at Toronto and Chicago (he is a brown five-year-old son of Baron's Pride); to J. D. Skinner, Sarnia, Ont., went Prestwick Freeman (imp.), the brown four-year-old son of Baron Solway; also the Hackney stallion, Coron King (imp.); to Graham Bros., Clarendon, the great champion Clydesdale, Sir Marcus. All these, besides the several mentioned in a former issue of "The Farmer's Advocate," that went to Mr. R. Taber, Condie, Sask.; the champion Hackney filly, Saxton's Queen, that went to F. Cooper, Clarendon, Ont., and the 1908 champion Hackney stallion, Carnion (imp.), that went to Orillia, Ont. They have still on hand for sale at their Bedford Park stables the Toronto first-prize two-year-old, Top Spot (imp.), the bay son of Baron Hood; dam by Darnley Again. This is one of the sweetest quality colts ever owned in Canada—a colt that will draw business in any section. Another is Baron Dow (imp.), a bay four-year-old, by Baron Britton; dam by Mains of Airies; g.-d. by Prince of Carruchan. There is no better breeding and few better horses. He is quality from the ground up, and has style, smoothness, character and faultless action. Glenlivet Chief (imp.) is a brown five-year-old, by Argus, a horse of superior Clyde character, up to a big size, and stands on a faultless bottom. This trio of Clyde stallions will stand the closest inspection by the most expert critic. They are for sale at living prices. Brigham Radiant, the Hackney champion, and Plymouth Horse, the Hackney pony champion, are in fine fettle, and ready to win more honors.

TRADE TOPIC.

Those who are tired of farming and consider that it does not pay as long as it is necessary to work so hard, should get Planet Jr. implements. They cut down the work enormously, and give better crops. It is said that two million farmers and gardeners are now using them, so they must be making farming pay somebody. Write to S. L. Allen & Co., Box 1108F, Philadelphia, Pa., for fuller particulars.



BIBBY'S CREAM EQUIVALENT CALF MEAL

GOOD TO THE LAST DROP

There is no other calf food, save new milk itself, which contains so much nourishment as BIBBY'S CREAM EQUIVALENT MEAL. It is heartily relished by young stock, is practically predigested, and can be fed with perfect safety to the youngest animals. It is a perfect substitute for new milk, and contains the same elements of nutrition. Mixed with milk and water, separator milk, or water only, it makes a nutritious feed that cannot be equalled for bringing calves and young pigs up to first-class condition, and preventing scouring and other ailments. BIBBY'S CREAM EQUIVALENT is in constant use by most of the leading breeders of high-class stock. Calves relish it, and thrive well upon it; it is easy to prepare, and costs much less per meal than other preparations.

For sale by all dealers or direct from WM RENNIE CO., Ltd., Toronto, Montreal, Winnipeg, Vancouver.

Shorthorn Cattle AND LINCOLN SHEEP.

Females of all ages for sale of the thick-fleshed, low-down kind that have been raised naturally, neither stuffed nor starved. Twenty-five Lincoln ewes, bred to our best imported stud ram, also a few choice yearling rams. Prices very reasonable for quick sale.

J. T. GIBSON, DENFIELD, ONT.

A. Edward Meyer,

P. O. Box 378, Guelph, Ontario,
Breeds SCOTCH SHORTHORNS Exclusively
Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls: Scottish Hero (imp.) = 55042 = (90065) 295765 A. H. B.; Gloster King = 68708 = 283804 A. H. B. Young stock for sale. Long-distance phone in house.

10 Imported Scotch Shorthorn Bulls 10

Personally selected from the leading Scotch herds. Now in quarantine. Will be for sale at my farm first week in January. They are of such noted families as Broadhooks, Butterfly, Claret, Clara, Ross Lady and Jilt. I also have for sale four bull calves from imp. sire and dam, and a number of good young cows and heifers. Catalogue being prepared. Write for one. Prices, as well as quality and breeding, will please you. Farm 1/4 mile from Burlington Junction station, G. T. R.

FRED. BARNETT, MANAGER. J. F. MITCHELL, BURLINGTON, ONT.

1854 MAPLE LODGE STOCK FARM 1909

A few extra good young SHORTHORN bulls and heifers for sale. LEICESTER ram lambs by the grand champion ram, "Sanford." Right good ones, and a few choice ewes.

A. W. SMITH, MAPLE LODGE P. O., ONT.
Lucan Crossing Station, G. T. Ry.

SHORTHORNS

Nine bulls from 8 to 20 months old, reds and roans; 10 yearling heifers and a few cows. Will sell very cheap to make room in stables.

CLYDESDALES

One pair of bay mares and one dark brown, heavy draft and two spring colts.

JAMES McARTHUR, Gobles, Ontario.

WE ARE PRICING VERY REASONABLY 10 Choicely-bred Young Shorthorn Bulls

Also one extra good imported bull, 22 months old. We have always something good to offer in females. Imported or home-bred. Write for what you want, or come and see them. Bell phone at each farm. **W. G. PETTIT & SONS, Farms close to Burlington Jct. Sta., G. T. R. FREEMAN, ONTARIO.**

Shorthorn Bulls!

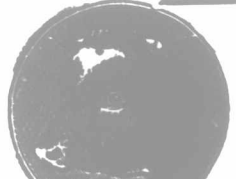
Herd heading quality and breeding. Also good ones at farmers' prices. Females for sale. Write, or come and see. Farm adjoins town.

H. SMITH, EXETER, ONT.

Scotch Shorthorns!

I am offering a few choice young bulls, also heifers in calf to imp. bull. Will be pleased to furnish pedigrees and prices upon application.

JOHN MILLER, Brougham, Ontario.
Clarendon Stn., C. P. R.



SOME SHOW PROPOSITIONS IN BOTH MALE AND FEMALE

SHORTHORNS

as well as a number of the useful sort of both sexes. Prices right. Large lot to select from. Up-to-date in breeding, etc. Catalogue.

JOHN CLANCY, Manager. H. Cargill & Son, Cargill, Ont.

Registered Shorthorn Yearling Bull

A Strathallan. Color red. Fine form and well fleshed, with excellent quality and very promising. Price moderate to early buyer. Dam a real good milker.

J. & D. J. CAMPBELL, WOODVILLE, ONT.
Fairview Farm.

Scotch Shorthorns

Canada's greatest living sire, Mildred's Royal, heads my herd. For sale are young bulls and heifers, show stuff and Toronto winners, out of Stamford, Lady Ythan, Claret, Emeline, Matchless and Belona dams. A visit will be appreciated. **GEO. GIER, Grand Valley P. O., Ont. Waldemar Sta., C. P. R.**

SHORTHORNS Belmar Parc.

Calves for sale by our grand quartette of breeding and show bulls: Nonpareil Archer, Imp., Proud Gift, Imp., Marigold Sailor, Nonpareil Eclipse. Females imported and from imported stock, in calf to these bulls. An unsurpassed lot of yearling heifers.

John Douglas, Manager. PETER WHITE, Pembroke, Ont.

Shorthorn Show Bull

For sale: Lancaster Victor = 67976, sired by Old Lancaster, and half-brother to the \$2,500 heifer, Pleasant Valley Jilt. For further particulars write: **J. & N. McPHERAN, Wanstead, Ont.**

MILK-FEVER OUTFITS, Dehorners, Teat Syphons, Slitters, Dilators, etc. Received only award World's Fairs, Chicago, St. Louis. Write for illustrated catalogue. Haussmann & Dunn Co., 392 So. Clark St., Chicago.



Largest winner of any pacer on Grand Circuit in 1908.

"The Eel" 2.02 1/2

Trained and Driven By Dan McEwen

Dan McEwen Feeds Royal Purple Stock Specific Regularly to "The Eel"

Dan McEwen speaks very highly of Royal Purple Stock Specific. In his letter of Sept. 14th he says in part: "I have used Royal Purple persistently in the feeding of 'the Eel' and 'Henry Winters.' I consider it the best article I have ever used in conditioning race horses. These horses have never been off their feed since I commenced using Royal Purple Stock Specific, almost a year ago, and you can rest assured I will always have it in my stables."



Royal Purple is being fed to "Henry Winters" (Trial mile 2.09-1/2) brother of "Allen Winters," winner of \$36,000 in trotting stakes in 1908.

AGENTS WANTED In every district on salary or commission.

FREE

A valuable booklet on diseases of cattle and poultry mailed free to any person applying for same. Also contains reliable cooking receipts. Explains Royal Purple fully.

We have hundreds of letters from stockmen, dairymen and poultry men, published in our free booklet, who speak just as enthusiastically of Royal Purple as does Mr. McEwen. They report that Royal Purple Stock Specific has increased the yield of milk from three to five pounds per cow per day—that rundown animals have been restored to former plumpness almost magically—that Bots, Colic, Debility, Skin Diseases and Worms have been permanently cured. Poultry raisers say that Royal Purple Poultry Specific is the best ever used for young chicks—that it makes hens lay in winter—that it prevents fowls losing flesh at moulting time. Remember, that Royal Purple Stock Specific is an entirely different article from the Poultry Specific. Some manufacturers recommend their stock food for poultry, but our experience has demonstrated that the requirements of fowls differ materially from cattle. Royal Purple Specifics will do your cattle and poultry a world of good. They are not grain foods. They are highly concentrated articles. A spoonful of Royal Purple gives better results than a cup of many other stock foods. A 50c package will last an animal 90 days—25 fowls 70 days. A \$1.50 package will last four times as much will last 360 days. If you are unable to procure Royal Purple from merchants or agents we will supply you direct express prepaid to any point east of North Bay one pair of Stock Specific or one pair of Poultry Specific upon receipt of \$1.50.

Our Guarantee:—Money refunded if not satisfied after material is used.

Royal Purple

Stock and Poultry Specifics

W. A. JENKINS, MFG. CO., LONDON, CANADA

The Wise Ones are Using Royal Purple Now. The Others Will Come in Later.

Scotch Shorthorns



Four young bulls recently imported, one Brawth Bud, a grandson of Bapton Diamond; two Kiblean Beautys and one a Mary Emma; also Canadian-bred bulls, and a grand lot of heifers.

H. J. Davis, Woodstock, Ont.

Long-distance Bell 'phone. C. P. R. & G. T. R.

SHORTHORNS!

Five bulls, sired by Lord Lieutenant, imp., one from imported dam. Cows and heifers from Lord Lieutenant, and now bred to Good Morning, imp., our present stock bull. All will be priced low, considering quality and breeding. Office near both stations.

SCOTT BROS., HIGHGATE, ONT. M. C. Ry. P. M. Ry.

HAWTHORN HERD OF DEEP-MILKING



Shorthorns

For Sale: 6 young bulls and 10 heifers, sired by Aberdeen Hero (imp.) = 2840 =. Some bred to the Lavender bull, Lavender Lorne = 68706 =.

WM. GRAINGER & SON, LONDONDERRY, ONTARIO

Glen Gow Shorthorns



Our present offering is 9 bulls from 6 to 14 months of age, sired by imp. Ben Loman and imp. Joy of Morning, and out of imp. and Canadian-bred cows. Also a number of very choice heifers. No fancy prices asked. Long-distance phone.

WM. SMITH, Columbus, Ontario Brooklin and Myrtle Sts.

Shorthorns, Cotswolds, Berkshires.



Nine bulls from 9 to 14 months, from imp. and home-bred cows, and sired by Pride of Day 5519; also cows, heifers and heifer calves. Nothing to offer in Cotswolds or Berkshires.

Chas. E. Bonnycastle, Campbellford, Ont. Post Office and Station.

MAPLE HOME SHORTHORNS



Our present offering: Two choice young bulls; also some good heifers and young cows. Away above the average. Pure Scotch and Scotch-topped.

A. D. SCHMIDT & SONS, Elmira, Ont.

Brownlee Shorthorns Three young bulls left yet, 14 to 16 months. Will sell at a bargain. Also a few heifers. Very reasonable. Good milking strains.

C. P. R. station. D. BROWN, AYR, ONT.

RAW FURS

WANTED IMMEDIATELY

200,000 MUSKRAT

WE BUY ALL OTHER KINDS OF FURS. SHIPMENTS SOLICITED.

The Monteith, Strother Fur Co. 11 and 13 Church St. TORONTO

Stoneycroft Ayrshires



Choice young bulls and heifers of the very best breeding, combining show and dairy quality. Large Improved Yorkshire Pigs from imported sires and dams, now ready to ship. Stoneycroft Stock Farm, Ste. Anne de Bellevue, Que.

Prizewinning Ayrshires

FOR SALE: 5 High-class Bulls, from 6 to 24 months of age; 10 Cows and Heifers, from 6 months to 5 years of age. All bred from the deepest-milking strains.

A. Kennedy & Son, Vernon, Ontario. Hillview Stock Farm, Winchester station, C. P. R.

MR. A. I. HICKMAN

Court Lodge, Egerton, Kent, England, exports pedigree live stock of every description to all parts of the world. During the spring months the export of light and heavy horses will be a specialty. Breeders should write and learn how to get in right. Mr. A. I. Hickman will be at the Bell Hotel, Gloucester, Eng., during the week of the Royal Show, and will be pleased to meet all foreign and colonial visitors there.

Sale of the Most Celebrated Herd of Ayrshires in the World.

Mr. Waller, Auctioneer, Castle Douglas, has received instructions from Mr. Andrew Mitchell, Bar-chesk e, Kirkcubright, Scotland, to sell on

THURSDAY, MAY 20th, his world-renowned herd of Ayrshires, consisting of over 200 head of the choicest cattle ever exposed to public auction, and on

FRIDAY, MAY 21st,

his celebrated stud of Clydesdales, consisting of 30 head, mostly Magregor and Baron's Pride blood. Included in the sale will be the dam and full sister of the champion show and breeding horse, Baron's Gem, and the dam of Criterion; all sure in foal. Cattle bought for export under three years old to pass tuberculin test. Arrangements made with Donaldson Bros. for cheap fares to purchasers at this sale.

BURNSIDE AYRSHIRES

are in such demand that I have decided to make another importation. I intend attending the great dispersion sale of the world-renowned Barcheskie Herd, belonging to Mr. And. Mitchell, Kirkcubright, Scot., where some 300 of the choicest Ayrshires ever offered will be sold. Orders entrusted to me will be carefully attended to. Breeders, take advantage of this great sale, and replenish with a few good ones. Correspondence solicited and satisfaction guaranteed. Long-distance phone in house.

R. R. NESS, HOWICK, QUE.

HOWGLEN AYRSHIRES!

For sale: 75 pure-bred registered Ayrshires, all ages; prizewinners; many imported. Apply to

ALLAN P. BLUE, Eustis, Quebec.

AYRSHIRES

Bull and heifer calves from producing dams. Right good ones. Hickory Hill Stock Farm. N. DYMENT, Dundas Station and Highgate, Clappison, Ont.

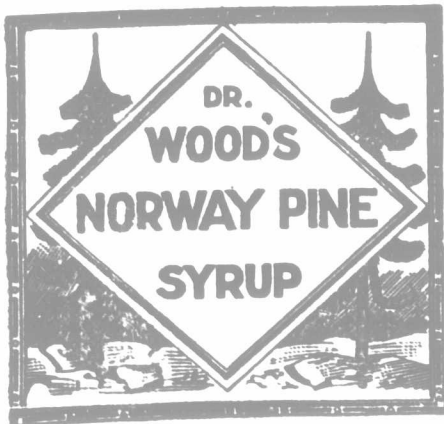
GOSSIP.

BRAMPTON JERSEYS

The enormous increase in dairying interests of late years is one of the leading factors of the Canadian agriculturist's financial success. The unprecedented demand for profitable dairy cows has constituted the golden era for breeders of purebred animals of the dairy breeds, and among the several breeds of dairy cattle none hold a more general favor with the Canadian people than the Jerseys, their beautiful form, their rich yellow milk, their easy keeping qualities, all tending to make them especial favorites with the people generally. For strictly high-class quality and heavy-milking productiveness the renowned Brampton herd, the property of Messrs. B. H. Bull & Son, Brampton, Ont., stands practically without a peer. As a show herd, their unprecedented success year after year stamps their superiority indelibly. Now 175 strong, the herd never contained so many high-class animals as at present—10 are imported, 25 were imported in dam, and nearly all the others are by imported sires and out of imported dams. The 50 yearling heifers and 35 calves that are still taking milk are a sight worth going miles to see. Arthur's Golden Fox, one of the greatest living sires, and sons of Flying Fox and grandsons of Golden Lad, is proving one of the most successful sires of the breed, his get winning prizes galore, as well as championships. Most of the youngsters on the farm are sired by him, others being sired by Imp. Fereor and Blue Blood of Dentonia, all three being championship winners. Among the females, Brampton Ruby, the 1908 first-prize two-year-old, is in grand shape, and will make an invincible bid for championship honors next fall. When fresh she gave 12 lbs. of milk a day, and is due to freshen in August. She has an August bull calf, by Imp. Arthur's Flying Fox, that is a grand good one. The 1908 all-around champion, Imp. Brampton Primrose, is also doing well, and looks like winning more honors. She is an ideal dairy cow, and a great producer. Imp. Kate, the second-prize two-year-old last fall all around the circuit, will certainly get higher honors this year. She is a wonderfully sweet heifer, and carries a grand udder. She has a nine-months-old bull calf (imported in dam) that is a show calf all over. Several other two-year-old heifers, daughters of Arthur's Flying Fox, that are now in milk, are giving 30 lbs. a day, thus showing the prepotency of Fox as a sire. The old champion, Minette, a 75% in blood sister to the great Adelaide of St. Lambert, although now in her 15th year, is making 35 lbs. a day. She has a yearling bull, a grandson of Fox, that is worth looking after. In young bulls there are 12 fit for service. Besides those mentioned there is Blue Blood Mokena, a son of old Blue Blood, and out of Mokena, a cow that has made 18 lbs. 6 ozs of butter in seven days. Another is a five-months-old son of Darling, the Calgary, Regina, and Winnipeg champion, and whose milk yield is 50 lbs. a day. He is sired by Golden Fern. Among this lot are several of last fall's winners at Toronto and elsewhere. Anything in the herd is for sale.

TRADE TOPIC.

There are so many fences on the market and many of them seem good enough, but it is well to caution buyers. Perhaps some of our readers have bought fencing that they were sorry for. The following hints are given for the benefit of prospective fence-buyers: The saving on the first cost of a fence is in many cases "penny wise and pound foolish." The "cheap" fence wears out a good deal quicker and the loss in fence quality more than discounts the saving on the first cost. It pays to get a good fence when you do get one. It takes time and costs money to repair fences, and the farmer who is immune from fence troubles is saving both. If you will read the advertisement of "Peerless Fencing" on another page, you will find out how a good fence ought to be made. Peerless Fencing is manufactured by the Banwell Hoop Wire Fence Co., Ltd. It costs only a penny to get the facts, and they cost many dollars to you.



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, HOARSENESS, CROUP, SORE THROAT, PAIN or TIGHTNESS in the CHEST,

and all throat and lung troubles. It is put up in a yellow wrapper, 3 pine trees the trade mark and the price 25 cents.

A HARD DRY COUGH.

Mr. J. L. Purdy, Millvale, N.S., writes:—"I have been troubled with a hard, dry cough for a long time, especially at night, but after having used Dr. Wood's Norway Pine Syrup, for a few weeks, I find my cough has left me. To any person, suffering as I did, I can say that this remedy is well worth a trial. I would not be without it in the house."

Brampton Jerseys

Unbroken record of several years success at all leading Canadian exhibitions is unequalled by any other herd of any kind or breed of live stock on the American continent. When buying a family cow, a stock bull or a dairy herd, buy only the best. Our public record proves that we have them.

B. H. BULL & SON, Brampton, Ont.

LAKEVIEW HOLSTEINS

Herd headed by Count Hengerveld Fayne De Kol. His dam, Grace Fayne 2nd, 26.30 lbs. butter in 7 days, is dam of world's champion 4-year-old butter cow. Sire Count Hengerveld De Kol, 70 A. R. O. daughters, including world's champion milk cow. For sale: 1 service bull; 10 bull calves, by 20-lb. butter cows. 75 head to select from.

W. D. WRECKON, Mgr., Brant, Ont.

IMPERIAL HOLSTEINS!

For sale: 13 bulls of serviceable age, sired by Tidy Abbeville Mercedes Posch, whose 7 nearest dams have records within a fraction of 27 lbs. Out of show cows, with high official records. A high-class lot of young bulls. **W. H. SIMMONS, New Durham, Ont., Oxford County.**

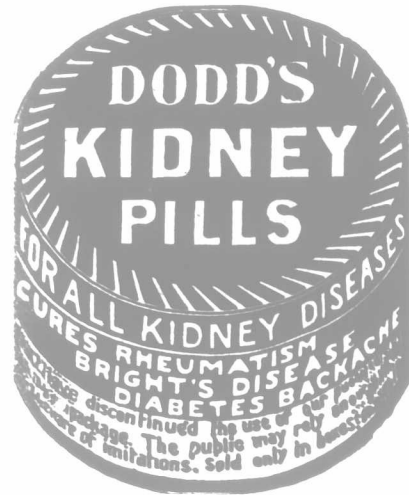
A Highland minister, who was rather a pompous gentleman, came to the shepherd's house to baptize a child.

"Are you prepared?" he asked the fond parent.

"Oh, ay, minister, I have got a gran ham for tea."

"I mean, spiritually prepared," thundered the cleric.

"Of course I am, oh, yes. I got two bottles of first-class whiskey from the minister, which he imported from Galt."



GOSSIP.

Messrs. Geo. Amos & Son, Moffat, Ont., write: "Owing to the splendid success we have had with the get of Old Lancaster (imp.), we have decided to use as stock bull on our herd a son of his, in our opinion the best one he ever left, which is saying a great deal; and not feeling disposed to keep two stock bulls, very reluctantly we are offering for sale Imp. Ben Lomond, a bull that as a sire of show stuff has few equals. He is 8 years of age, a deep red, guaranteed absolutely right in every particular, active and sure, sired by Count St. Clair, he by Bapton Conqueror; dam Beauty 13th, by Lord Marshal, by Field Marshal; g-d. by Gravesend. We have also to report the sale to W. D. Flatt, of Hamilton, Ont., the high-class young bull, Ben Cecil, winner of second prize in the junior calf class at Toronto last fall. He is sired by Imp. Ben Lomond."

SPRINGHURST SHORTHORNS.

Few men in the business to-day have reduced the breeding of Shorthorn cattle to the science reached by Mr. Harry Smith, of Exeter, Ont. Few herds in Canada show the remarkable uniformity of type seen in the Springhurst herd. Years ago, realizing the prepotency of Cruickshank blood in moulding an approved type of Shorthorns, Mr. Smith, in purchasing breeding females, gave a decided preference to that line of breeding, his herd now being strong in such rich tribal lines as the Cruickshank Butterflys, Mysies, Buckinghams, Lovelys, Lancasters, Marigolds, Lustres and Villages; other blood being the Campbell Buchan Lassies and Minas; Bruce Augustas, Diamonds and Vanitys, the last-named being a most remarkable strain for perpetuating that low-down, thick-fleshed, mellow-handling type that wins the ribbons and cheers the hearts of Shorthorn breeders. At the head of this herd for several years has been, and still is, Gold Drop, one of the greatest sires Canada has known. Sired by the 200-guinea Golden Drop bull, Imp. Golden Drop Victor; dam the Brawith Bud cow, Imp. Golden Gift, by Cypress, one of the best sons of the renowned William of Orange. As a show bull, Gold Drop won first prize at Toronto as a two-year-old, in a class of 18. As a sire his get has won as many first prizes at Toronto during the last three years as any other two Canadian-bred bulls, or any other four imported bulls. This, it is claimed, the records will show. In the herd just now are over a dozen one- and two-year-old heifers, daughters of Gold Drop, that for a thick, even, ideal type can scarcely be duplicated in the country, several of them being first- and second-prize winners at Toronto. Gold Drop is not only a high-class heifer getter, but is a getter of high-class bulls as well—a most desirable qualification, seldom found in one bull. On hand for sale are several young bulls. Mariner is a red two-year-old, out of a C. Mysie dam, a very low-down, thick bull, very evenly fleshed. Viscount Vanity is a roan, 18 months of age, out of a Vanity dam, and sired by Starlight, a son of Springhurst, that Mr. Duthie pronounced the best bull he had seen in Canada. This is one of the best young bulls in the country, immensely thick and mellow. Last fall at Toronto he was placed second in a strong class. He is a high-class herd-header and show bull for someone. Another very superior bull, a show bull of a high order, is Village Bridegroom, a Village-bred yearling, sired by Gold Drop. Last fall at Toronto he was first in the junior yearling class. Another is a roan yearling, out of Imp. Molly, and sired by Gold Drop. Here is a very growthy young bull of superior type and quality. Something especially good is a dark-red 10-months-old son of the stock bull, and out of a cow of that good old Vanity strain. This one will make a high-class stock bull for the man fortunate enough to get him; then there are several other younger ones of splendid form and type. The herd is in grand shape, and almost anything is for sale. The farm has long-distance telephone connection from Exeter.

Now is the time to buy a bull for service next year, because we sell **CHEAPER** now than we do next spring. Why not write to us **RIGHT AWAY** for a **BARGAIN** in bulls from R. O. M. dams? Or better yet, call and see us.

E. & F. MALLORY,
FRANKFORD, ONTARIO.

Young Holstein Bulls For sale: Two Holstein bulls 11 months of age, sired by Cornelius Posch 2nd, and out of young cows that are showing up well. Will be sold cheap for quick sale. **Josh Harrison, York Mills, Ont.**

WOODBINE STOCK FARM

Offers a few fine young Holstein bulls and bull calves, sired by Sir Mechthilde Posch. Sire's dam holds world's largest two-day public test record, dam Ianthe Jewel Mechthilde, 27.65 lbs. butter in 7 days; average test, 4.46 per cent. fat; out of dams with superior breeding and quality.

Shipping stations—Paris, G. T. R.; Ayr, C. P. R.
A. KENNEDY, Ayr, Ont.

HOLSTEINS Two bull calves, two yearling heifers, two two-year-old heifers. Prices right for quick sale. **White Rock and Buff Orpington eggs** Utility pens, \$1 per setting; exhibition pens \$2 per setting. **DAVID RIFE & SONS, Hespeler, Ont.**

A MAMMOTH AUCTION SALE OF 20 Head of Registered Holsteins

Including 11 cows—a few two and three year old heifers and calves, WILL BE HELD AT CANBORO VILLAGE, ONTARIO, ON WEDNESDAY, MARCH 24TH, 1909, AT 12 O'CLOCK NOON.

Terms: \$5 and under, cash; over that, 7 months' credit on approved joint notes, 3 1/2 per cent. straight discount for cash on sums over \$5.

Parties coming by train will be met at Canfield Station, G. T. R., by notifying the proprietor.

MONTAGUE & MACQUILLÉN, Auctioneers. **JOHN HILL, PROPRIETOR, CANBORO, ONTARIO.**

Centre and Hill View Holsteins

We are now offering 8 choice young bulls from 6 to 10 months of age, with high official backing. These are a grand lot of young bulls. We are entirely sold out of females for the present.

P. D. EDE,
Oxford Centre P. O., Woodstock Sta., Ont.

Homewood Holsteins!

For sale: 6 cows 5 years and under, to freshen this spring. Bull calves: One from Queen Butter Bar, 2nd prize two-year-old at Guelph, 4.4% fat; one from Ianthe Jewel Mechthilde 3rd, 1st prize two-year-old at Gue. ph. 1907 4% fat; one from L-dy Aargie De Kol 2nd, daughter of sweepstakes cow, A. R. O., 27 lbs. butter in one week, 88 lbs. 11 ozs. milk in one day. Satisfaction guaranteed.

M. L. & M. H. HALEY, SPRINGFORD, ONT.

OIL CAKE The finest feed known for stock. Once a user, always a user. Sold either fine or coarse ground. Write:

J. & J. Livingston Brand
DOMINION LINSEED OIL CO., LIMITED,
BADEN, ONTARIO. 31 Mill St., MONTREAL, QUE.

The Maples Holstein Herd!

RECORD-OF-MERIT COWS. Headed by Lord Wayne Mechthilde Calamity, also in the Record of Merit. Several choice bull and heifer calves; also one bull fit for service.

WAIKIRI RIVERS, Fielden's Corners, Ont.

DON'T Buy a **HOLSTEIN BULL** till you get my prices on choice goods from 14 months to 1 month old, from best producing strains. "Fairview Stock Farm." **FRED ABBOTT, Harrietsville, Ont.**

FAIRVIEW HERD HOLSTEINS

The greatest A. R. O. herd of in northern New York. Headed by Pontiac Korndyke, the greatest sire of the breed, having five daughters whose seven-day records average 29 1/4 pounds each, and over 4 3/4 fat. Assisted by Rag Apple Korndyke, a son of Pontiac Korndyke, out of Pontiac Rag Apple 31.62 pounds butter in 7 days, and 126.56 pounds in 30 days, at 4 years old. Cows and heifers in calf to the above two bulls for sale, also young bulls sired by them out of large-record cows. Write, or come and inspect our herd. **E. H. DOLLAR, Heuvelton, St. Law. Co., N. Y., near Prescott, Ont.**

HIGH PRICES PAID FOR HIDES, SHEEPSKINS, RAW FURS AND CALFSKINS

E. T. CARTER & CO., 84 Front St., East, Toronto, Ont. We pay **FREIGHT and EXPRESS CHARGES PROMPT RETURNS.**

Cattle and Sheep LABELS!

Metal ear labels, with owner's name and address, and numbers. Sample and prices mailed free. **F. G. James, Bowmanville, Ont.**

Holsteins at Ridgedale Farm

Eight bull calves on hand for sale, up to eight months old, which I offer at low prices to quick buyers. Write for description and prices, or come and see them. **R. W. WALKER, Utica P. O., Ont.** Shipping stations: Myrtle, C. P. R., and Port Perry, G. T. R., Ontario Co.

EVERGREEN STOCK FARM

Females all sold. Still have a few young bulls from 12 to 15 months old, sired by a son of Tidy Abbeville, record 25.58 lbs. butter and 81 lbs. milk in 7 days. Dams also in Record of Merit. **F. E. PETTIT, Burgessville, Oxford Co., Ontario.**

Maple Hill Holstein-Friesians

Special Offer: I must sell in next 30 days two cows; one bred in Nov. to Prince Posch Pieterje C.; one fresh in Dec., just bred. One yearling bull fit for service. **G. W. CLEMONS, ST. GEORGE, ONT.**

HOLSTEINS

We must sell at least 25 cows and heifers at once in order to make room for the increase of our large herd. This is a chance of a lifetime to buy good cattle at bargain prices. The best way: arrange to come and look the herd over. If you cannot, we will do our best for you by correspondence. Also a few young bulls. 100 head to select from. Imported **Pontiac Hermes**, son of Hengerveld De Kol, world's greatest sire, head of herd. All leading breeds represented.

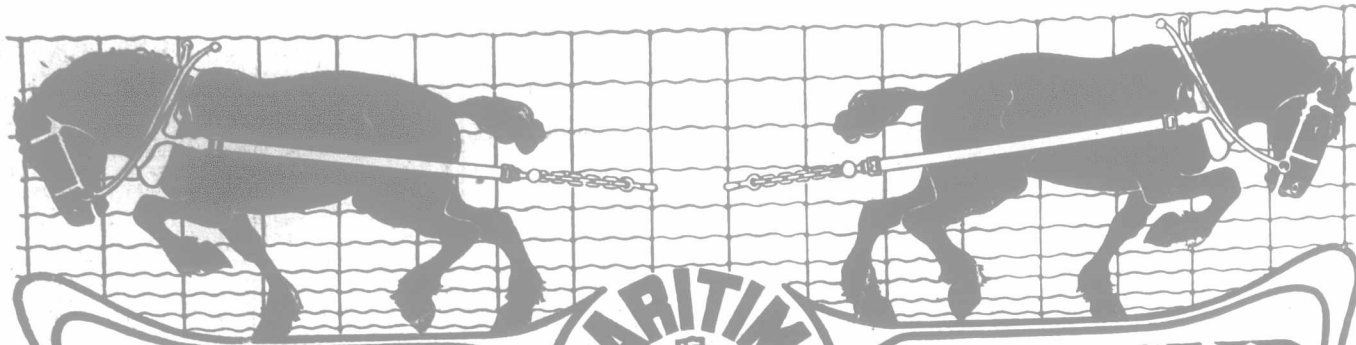
Putnam station, near Ingersoll.
H. E. GEORGE, Crampton, Ont.

MAPLE GLEN

For sale: Only 1 bull, 11 months old, left; dam is sister to a 26-lb. tested cow. Any female in herd for sale, 7 with records 20 1/4 to 26 1/4 lb. official tests. An 8-yr-old G. D. of Paul Beets De Kol, in calf to O k-land Sir Maida—her record 21.88 as a 5-yr.-old. Price \$400, or will dispose of herd en bloc, a great foundation privilege. **G. A. Gilroy, Glen Buell, Ont.** Long-distance phone connects with Brockville.

BUSINESS HOLSTEINS!

Over 60 head to select from. Milk yield from 60 to 85 lbs. a day, and from 35 to 47 lbs. a day for 2-yr.-olds. There are 10 2-yr.-old heifers, 8 1-yr.-olds, and a number of neifer calves. Bulls from 1-yr.-old down. Priced right. Truthfully described. **W. Higginson, Inkerman, Ont.**



THE LOCK CAN'T SLIP

The illustration demonstrates the phenomenal gripping-strength of our lock. Under the most unusual strain it never gives. It is known as the lock that can't slip; the lock that unfailingly holds the wires in their correct position.

Our Free Catalogue will tell you more about our can't-slip lock, and about the superior high-carbon, hard-drawn steel wire from which Maritime Wire Fence is made. Address the card as follows:

New Brunswick Wire Fence Co., Limited, Moncton, New Brunswick

GOSSIP.

J. H. M. Parker, of Willowdale Stock Farm, Lennoxville, Que., advertises for sale Shorthorn cattle and Clydesdale horses. The cattle consist of some very good yearling and two-year-old bulls and heifers, from such sires as Broad Scotch, Joy of Morning, Morning Hero, etc.; they are all in fine condition. Earl of Willowdale, a fine Scotch-topped, twenty-months bull, is for sale, and would grace any herd. The Clydesdales consist of some of the very best importations, headed by Fyvie Prince (6126), (12983), a beautiful brown four-year-old, by Baron's Pride, imported by Robert Ness & Son, Indomitable (8414), a magnificent youngster, rising two, by Benedict, imported last July. The females are bred from such sires as McQueen, Darnley, Baron's Pride, Up-to-Time, Prince Sturdy, Majestic, etc. Mr. Parker is also an extensive breeder of Leicester sheep and Chester White swine, and has also one of the most extensive pure-bred poultry yards in Canada. He will be pleased to send his pamphlet free upon application.

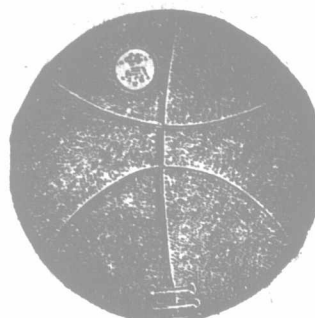
CARGILL SHORTHORNS.

A perusal of the new tabulated catalogue of the noted Cargill herd of Scotch-bred Shorthorns will show the 160 or more head now on hand to be one of the richest-bred herds to be found in this or any country where Shorthorns are known, and while this is true of their breeding, the same may truthfully be said of their type and high-class individuality. There is probably no other herd in the world to-day stronger in Cruickshank blood, there being among the breeding females (56 of which are imported) two Beautys, one Emma, one Lancaster, one Nonpareil, two Rosemarys, two Secrets, one Rosewood, and three Victorias, besides such other rich blood as the Marr Beautys, Roan Ladys, Floras, and Rachels, Campbell Minas, Bruce Mayflowers, Broadhooks, etc., at the head of which has been such grandly-bred bulls as the Missie-bred, Imp. Lord Mistletoe, by Lovat Champion, the Missie-bred, Imp. Merchantman, also by Lovat Champion, the Golden Drop bull, Golden Drop Victor, (Imp.), by Nonpareil Victor; and the present stock bull, Imp. Blo d Roys, bred by Wm. Duthie, sired by the Rosemary bull, Pride of Avon, dam Beaufort Beauty 3rd, by the Roan Lady bull, Royal Star. Individually, there have been few bulls imported from Scotland the equal of Blood Royal, and as a sire he is all that could be expected from his high-class quality and right royal breeding. As assistants in service, Mr. Cargill has lately imported two exceedingly choice young bulls. Proud Hero, bred by Wm. Duthie, sired by Pride of Avon, dam Zoe 10th, by the Missie bull, Scottish Crown, and Red Star, also bred by Duthie, sired by the Roan Lady bull, Vanguard, dam Beaufort Pride 4th, by Royal Star, also a Roan Lady. Price did not stand in the way in the selection of these young bulls, and their type and breeding being so high, they should leave their mark of excellence on the herd. Although of late sales from this herd have been heavy, there are still on hand twelve bulls fit for service; a big, sappy, good-doing lot, all out of imported dams, and got by imported sires, and a man would hardly know what he wanted if he could not be suited among this lot. Besides these there are a number of younger ones, among which are several exceedingly choice show animals.

TRADE TOPIC.

Horse authorities concede that a good clipping in the spring is of advantage in preparing horses for the heavy spring work. You can get the Stewart No. 1 clipping machine, as advertised on another page of this issue, at only \$7.50. This splendid little machine is guaranteed to you for twenty-five years by a thoroughly responsible firm, the Chicago Flexible Shaft Company. If you have not a good clipping machine, why not get one now, at your dealers, or from the manufacturers direct?

Football FREE



card will do. THE RELIABLE PREMIUM Dept. X Waterloo, Ont.

For selling Picture Post Cards and Collar Buttons.

This "Favorite" Football given free for selling \$3.75 worth of our fast-selling, gold-plated Collar Buttons or our Picture Post Cards, giving views of Canada, England and other countries. Collar Buttons sell at 10c. for set of 4. Post Cards, 6 for 10c. Send your name and address and we will mail you whichever you wish to sell. Write to day. A post card will do.

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Write for Weekly Price Lists. Shipments Solicited.

JOHN HALLAM - TORONTO, ONT.

Maple Villa Oxfords, Yorkshires

The demand for Oxford Down sheep and Yorkshires has been the best I ever had. I have still for sale shearing ewes and ewe lambs, and young sows sale in pig. These will certainly give satisfaction.

J. A. CERSWELL, BONDHEAD P. O., ONTARIO
Simcoe County.

IMPORTED HORNED DORSETS

I have for sale a few of both sexes, the get of last year's champion all round the circuit, Imp. Romulus 2nd. Canada's banner flock of Dorsets.

JAS. ROBERTSON & SONS, MILTON P. O. and Sta., C. P. R. and G. T. R.

SOUTHDOWNS AND COLLIES.

Orders now solicited for especially-fitted sheep. Your choice of early lambs from imported and prizewinning Canadian-bred ewes, and by the sire of the Grand Champion wether at Chicago, 1907. Twenty shearlings, the choice of last year's lamb crop, also for sale.

ROBT. McEWEN, Byron, Ont. Ry. Stn., London, Ont.

OHIO IMPROVED CHESTER WHITES—Largest strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 6 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe delivery guaranteed.

E. D. GEORGE Putnam, Ont.

SUNNYMOUNT BERKSHIRES

Highest standard of type and quality. For sale: Sows of all ages, and 4 yearling boars. A grand, good lot. Also younger ones. Pairs not akin.

JOHN McLEOD, C. P. R. & G. T. R. MILTON P. O., Ont.

Pine Grove Yorkshires

At the late Guelph Winter Show we won decidedly the best of it in the bacon classes. Our Yorkshires are noted for superior excellence. Both sexes and all ages for sale.

J. Featherstone & Son, Streetsville, Ont

Hilton Stock Farm Holsteins and Tamworths.

Present offering: 6 yearling heifers and several younger ones. All very choice. Of Tamworths, pigs of all ages and both sexes, pairs not akin.

R. O. MORROW & SON, Hilton, Ont.
Brighton Tel. and Stn.

Maple Grove Yorkshires!

A very choice bunch of sows bred and ready to breed. Boars ready for service and younger. Pigs of all ages. M. G. Champion - 20102 - Toronto's champion boar in 1907, is stock boar. Sows are mostly imported, and as good as the best. A square deal or none is our motto.

H. S. McDIARMID, Fingal P. O., Ont.
Shedden Station.

Willowdale Berkshires!

Won the leading honors at Toronto this fall. For sale are both sexes and all ages, from imp. stock on both sides. Show things a specialty. Everything guaranteed as represented. J. J. WILSON, MILTON, ONT., P. O. AND STATION. C. P. R. AND G. T. R.

PINE GROVE BERKSHIRES.

Sows bred and ready to breed. Nice things, three and four months old.

W. W. BROWNIDGE, Milton, C. P. R. Ashgrove, Ont.
Georgetown, G. T. R.

MONKLAND YORKSHIRES

are the easily-fed, quick-maturing kind. The sort the farmers want. All ages for sale. 100 sows bred now

JAMES WILSON & SONS, FERGUS, ONTARIO

Newcastle Stock Farm

I have a splendid lot of **TAMWORTH SOWS** well forward in pig, and well worth looking after; also grand selection of boars, 3 months to 10 months old, several prizewinners, and 1 out of dams that have been prizewinners all over this part of Ontario. I have also a few choice Shorthorn heifers, well forward in calf to my Cargill-bred bull, and others ready to breed. All will be sold well worth the money.

A. A. COLWILL, NEWCASTLE, ONT.

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.**

CLAYFIELD Buy now of the **Champion Cots** **STOCK** flock of America, 1906. Flock headers, ranch rams, ewes of different **FARM!** ages. All of first-class quality, and prices reasonable. Write, or call on **J. C. ROSS** Box 61, Jarvis, Ont.

ELMFIELD YORKSHIRES

50 young pigs for sale, both sexes. Young sows bred to imported boar, also sows to Canadian-bred boar due to farrow about 1st October.

G. B. Muma, Arr, Ont. Arr, C. P. R.; Paris, G. T. R.

RIPLEYS COOKERS

Recommended and used by Wis., Iowa, Georgia and New Mexico State Experiment Stations. Made of Cast Iron and Heavy Steel. Last for years. Run dairy separators, cook feed, bake hog and poultry houses, etc. Heat water in tanks or cook food 500 feet away. Little fuel needed. Burns coal, coke, wood, kerosene or gas. No flues to rust or leak or fill with soot. Generates steam in twenty minutes. Boils a barrel of water in 15 minutes. We manufacture the largest line of cookers in America. Cooker and Brooder Supply catalog free.

Special prices—anywhere in Canada.

Ripley Mfg. Co. Mfrs., Box 6, Grattan, Ill., U. S. A.
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BROOKS' NEW CURE FOR RUPTURE!

Brooks' Appliance. New discovery. Wonderful. No obnoxious springs or pads. Automatic Air Cushions. Binds and draws the broken parts together as you would a broken limb. No salves. No lymphol. No lies. Durable, cheap. Pat. Sept. 10, '01. **SENT ON TRIAL. CATALOGUE FREE.**

C. E. Brooks, 9789 Brooks Bldg., Marshall, Mich

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For proof that fits can be cured, write to **Mr. Wm. Stinson, 134 Tyndall Ave., Toronto, Ontario.**

For pamphlet giving full particulars of simple home treatment, 20 years' success. Over 1,000 testimonials in one year. Sole proprietors: **Trench's Remedies, Limited, Dublin.**

DEHORN YOUR CATTLE

Wonderful how it improves them. Heifers develop into better milkers. Steers fatten quicker.

KEYSTONE DEHORNER

Does it. Cuts clean—hurts little—does not bruise flesh or crush bone. Write for free booklet.

R. H. McKENNA, Late of Picton, Ont.
119 Robert St. Toronto

POPLAR LODGE SOUTHDOWNS AND BERKSHIRES.—At right prices, 2 aged, 3 shearing rams, 2 ram lambs. Flock headers. Berkshires all ages, both sexes. Ideal type. Correct description guaranteed. **S. Lemon, Kettleby, Ont., P. O. and Sta., also Aurora Sta.** Long-distance phone.

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs.—Present offering: Lambs of either sex. For prices, etc., write to **John Cousins & Sons, Harriston, Ont.**

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs.—Present offering: Lambs of either sex. For prices, etc., write to **John Cousins & Sons, Harriston, Ont.**

"Ideal" Fence has features that shrewd buyers appreciate

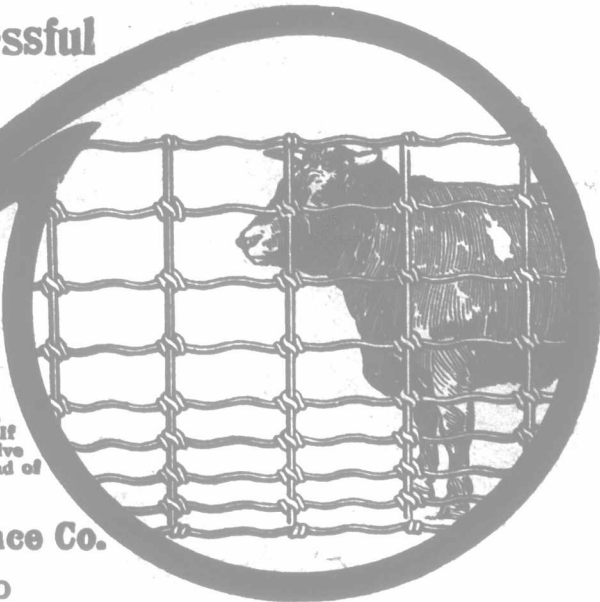
That's why our Agents are so successful

Taking orders for "IDEAL" fence is far easier than you may think. The "IDEAL" has features that shrewd buyers appreciate. The railways buy "IDEAL" because of its weight and quality, because of the gripping tenacity of the lock on the

"IDEAL" WOVEN WIRE FENCE

It is undoubtedly the strongest fence lock in existence. The farmers buy "IDEAL" for the same reasons as do the railways. "IDEAL" fence is easiest to sell. That is why our agents are so successful.

Don't you think it would be wise to write us for complete particulars in regard to becoming the "IDEAL" fence agent in your locality? Do so to-day. If you wait until to-morrow you give your neighbor a chance to get in ahead of you.



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Weak Men, Wake Up!

Why Do You Wait?



Are you satisfied to turn the grindstone for the other fellow all your life? Are you content to be a plodder all your days? There's nothing in it, and you know it. Then why not brace up and be a Man? Electricity as I apply it is working wonders in the world. I am making hustling, energetic men out of wrecks every day. In every walk of life you'll find these men—men whom I have saved from lives of wretchedness and despair—men who are making their mark in the world—men who are shouting the praises of my Dr. McLaughlin Belt—men who will tell you that their success in life dates from the time that they began the use of my great Electric Appliance—the only absolutely safe and sure remedy for a weak man—a broken-down man.

My remedy is an honest remedy, a logical remedy, a time-tried remedy. You have seen my advertisements for over twenty years, if you have been on earth that long, and if you'll write to or consult some of the men and women who have used my appliance or are using it, they'll tell you that it does all that I claim for it, and even more. Then why do you wait? What's the use of bewailing your fate? You know you are not the man you ought to be. I can help you with Electricity as applied according to my method more than all the Doctors and Drugs in Christendom. If it's fresh strength and energy you want, VIM and VIGOR, that's what I can give you, and you'll be a long time getting anything like that out of drugs.

I'LL CURE YOU, OR YOU NEED NOT PAY.

If your stomach doesn't work; refuses to digest your food; if your Bowels do not move regularly; if your Kidneys are weak; if your Liver is sluggish; if your Blood Circulation is poor and your Blood is full of Uric Acid or other impurities; if your powers of Manhood are weakening; if your body is full of Pains and Aches; if you suffer from Headaches, Debilitating Losses, Urinal Disorders, Irritability, Despondency, Sleeplessness, or any other signs of Nervous or Physical Breakdown, stop and THINK! Don't depend upon drugs to build you up; they'll never do it. Don't you know that all such symptoms are crying out the fact as loudly as they can that the nerve cells of your body are robbed of their power—their vitality. Don't you know that it is nerve power that operates every organ, every function of the body? Don't you know that the basis of nerve power is Electricity? Don't you know that Electricity is life? If you don't, then you should get my Book and read it. It will teach you facts you ought to know.

Let me treat your case in my own way. Let me apply a steady current of Galvanic Electricity to your weakened system with my Dr. McLaughlin Electric Belt. Wear this appliance, night after night, for a few weeks and it will drive out all those pains and aches; it will restore energy and equilibrium to your nervous system; it will fill your body with fresh strength and energy; it will give you back the powers of Manhood, and make you a man among Men. Again I place before you more proofs:

WILLIAM BROCK, Listowel, Ont., says: "Your Belt cured me of Neuralgia and Rheumatism after the failure of many kinds of medicine and many doctors."

WM. S. CARTER, Mapleton, Ont., writes: "My aches and pains have completely left me. I am twice as strong as before, and advise all suffering people to get Dr. McLaughlin's Electric Belt."

MR. HENRY FAUST, Fordwich, Ont., says: "I have worn your Electric Belt according to directions, and am pleased to say it has done all and even more than you said it would. I have recommended and will recommend it to others."

Call at my office this very day if you can; if you can't, then fill out this coupon, send me your address, and I'll mail you, closely sealed, a FREE 80-PAGE BOOK, elegantly illustrated. I have a Book for Women, too. DON'T WAIT. Get it now!

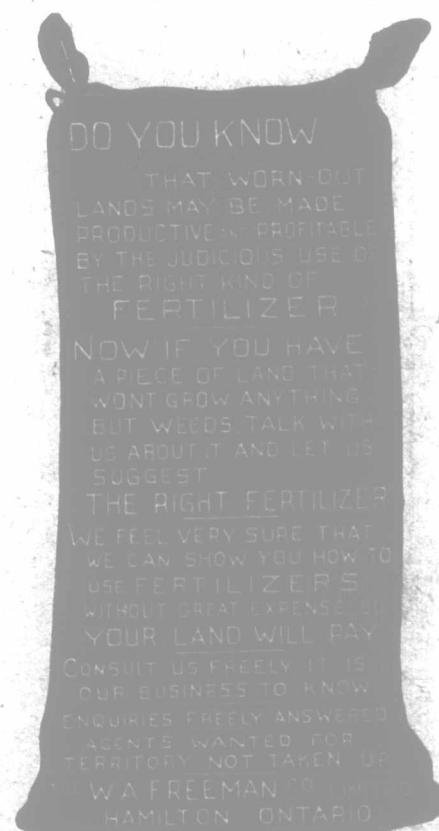
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I Cured My Rupture

I Will Show You How to Cure Yours FREE!

I was helpless and bed-ridden for years from a double rupture. I wore many different kinds of trusses. Some were tortures, some positively dangerous, and none would hold the rupture. The doctors told me I could not cure it without a surgical operation. But I fooled them all, and cured myself by a simple method which I discovered. Anyone can use it, and I will send the cure free by mail, postpaid, to anyone who writes for it. Fill out the coupon below and mail it to me to-day.

Free Rupture - Cure Coupon.

CAPT. W. A. COLLINGS,
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Dear Sir,—I wish you would send me your New Discovery for the Cure of Rupture.

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PLUS + Strength!

It's built into EVERY Cockshutt Implement

—it pays to put it there—pays you and us too!

Plus-strength means strength to stand harder usage than any farm-implement ought to have to stand—but DOES have to, sometimes.

You know what "careful" use the average "hired man" is apt to give any farm-implement! And the more expensive the thing is, the harder usage it is likely to get—on your farm or anybody else's. Now an ordinary farm-implement lacks plus-strength. It's built for careful handling—not for abuse. Wherefore it goes smash under stress—and always at the busiest time—when breakdowns cost most.

Of course it costs more to build plus-strength into a machine; but the buyer of a Cockshutt implement pays no more to get it.

Just as no Cockshutt customer pays a cent of the cost of this advt., he doesn't pay for the surplus strength built into a Cockshutt tool. **Where the value of it comes in** Advertising is an investment that repays us in increased business—and plus-strength is an investment that repays us in increased reputation. You get breakdown insurance for the price you'd pay for ordinary implements. We get your faith and your good word—and they count a whole lot in this business.

This plus-strength does NOT mean extra weight, nor clumsiness. It wouldn't be worth having if it did mean either of those things.

Putting this surplus strength into a Cockshutt Implement is a matter of careful choice of materials; of special formula for steels and irons; of special factory processes; of special study by experts who are highly paid to accomplish this very thing—and to do it without increasing, but rather by lessening, the friction and the draft of the implement. Cockshutt implements stand up better and still draw lighter.

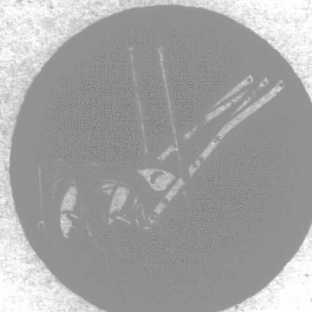
As the Cockshutt Line includes a great many kinds of implements—ranging from light garden plows to huge 12-furrow engine gangs, and including harrows, cultivators, seeders, and other kinds of modern farm-equipment—it is not possible to tell you here just how this plus-strength is shown by each of them. But if you will just write and ask for our catalog, and tell us what particular implement you might be interested in, the details will go to you by return mail. That is well worth your while. It means money saved to you—and satisfaction gained. Write us to-day.

Made with 13 and 15 Discs
Guaranteed not to Clog

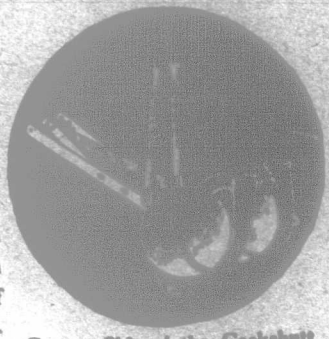
Seeds Closest
Runs Easiest



If you knew, to a dead certainty, that seeding your land to any grain with this New Disc Drill actually would increase the yield from 2 to 5 bushels an acre—if that could be proved to you beforehand—you would think pretty seriously about investing in one, wouldn't you? Well, that CAN be proved to you; and so can it be proved to you that no other seeding machine built will do what this does. Free Booklet B proves it.



Concave Side—Note Tubular Pressure Spring Rod that Prevents All Backing—



Convex Side of the Cockshutt Disc that Can't Clog in Any Soil—

Booklet "B" tells you, among things you ought to know, why this New Cockshutt Disc Drill sows anything grown in drills, whether small as tobacco-seed or big as broad-beans, with greater accuracy and far more uniformity than any other method of seeding can do. The pictures at each side of what you are reading now suggest one reason why this is so.

The picture above shows that the grain-boot on this Drill does not touch the disc at any point; and, also, that the space between boot and disc widens gradually from bottom to top. This makes it impossible for trash, weeds, stones, etc., to jam there. Nothing of that kind can block the free turning of any disc. There's nothing to hold mud or trash. That's why this drill will work perfectly under conditions that would stall any other drill ever built.

Discs are set six inches apart with a seven-inch stagger, and at exactly the angle that will cut the ground easiest. Grain follows right down the grain-boot into the BOTTOM of the furrow—always at the depth you adjust for—no chance for missing. And you can seed from one-half of the hopper

only, if you wish to—often a big advantage. The grain-feed is a FORCE-feed, governed by a lever, handily reached from the full-width running board.

This shows the one perfect disc-bearing—GUARANTEED dust-proof and self-oiling. It accounts for this Disc Drill's wondrously light draft.

This Drill's drop-pattern frame, of high carbon angle steel (extra tough, extra strong), has a heavy I-beam running across the machine's whole width. The whole frame is RIVETED together—not bolted—nothing about it to shake loose or get out of true. And this is simply one of many Plus-Strength and Minus-Draft features of the Cockshutt New Disc Drill. SEND FOR THE BOOKLET that tells about them all—send to-day. It's FREE. Address

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