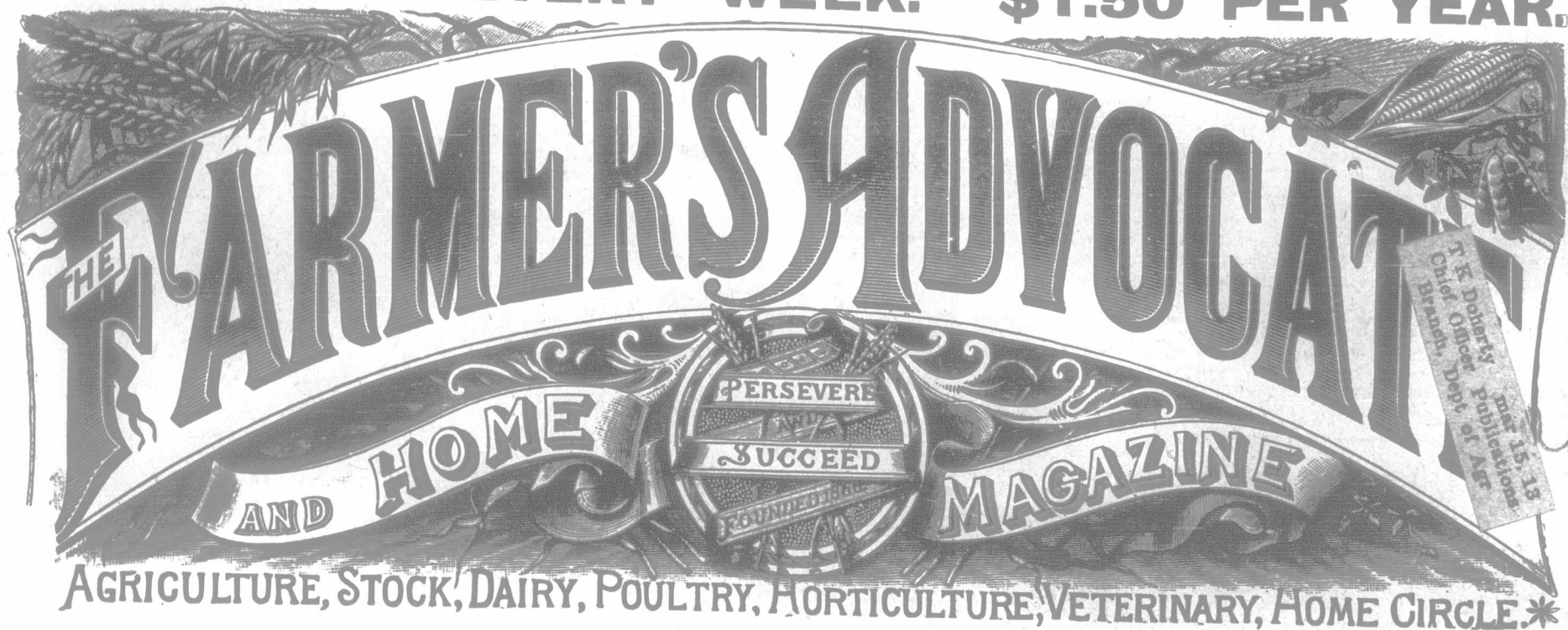


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Vol. XLVIII.

LONDON, ONTARIO, MAY 8, 1913.

No. 1076

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have been bought by some thousands of Canada's best farmers. 30,000 "Clay" Gates were sold in 1912. This extensive appreciation of "Clay" Gates is the

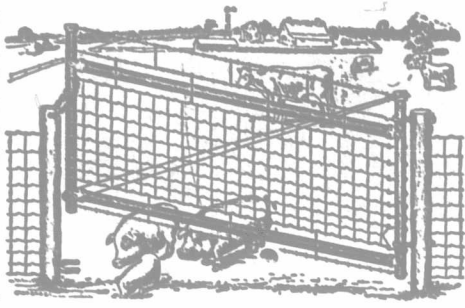


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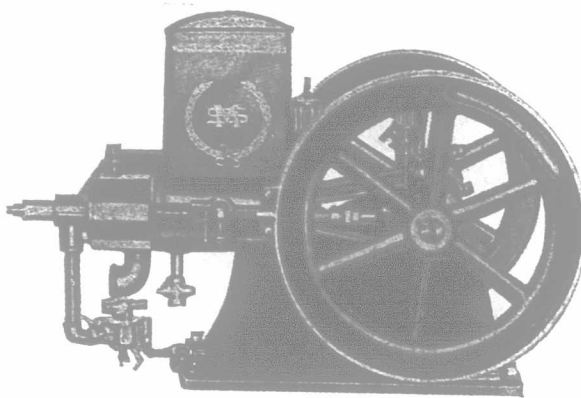
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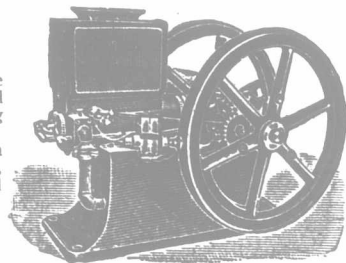
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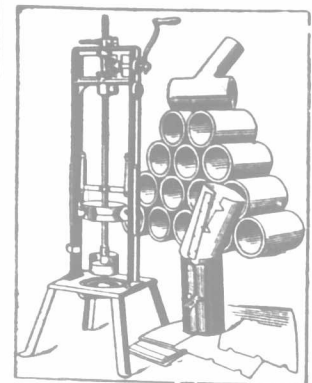
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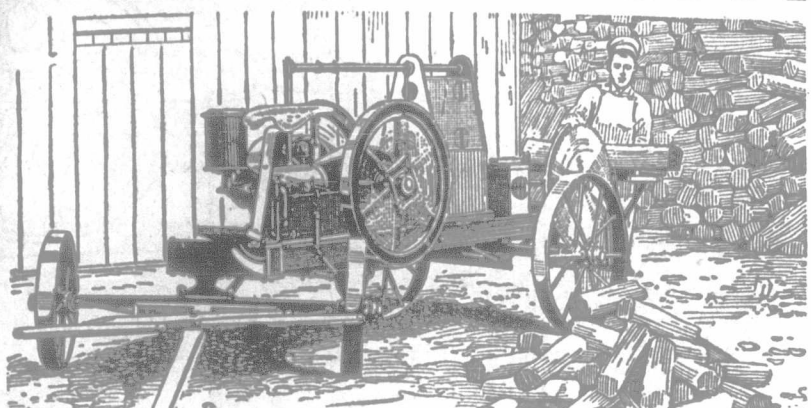
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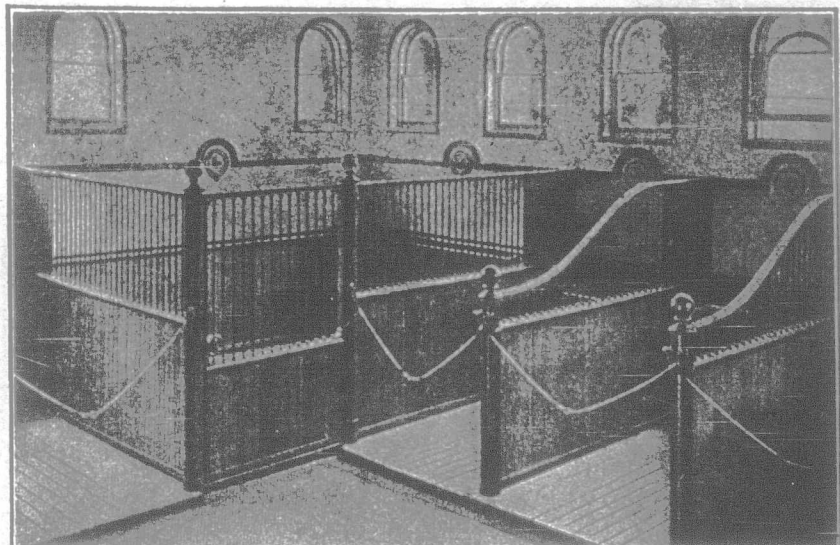
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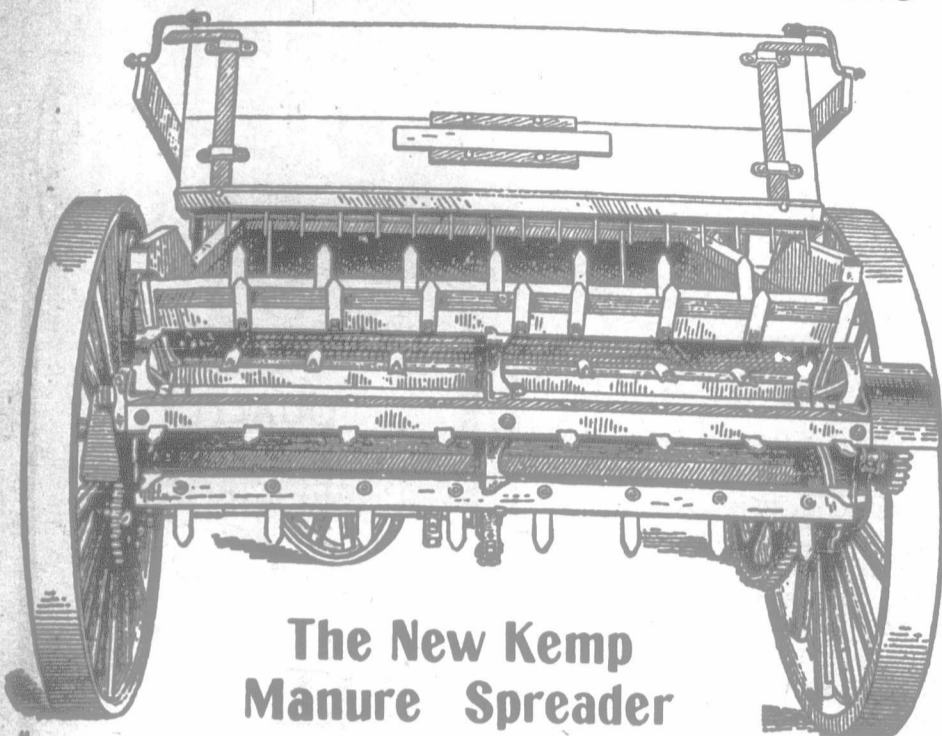
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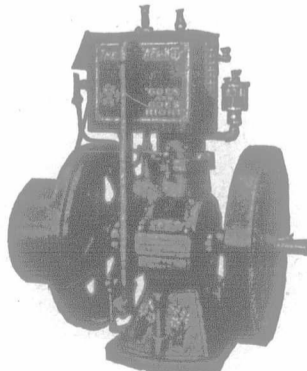
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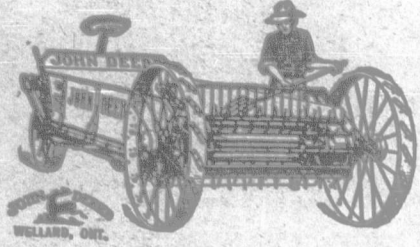
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John Deere Spreader

The Spreader with the Beater on the Axle



Take any manure spreader you have ever seen, remove all the clutches and chains, all the countershafts and stub axles, do away with all adjustments and mount the beater on the rear axle. Rebuild the spreader so that the top of the box is only as high as your hips. Make it stronger. Remove some two hundred trouble-giving parts and throw them away. You will have some sort of an idea of what the John Deere Spreader, the Spreader with the Beater on the Axle, is like.

The Beater on the Axle

The beater and all its driving parts are mounted on the rear axle. This construction is patented. You cannot get it on any other spreader made.

Power to drive the beater is taken from the rear axle through a planetary transmission (like that on automobiles). It is positive, runs in oil, and does not get out of order.

Few Working Parts

The John Deere Spreader is so simple that there are no adjustments. It has some two hundred less parts than the simplest spreader heretofore made.

There are no clutches to throw it into gear. The lever at the driver's right is moved back until the finger, or dog, engages a large stop at the rear of the machine. All the chains and adjustments have been done away with.

Only "Hip-High"

Because the beater is mounted on the rear axle, it is only "hip-high" to the top of the box. Each forkful of manure is put just where it is needed. You can easily see into the spreader.

Roller bearings, few working parts, the center of the load comparatively near the horses, and the weight distributed over four wheels, make the John Deere Spreader light draft.

Spreader Data Free—Tells about manure, when and how to use it, how to store it, and a description of the John Deere Spreader. Ask for this data on Package No. Y 119

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A straight from the shoulder message to separator buyers

Beware of separator salesmen who claim that their machine is "just like the De Laval" or "as good as the De Laval". Such claims are all absolutely false.

Such imitators juggle with words.

Instead of putting into their machine the experience and the workmanship and the material necessary to make a cream separator anything like as good as the De Laval, they find it cheaper and easier to "claim everything" and make a bugbear of "price" to keep the buyer from discovering the mechanical shortcomings of their machines.



They go on Barnum's theory that the people like to be fooled and they don't care how they get your money just so long as they get it.

It is unfortunate that the separator business should be burdened with such unfair business methods; but since it is it behooves every prospective separator buyer to use care and good judgment in the selection he makes.

Look well to the demonstrated ability of the concern that makes the machine to build a good separator. Avoid buying a machine whose makers have had little separator experience, or who are constantly changing from one makeshift type to another.

Talk with separator users who have learned by experience. The more you investigate the more you will find that there is one and only one separator that stands in a class all by itself.

It was the pioneer cream separator in 1878 and it has been first ever since.

You will find that more machines of this make are being sold than all other makes combined.

You will find that 98% of the world's creameries use it exclusively.

You will find that every user of this machine is a booster.

You will find that its makers are so confident of its superiority that you may have a free trial of it alongside any other machine and judge for yourself as to which machine will serve you best.

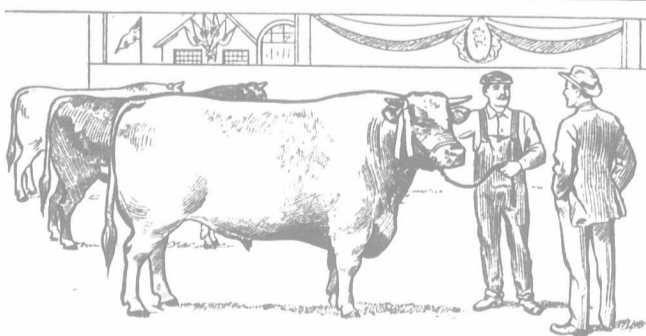
This machine has over 1,500,000 satisfied users.

It will serve you best, save you most, and last the longest.

If you want to be sure of making a good bargain buy a

De Laval Cream Separator

DE LAVAL DAIRY SUPPLY CO., LTD.,
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Bring Home the Ribbons and Get the Money

BY USING THE BEST STOCK CONDITIONER Caldwell's Molasses Meal

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What are the reasons behind these facts? Simply these: Caldwell's Molasses Meal has proven itself to be the best stock conditioner on the market, as well as the most economical in actual use. Ask your feedman! Or write us direct for proofs.

The Caldwell Feed Co., Limited, Dundas, Ont.

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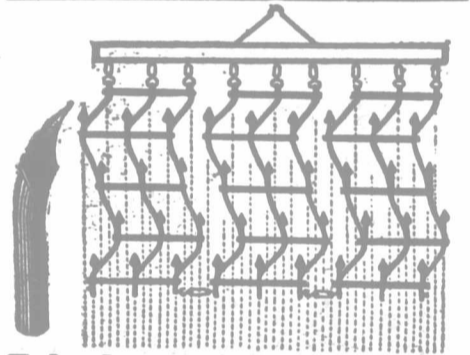
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The Farmer's Advocate and Home Magazine

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1866

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Vol. XLVIII.

LONDON, ONTARIO, MAY 8, 1913.

No. 1076

EDITORIAL.

Oh for a ditching machine!

Have you put in your garden yet?

It is safer to test the corn in a small box than to wait for the entire seeding to prove its germinating power or lack of it.

Nine months of almost continual saturation have left the ground in a sodden condition, which emphasizes the contrast between tiled and undrained areas.

We can follow every tile without a moment's hesitation through our alfalfa field this spring. On most of the undrained area the roots were heaved and broken beneath the surface, and the tops show it.

Make Canada's agriculture permanent by building it on the solid foundation, live stock, and make the foundation everlasting and indestructible by constructing it upon the hard pan of pure-bred sires of the best type of their breeds.

We are deeply grateful for the very appreciative letter from a fellow journalist, who, though an entire stranger to us, has the courage to come forward over his own name and discuss frankly the grave risks a publishing company incurs in attacking the money interest. As he humorously observes, we fully realize that we are likely to strike "more hornets than oil," and if we were moved by no other principle than money-getting, we would not touch the subject with a sixteen-foot pole. Financially, we stand to lose far more than we gain. The loss can be partially compensated, and the cause promoted by just such action as our sympathetic friend suggests. In this matter the cause of the people has a champion. Will they back it up? Response has already been encouraging, but we can stand more of it, and so could your member of parliament.

The Department of Marine is to educate the Canadian public to eat more fish. The dairy authorities are continually urging the wholesomeness and economy of cheese; vegetarians claim we should eat more apples, lettuce and nuts; poultrymen think that the consumption of eggs might be increased with much advantage to stomach and pocket book; apiarists tell us honey ought to find a more regular place on our tables; while owners of sugar groves believe the maple product is a notch or two ahead of honey. Stockmen, on the other hand, maintain that Anglo-Saxons are preeminently meat eaters and that the percentage of meat consumed naturally increases as people acquire the means to pay for it. Now, if we are to eat more of all these good things where is the economy to come in and what is to become of our over-loaded stomachs? This multiplicity of good things we are to eat more of reminds us of the darky's exclamation when he fell into a hogshead of molasses: "Oh for a hundred tongues and a thousand years to live!"

Where Bank Profits Go.

Necessity has been called the mother of invention. She is also the mother of frugality. Privilege, on the other hand, is the parent of waste. Farming is the most frugally conducted industry in Canada because it has to be so. The thriftless farmer soon goes to the wall, or is obliged to curtail his operations to the scope of mere self employment at a very low wage. Most other businesses, bonused with subventions and nurtured by privilege, do not have to figure so closely to make ends meet, and are, therefore, continually subjected to the temptations of extravagance and waste. Banking is by no means the only one of these privileged businesses—perhaps not the most conspicuous example—but it happens to be the one under present discussion by our federal legislators, hence the application of these remarks.

Let us emphasize again that the profits of banking are not the main point of our current discussion. The main point is the need for efficient inspection and regulation to protect shareholders, secure depositors and check abuses. Another point more important than the profits of the banks is the profits made possible for the leading bankers through the opportunity they possess of loaning the country's capital largely to industries and mergers in which they are individually interested, favoring these, if need be, in times of stress on the ground that they are large concerns whose collapse would be disastrous to the country.

But while the direct profits of banking are not the most important point under discussion, nor yet the second most important point, they are worthy of examination. On page 761 of our issue of April 24th., was an editorial discussing the franchise of our Canadian banks. Among various privileges we pointed out that the authorized power of note issue enabled our banks to duplicate their capital, earning interest on the value of plant and equipment besides the margin on turnover, i. e., deposits, on which latter, by the way, it was indicated that the average rate of interest paid amounted to, perhaps, 1½ per cent.

How does it work out for the banks? It means that our stronger and better established banks, after putting large sums into buildings and piling up reserves about equal to their capital, are able to pay dividends on their stock amounting to from 8 to 14 per cent. per annum. If the annual expenditure on buildings and the annual accession to the reserves were added to the dividends paid out, these would amount to something nearer 20 per cent. on every hundred dollars worth of stock in the leading banks. It will be seen, then, that, having regard to the power of note issue, which enables the banks to duplicate their capital, and having regard to the opportunities of handling deposits eight or ten times greater than the amount of their own capital, the established banks have rather handsome margins to come and go on.

This explains how it is that banks can afford to acquire central street corners and tear down substantial buildings to erect new classic edifices in keeping with their own general style of architecture. It explains how they can afford to demolish solid buildings and erect others on the same sites with lower foundations, so as to let depositors in on the level. It explains how the banks can afford, in competition for business, to

outbid all rivals for favorite sites in booming Western towns. It explains the statement made in the Banking and Commerce Committee that one leading bank had put five million dollars in premises which were written down on their books at six hundred thousand, until one year, when, for some reason, they suddenly jumped into the millions. It explains, moreover, how the various banks can afford to multiply branches in towns and cities already well served. They are all scrambling for deposits, and the margins of the business make this extravagant duplication of facilities possible. If the margins were as close as in farming and other productive enterprises, such wasteful extravagance and superfluous competition would be out of the question. We see, therefore, how the great value of our banking franchise has tended to extravagance and waste. Even after this has occurred, and, after our banks have invested immense sums to establish themselves in a growing country, thereby greatly strengthening their position for years to come, they have still been able to pay dividends which, in conjunction with the reserves back of the stock have held the value of bank stock up to about two hundred per cent. Of the fifteen banks whose stocks are listed on the Toronto Stock Exchange, only three rule below 200 per cent.

Now, if we were to double the value of the franchise of our Canadian banks, what would happen? First of all we would enlarge the inducement to extravagance and wasteful competition. Then the balance of earnings would be capitalized in the form of augmented values of bank stock. Instead of selling at 200 per cent. it would command, probably, between three and four hundred per cent. of face value.

Is it necessary to grant the banks a monopoly of such valuable privileges without requiring something in return beyond security of note issue, chiefly at the depositor's risk? Is there not a strong case for insisting upon a statutory minimum of cash reserves, a reasonable percentage limitation of loans, a limitation of loans to any one firm or individual, and especially a limitation of loans to directors? And beyond these stipulations, is there not still a fair case for taxation of note issue or for some other form of profit sharing? If the privileges for profit are in no wise curtailed, where will extravagance end, and who will soon own the country? It is time to reflect.

Why a Bank Commission is Needed.

That certain phases of the Bank Act have been habitually violated by our Canadian banks, the law in regard to falsification of returns being practically a dead letter;

That it has been possible for a knavish general manager to go on for twenty-five years, as the Ontario bank did, using the funds of an unsound bank to enrich himself while doing great mischief to the country;

That Canadian banks have habitually over-loaned, considerably beyond the limits of safety, as determined by world experience in banking;

That cases have arisen where a single bank has controlled the policy of the Canadian Bankers' Association by influence;

That at the present rate of progression we are destined by 1923 to have only seventeen banks with an average capitalization of over ten million

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"
Winnipeg, Man.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
 2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
 3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
 4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrearages must be made as required by law.
 5. THE LAW IS, that all subscribers to newspapers are held responsible until all arrearages are paid and their paper ordered to be discontinued.
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 12. WE INVITE FARMERS to write us on any agricultural topics. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
 13. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.
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LONDON, CANADA.

dollars, and that it would be well to prevent the growth of gigantic institutions, which would in time become controllers of the country through political influence or otherwise;

That all the failures of Canadian banks have been due to an unsound, imprudent or dishonest state of affairs at the head office;

That the mere verification of accounts would be worthless, a much broader and more thorough-going audit or inspection being necessary to secure depositors and policy-holders.

These are some of the sobering opinions declared by H. C. McLeod in his evidence before the Banking Committee of the House of Commons. They are some of the facts which point to the need of a strong bank commission, with extensive supervisory and regulative powers. Mere audit is not enough, even although made by firms of auditors approved by the Department of Finance. Even inspection is not enough. Authority to regulate is required.

Ottawa despatches nearly a fortnight since this will be read naively informed the public that a majority of the witnesses before the Banking Committee had not favored inspection. Naturally not, seeing most of them were bankers, who until recently disparaged the idea of any audit or inspection at all, and refused, on some occasions, to give Mr. McLeod a hearing on that subject in the Bankers' Association;

But what does the country think? What will it think when the press has informed the average citizen fully concerning the matter? Correspondence and conversation have convinced us that the real public in particular is swinging strongly to the idea of inspection by an efficient bank commission. The one provision we hear from reflective men, and one which we fully endorse, is that the commission be carefully chosen, embracing strong, upright men, who will regard the situation from the public as well as from the bankers' point of view. A mere formal commission, consisting of well-wishers, or complaisant members, would be a danger and a farce. The kind of men needed for the Banking Commission are those of the stamp of Cotton and Mabey and

Mills. Will Parliament provide such a commission? It will, if the people demand it. Have you informed your member what you think?

Culture and School-Gardening.

"Isn't there danger of pushing such things as school-gardening and manual training at the expense of culture?"

"We must guard against allowing these innovations—fads and frills some unsympathetic people call them—to crowd out the three 'R's.' The former are useful,—very useful—and certainly should be taught as far as there is time, but it must not be forgotten that the latter are the essentials."

These quotations are two ways of expressing what is practically the same fear and we propose to examine the ground for it.

The first question naturally provokes another—What is meant by culture? If it is that fine mental flavor which comes from knowledge of and sympathy with the good and true and beautiful, then we say that the answer depends entirely on the manner in which school-gardening and manual training are taught.

Raising big cabbages in clean patches bounded by straight paths may be little, if any, more cultural to the pupils at school than it is to the hired man on the farm who does his daily work as a machine in the manner directed. To both there may be, indeed there must be, some culture in a cleanly-kept, straight path,—perhaps there is in that kind of work as much as or more than in memorizing spelling columns and arithmetic tables, lists of dates and county towns and plugging science and literature to pass examinations.

Culture, as we understand it, refers to the attitude of mind rather than the mass of its knowledge contents. Of a youth it was said his culture was surprising considering that he never went to school. The explanation was that he had been brought up in a cultured family and there imbibed the habits of speech and action and the points of view of life acceptable to good society.

An intelligent, philanthropic and wealthy lady started a large school-garden for New York City children. Later when stating her motives she said that she had not started that garden or "school-farm," as she called it, merely that vegetables and flowers might be raised by the labor of children—hardly that at all—but to show the public how willing children are to work at suitable employment and to teach these children by and through that employment some necessary virtues such as care of public property, economy, honesty, application to duty, self-government, civic pride, dignity of labor, and the love of nature.

It has been abundantly demonstrated that these virtues can be taught by the right use of the school-garden. Any one who denies that such education is highly cultural will have to write a new definition of culture. It is true that in this list knowledge—intellectual culture—was hardly mentioned. But it might have been, for the growth of plants and the activities of the garden offer to the observant and inquiring mind problems as practical and disciplinary as do the formal, humanistic studies.

Some of the opponents of progressive education are very solicitous about the "three R's." It is true that children can be kept dawdling at reading, spelling, writing and ciphering, from six to fourteen years of age. But it is also true that if their minds are brightened and strengthened by proper education upon realities they can learn what is required to be known of these arts—the three R's—in a third of that time. The Germans have a motto—

"When eye and hand you deftly train
Firm grows the will and keen the brain."

Instead of being essentials the three R's are not education in the true sense at all. The committee on industrial education of the U. S. A. Manufacturers' Association in a recent report put this fact in these words: "The three R's, which in themselves are not education but only the tools whereby education may be gained in

other studies that develop judgment, citizenship and efficiency."

The day is coming when reading, writing and arithmetic will be largely based upon and related to the activities of the children in the home and garden, shop and farm; these arts will not therefore be worse but be the better learned for their obvious applications. There will still be just as much time for history and literature—subjects which are taught or should be taught almost wholly for culture. The three R's will yield their present honored place to the three H's—the culture of the head, the heart, the hand.

Book-Learning vs. Real Education.

One of the most important training colleges in the Dominion is that administered by Dr. Sloan at Truro, Nova Scotia. In a recent report, speaking of the student-body he made several statements which have a wider application than to the provinces by the sea. He said in effect that as a body the students show proof of diligence and ambition to improve. In too many cases, however, it is the blind diligence of the memorizer rather than that of the investigator; the ambition is the weak one to excel in amassing information rather than applying it. At regular intervals as high school pupils they have been subjected to examinations of a single kind—that of statement of facts, principles, theories. The written examination cannot very well probe the capacity of the pupils to deal with real things; to manipulate, to dimension, to construct, to observe, to compare, to classify phenomena and materials. The power to train in this way must be left to the honesty and intelligence of the teachers to develop in the pupils. He proceeded to show that the grasp of principles and power to apply them cannot come from conning literary gems, memorizing dates and place-names, ciphering and spelling, committing mathematical theorems and the accident and vocabularies of foreign languages. All this work is deductive, while human progress travels along the lines where induction leads. In the absence of the investigation method in the school there is little hope that it will do much to contribute to the efficiency of the future agriculturist, home-maker or artisan.

Nothing Doing.

Not long ago a man of an enquiring turn of mind and a wholesome hanker for apples went into several leading Toronto fruit stores where he found showy-looking apples selling at 35 cents per dozen and single apples retailing along Yonge Street at 5 cents each though they proved of indifferent quality. Meanwhile tens of thousands of much more highly flavored and toothsome Ontario apples have literally gone to waste since last autumn. Better apples grown at home and yet eating apples carted across the continent and duty paid! In Toronto alone, without doubt thousands of mouths never enjoy the taste of a good apple from one year's end to another. Some legislative detective might, if he hunted hard enough, unearth a clue to a remedy here for the high cost of living.

Some Ontario railways either have too much to do or else they are taking their time about it. A gentleman interested in promoting the growth of a valuable new field pea which he had grown at Liskeard, New Ontario, for distribution in the older portion of the Province received in due course advice of the shipment of twenty bushels in bags on March 31st. Up to about the end of the third week in April they have still failed to materialize, though the consignee had been industriously chasing them up from one official to another. "Try someone else" or a "ring off" was his usual experience. Meanwhile his prospects for supplies of early peas were gradually fading out of sight. "We have built these railways," he observed, "and this is how they serve us and charge stiff rates for it too."

A Bruce County, Ontario, truck farmer who had reduced growing choice cabbage down to a fine art was offered the magnificent sum of \$5 to \$8 per ton, but the freight rate from Warton to Toronto was quoted at \$42 per car. He figured out that he would receive about 1/4 of a cent each per head for his cabbage. Meanwhile the innocent householder of the Queen City—while he read articles on how to reduce the high cost of living in his evening paper was munching mouthfuls of corned beef and cabbage, the latter constituent of which cost him from 10 to 15 cents per head each

at the corner grocery. The middleman and the railway seem to have been getting the best of the cabbage juice. "What worries me" observed the man from the northern peninsula "is not how to grow cabbage but how to get them within reach of the consumer."

Is not the time opportune for some one other than the farmer and vegetable grower to get busy?

The One Great Issue.

Editor "The Farmer's Advocate."

I was delighted to see endorsement of the stand taken by "The Farmer's Advocate" on the Bank Act Revision, and the evil effects of the money influence in the Dominion by one whose name is so well known to Ontario farmers as W. O. Good.

Farmers who read these lines may take the word of one who has been up against the real thing in boycotting, that "The Farmer's Advocate" has undertaken, in the farmers' interest, a task of great magnitude and great risk to itself in "showing up" the evils of the present Money Trust on the public as well as on the individual life of the Dominion. The proprietors of the paper must know full well that in essaying the role of the prosecuting counsel against the Money Interest they are opening up large possibilities of striking more hornets than oil.

"The Farmer's Advocate," like other journals, depends for its existence not on revenue from subscriptions, which is infinitesimal, but on revenue from advertising. The banks, as the editor has explained, have already withdrawn their advertising from "The Farmer's Advocate" because it published some articles by Peter McArthur throwing light on the Canadian Money System. Now that the paper has renewed its activity and turned on more light, every ounce of strength in the Money Trust's bone will certainly be exerted to injure the farmers' newspaper. "Crush 'The Farmer's Advocate'!" will be the motto. The banks cannot withdraw their advertising—they have already done so. But they can, perhaps, by intimidation and mild but influential warnings, compel firms depending on "favors" from the banks, in the shape of loans, to withdraw their advertising. And there is not the slightest doubt in the world that no stone will be left unturned. It has been done in the West with the "Grain Growers' Guide." It will be done in the East with "The Farmer's Advocate", or all my years in the newspaper work count for nothing.

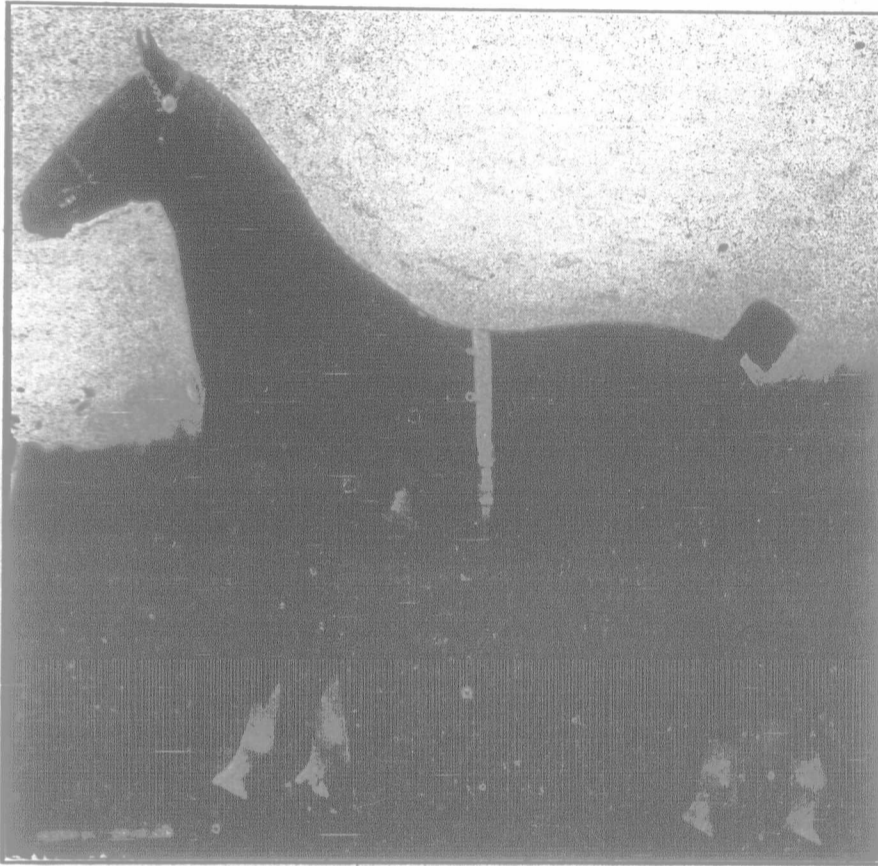
The moral is, then, for every reader of "The Farmer's Advocate" to rally to its support in its fight for better conditions for the people, and to send the editor a few words of approval, if only on a post card. These he should publish. It will be an effective demonstration to the present government, and a lesson to future governments that the farmers are alive to the menace of the Canadian Money Trust.

But, pshaw! What will that amount to after all? Do you think it will "fizz" on the men at Ottawa? It will on some. It will open the eyes of all. But, on the majority who are there at present, ostensibly representing us farmers, yet all the time playing into the hands of the Money Interest, it won't even sizzle. Then what is to be done? Organize, gentlemen, organize! We must drop old-time party politics and get together as farmers opposed to a Giant that has us all enslaved. I say "enslaved" advisedly, for we have, in the recent failures of the Ontario Bank and the Farmers' Bank, ample justification for the conclusion that the present condition of the banking business in the Dominion is improvable, Sir Edmund Walker's special pleading to the contrary notwithstanding. How many lives were utterly blanked by the Farmers' Bank failure? And wherein were the public protected by the Finance Minister, who, although he was warned of the impending danger, complacently sat still and saw the structure come like an avalanche upon the bodies of the people without moving a finger to stop the onrush? To-day parliament is holding a mock Banking Act Revision, which won't revise anything worth talking about so far as the public are concerned. Here you have two excellent illustrations of what the old-time parties will do for the public when the interests of Special Privilege, in the form of the Money Trust, are concerned.

As our friend, Peter McArthur, has repeatedly told us, we must cease being partisans and simply be men fighting for the rights of the people against the gigantic privilege and prosecuting power at present enjoyed by the mere handful of men who constitute the Money Interest, and who constantly stand at attention ready to oppose and quiet down every shadow of movement tending to weaken their power. There is no other real "issue" before the people to-day, and there hasn't been since the first pages of history were penned. All other so-called "issues" have been but red herrings across the trail to lead the thoughts of the people astray.

A few of the clever ones, possessing the supreme qualities of leadership, have banded together in the red-herring industry and built up to its immense disastrous proportions this uncrowned King, the Money Interest; opposing, because it was in their interest to oppose, the education which meant the opening of the eyes of the people to the basic conditions of society, when privilege and extortion must surely totter and fall. The tottering stage has already begun. We see it in England, in France, in Germany, and now in the United States. If nothing happens, if President Wilson is not assassinated, he is going to be a slightly more conservative Lloyd-George.

We hear nothing more frequently from the lips of Canadian farmers than this: "We farmers are a lot of blinkety-blank fools. We don't stand together. If we only would we could run the whole country as we pleased, make our own prices, and if the city Johnnies refused to pay them, we could starve 'em into submission in a fortnight." In those familiar words we have the expression of Power. But it is the power of the caged lion, who, in his innocent ignorance, doesn't know enough to use his power in his own behalf.



Hopwood King.

Junior champion of the Hackney Show, London, England.

It gives one gooseflesh, when election time comes round, to note the absence of the above talk, and to hear above the din of battle: "I'm a Liberal (or I'm a Conservative) you bet, and always will be! What good did either party ever do for the country?" And away the people go across the red herrings to the polling booth to vote against themselves and in favor of just one thing—the Money Interest. That's just what it amounts to. It's a crude way of putting it, but such, in a nutshell, are the facts. Surely "The Farmer's Advocate" and its brilliant contributor, Mr. McArthur, have said enough already to get farmers seriously thinking as to what is for and what is against their interest. But I expect more is to follow, for we farmers can thank our lucky stars that we have, in "The Farmer's Advocate", a paper which is now strong enough to withstand and defy the tentacles of the Money Trust. It simply remains for us to back it up—back it up in every way possible.

As a farmer and an old newspaper man, who hasn't the acquaintance of any of "The Farmer's Advocate" people, and can claim disinterestedness, except for the cause, let me tell you how to back it up.

First write your member at Ottawa, and tell him in plain words that, as a farmer, you wholeheartedly endorse the stand taken by "The Farmer's Advocate" on the Bank Act Revision.

Then write your appreciation to the editor of "The Farmer's Advocate", even if only a few words. Don't think your little say won't count for anything—that is the farmer's inherent weakness; he thinks too much that way. It will count! It will help a whole lot for "The Farmer's Advocate" and for the fellows at Ottawa, who will now be watching for "The Farmer's Advocate" eagerly every week, to see that you, John Smith, and twenty thousand other Canadians with votes are saying the same

thing, which they know means that hundreds more who don't write are thinking the same way.

Next, don't forget, when you reply to an advertisement, to say you saw it in "The Farmer's Advocate." Modern business houses, which do advertising, have a system for keeping track of every reply that mentions the paper in which the advertisement was seen. The more replies they get of this kind the more they advertise in that paper, because they know it is paying them. Therefore, by mentioning "The Farmer's Advocate" you are bringing it home to the firm you write to that they can't afford to "cut out" "The Farmer's Advocate" whether the Money Interest says so or not. This is the backing "The Farmer's Advocate" needs to strengthen it in fighting the Money Interest.

But whatever you do, for goodness sake do something. We farmers have sat still and grumbled without doing anything to help ourselves long enough. We now have worthy and able champions in "The Farmer's Advocate", and in Peter McArthur. Let us with a firm purpose back them up. The first thing to do is to show our representatives at Ottawa that the farmers are out for business, and that the Money Interest

has got to be disciplined as step No. 1 in the movement towards fairer play and better times for the farmers, and the masses of the people.

Step No. 2 is to organize. Step No. 3 is to either develop from within or enlist from without the quality of great leadership, which is the quality farmers and other independent parties have always lacked, and the quality the Money Interest has always shone in. You can't have a great and powerful party without great leadership. But once well organized, a worthy leader will come forth. He is, no doubt, already among us.

Some other day I may make time to tell you a few more things about the Money Interest and its ways, how it, more than any other agency, is responsible for the high cost of living, and how we farmers can, if we get about it, show them a few things. In the meantime we must get on with the seeding, for the season is late and the work is piling up. But take an evening to write your member and the editor.

Northumberland Co., Ont. WM. L. MARTIN.

Nature's Diary.

By A. B. Klugh, M. A.

From the ponds comes a high trilling chorus which is usually attributed to "frogs." But it is not the voice of any frog but of our warty friend the toad. We usually associate toads with dry places, but in the spring we find them in the water. Here they lay their eggs in long curling masses tangled along the water plants. They are arranged in a single row in transparent jelly-like ropes. The gelatinous substance about the eggs is hardly visible when the eggs are first laid, but it swells on contact with the water. The eggs are very small, only about one-fifteenth of an inch in diameter, and a single female lays between four and twelve thousand.

The time the eggs take to hatch depends upon the temperature, if it is very high they may hatch in four or five days, if the temperature is lower they take longer.

The little tadpole, on hatching, has a rather long, thin tail and a rounded head at the front end of which there are two small black suckers. These suckers secrete a sticky substance, by means of which the tadpole can attach itself to water-plants. Soon the gills become visible as little projections from the neck. In a few days the mouth appears and the tadpoles feed on microscopic plants. The external gills now disappear,

being replaced by internal gills, and the tadpole breathes by taking water in at the mouth and nostrils, passing it over the gills and out at an opening at the left side. When the tadpole is about six weeks old the hind legs begin to appear as little round knobs. They develop rapidly, and are soon used to aid the tail in swimming. In a couple of weeks more, the front legs suddenly appear. They have in fact been growing for some time, but have been concealed from view by the membrane covering the gills. The small, rounded mouth is now replaced by the wide mouth of the adult toad. The tail is now gradually absorbed and the tadpole emerges from the water as a toad. If the weather is dry at this time, the little toads hide in cool, moist places during the daytime, but if it is damp weather, we see them hopping about in thousands near the ponds and marshes. This is the origin of the belief in the "shower of frogs" of which we hear. People have said "There were no frogs here yesterday, to-day we had a heavy shower and there were the frogs! They must have rained down." It is not a very long step from "must have" to "did" and there is the belief established. When they leave the water they are perfectly smooth and less than half-an-inch in length. In about six weeks warts are beginning to appear behind the eyes, and on the under surface of hands and feet. At this time in their existence their enemies are extremely numerous, and snakes, crows, hawks and owls, capture them in large numbers. Hence we see the reason for the large number of eggs which are laid, for, in spite of enemies, a good number of young toads are left to burrow down into the ground, hibernate for the winter and emerge in the spring. During the summers of the next two years these toads make their homes in field and garden, and not until they are three years old do they resort to the water to breed.

While growing rapidly the toads shed their skin every few weeks and the older toads moult four times a year. The old, outer skin splits along certain definite lines and is gradually drawn into the mouth and swallowed.

Toads, if they escape accidents, have a long spell of life, probably about forty years, as one is known to have lived thirty-six years and to have been killed accidentally. But we often hear of toads which are popularly believed to be several hundred or even several thousand years old. In these instances they have been found in the middle of stones, and the finders declare that there was no entrance hole and that the toad must have lived in the stone since the stone was formed. As a matter of fact, in these cases, there is a small hole through which the young toad crawled when very small. It found here congenial quarters and remained there feeding on the insects which frequent such places until it grew too big to get out, and here it continued to live until found. The English naturalist, Buckland, tested the ability of the toad to live for long periods sealed up. He confined toads in limestone and sandstone boxes and buried them three feet deep. At the end of two years all the toads were dead. So much for the antedeluvian toads.

Another popular fallacy in regard to toads is that touching them will produce warts; of course this is simple nonsense. The toad has however a secretion which it pours out of its skin, and particularly from the two swellings behind the eyes, when it is in great pain. This fluid has a most disagreeable effect upon the mucous membrane of the mouth and acts as a protection to the otherwise defenceless toad. Thus we find it is very rare for any but a young dog to molest a toad. To a human being this secretion is entirely harmless unless it gets into the mouth, nose or eyes.

The toad feeds in the evenings and as long into the summer's night as its large eyes enable it to see. It feeds on cut-worms, tussock-moths, caterpillars, tent caterpillars, May beetles and other injurious insects. Eighty-eight per cent of its food consists of pests of the field and garden, and it has been estimated that a toad eats 9,936 injurious insects in three months, and, that out of this number, 1,988 are cut-worms, so that if the injury done by a cut-worm be put as low as one cent then the toad is worth \$18.88 per year to the farmer.

Favors Bank Inspection.

Editor "The Farmer's Advocate":

We have read with great interest your articles regarding Bank inspection. We agree with the stand you take, and feel sure that you have the sympathy of the agricultural community. Hoping that you may succeed in arousing the country to the need of a thorough inspection of all banks. Bruce Co., Ont. JOHN McINTYRE.

HORSES.

Avoid the stallion with the small effeminate head. He is not likely to be the sire of many of the largest geldings.

Convenience is a factor in selecting the sire to which to breed the mares, but it should never carry so much weight that a good mare is bred to a horse of inferior type, quality and breeding simply because he is "handy." Go a few miles further if necessary, and get the best horse.

A report of agricultural conditions, issued by the Ontario Department of Agriculture in April, contains a communication from a correspondent in a central county which reads: "So many of our best brood mares are being bought for the West, that it will likely tell unfavorably against us in a few years." Nothing is much surer than the loss of the best breeders will be felt by the districts depleted of them. The brood mare is a good investment, and properly managed will pay good interest on the investment.

On a cold, raw day in April a horse was observed with his back humped and his body quivering standing under a deciduous tree, which, while making heroic efforts to bud into new life, was still bare of leaves, and offered poor protection. The tender grass was short and watery, and, while a little of it might have acted as a tonic to the animal, he had to eat almost continuously to subsist, and the ground was too cold and wet to be even a suitable bed. He was an old horse. His younger, hardier and better-cared-for mates were busy tilling the soil and sowing the seed for the 1913 crop—work which, in his prime, he did faithfully day by day with a vigor and energy which young horse life shows. He had worked for his master hard, helped him prepare the land for and sow and reap a score or more crops, but now his usefulness, except for light and slow work, is over. He cannot take his place on the disc, the cultivator, drill or plow. His day is done. He would be better off if life would also desert him, but it does not. How many horses are there in the country in just such a condition? Surely the old horse deserves a warm stable and good feed until he dies, and it would be far better to remove him by some humane means than to force him to live in misery. Give the old horse as good care as the younger animals, or if this cannot be done and his usefulness is past, at least give him a decent burial.

How to Care for the Foal.

Between this date and the end of June a large number of colts will have been foaled. Volumes have been written on the care of young colts, but new conditions—conditions which have not been previously encountered by the average farmer-obstetrician—are ever cropping up and must be met almost on the spur of the moment, for parturition in the case of the mare means promptness—not undue haste, but quick and good judgment. The subject will never have too much light thrown upon it, and new points are brought out by nearly all good horsemen who write upon the subject. Dr. J. G. Rutherford in his last report as Veterinary Director General and Livestock Commissioner, devoted considerable space to a discussion of this most important question and his good advice we pass on to our readers.

"It is well-known among breeders that it is very difficult to catch a mare in the act of parturition, and that if the foetus is in its proper position, and everything else favorable birth occurs very gently and easily. Should you, however, happen to be on hand when your mare foals and the youngster is coming right, but not progressing as fast as he might, it will do no harm to rupture the membranes and help a little, pulling only when the mare presses and always in a downward direction or towards the hind feet of the dam. It would appear on the first impression that the breath is a necessary and indispensable adjunct to life; but in the unborn foal such of course is not the case—the first inspiration is taken upon the advent to the open air of the little animal, and it is of importance that nothing shall interfere with the supply of oxygen to the lungs as they begin to assume their vital functions. Many foals are lost through the nasal passages being occluded by the foetal membranes or otherwise, the first feeble attempts of respiration proving of no avail the blood fails to become oxygenated, the next effort is weaker still, the heart's action at the best is uncertain, owing to the sudden change in the course of the circulation, soon ceases entirely, and independent existence ends before fairly begun.

As soon as the foal has emerged, free the

head from the envelopes, see that the air passages are clean of mucous or other fluid, and lay the animal on his right side. If the umbilical cord or navel string is not ruptured at birth it may be tied with a stout cord a couple of inches from the navel and cut below the ligature, and to prevent blood-poisoning, or the absorption of septic germs, it may be dressed with a strong solution of carbolic acid, and care being taken not to injure the surrounding tissues, or it may be temporarily smeared with carbolic oil. Should animation appear to be suspended while the heart still beats an attempt may be made to resuscitate the little creature by pouring cold water in small quantities on the head, slapping the body with a cold wet cloth, holding ammonia to the nostrils, or even by what is generally more convenient, puffing a little tobacco smoke into them. Should these measures fail, a little blood may be taken from the navel, but when syncope is present there is no great hope of bringing about recovery.

"If there is any malposition of the foetus, not of a serious nature, you may, if you are at hand, be able to rectify it, using judgment and common sense, bearing in mind that a mare will not stand much rough handling, and, above all, keeping cool and endeavoring to avoid excitement, which at such times is very natural and very dangerous. Should you find yourself unable to remedy the evil, lose no time but send at once for professional assistance if such can be procured, and meanwhile, allow no interference save by some intelligent and thoroughly experienced stockman who understands the vital importance of absolute cleanliness and who will know, after making examination, whether he can do any good or not, and will guide himself accordingly. Great harm may result from well-meant but mischievous interference with these cases, and the veterinary surgeon often finds on his arrival a well-nigh hopeless subject which, if let alone, he might have handled with one tithe of the trouble and with far greater certainty of saving life.

"We will suppose that the foal is dropped safely and lying breathing and sneezing behind his dam, who has just had the gruel with which she ought always be rewarded after the termination of her labor. The mare will generally, on rising, turn around and begin fondly to nose and lick her progeny, a process by the way, of great importance and value to the latter; but young and nervous mares, especially if delivery has been protracted and painful, will often act in an entirely different manner, snorting, pawing and evincing fear and irritation at sight of their offspring. Under such circumstances it is well to protect the foal for a time by a small hurdle or gate placed across one corner of the roomy, airy, dry and warm loose-box, in which, it is presumed, he has first seen the light, to rub him smartly and gently with soft rough towels and to endeavor to induce the mare to begin the licking process by sprinkling the youngster with a little dry bran or meal and salt. Such measures are not, however, often necessary, kind, considerate treatment and judicious letting alone generally proving effectual in bringing about a reconciliation in the family.

"Plenty of dry, clean bedding should be furnished, the shorter the better, for the foal will soon begin to tumble about in repeated attempts to get his long and shaky legs under him. If he does not succeed after a reasonable time in getting on his pins, a little assistance may be given, and his dam proving friendly, he will soon, if let alone, find his way to the maternal font; but if he is unable to stand, or the mare is touchy and restive, she ought to be held while he is guided to the teat and allowed to obtain nourishment. If the foal is weak and quite incapable of supporting himself, the mare may be milked and the fluid thus obtained given to him slowly and very carefully, it being a matter of great importance that the little chap obtain if possible some of the very first milk secreted by the mare. When once friendly and confidential relations have been established between mare and foal, they should be left alone for some time, care, however, being taken to remove the placental membranes from the stall as soon as they are dropped.

"If the mare has gone much over her time and especially if she has lost much milk, it will be necessary to watch the foal closely for symptoms of constipation, which will be manifested in the first place by continued elevation of the tail accompanied by straining without the passage of faeces. This will be succeeded by dullness and then by evidence of pain, the abdomen will become bloated, the little animal will show great uneasiness and begin to perspire and the pulse and respiration will be accelerated. In the early stages a few ounces of soapy warm water or a little raw linseed oil introduced by a syringe into the rectum will generally afford relief, but should acute pain and distress make their appearance, the administration of two or three ounces of castor oil with twenty or thirty drops of laudanum and half a teaspoonful of turpentine well shaken up, will be in order; a small enema should also be given from time to time, and the abdomen covered with a woolen cloth wrung out

in hot water. These measures if adopted in time will usually be sufficient and it must not be forgotten that the administration of medicine to newly-born foals is fraught with great danger so that the mechanical remedies, viz., the injection and stipes to the abdomen are much preferable to large or repeated doses of physic.

"Diarrhoea may set in, either spontaneously from septic causes, or as a result of the free use of medicinal agents, the mortality among young foals from this affection being very great. The treatment will depend on the origin of the trouble—if from medicine little can be done save in keeping the strength supported by stimulants and concentrated nourishment, and for this purpose an egg beaten up with a teaspoonful of brandy and a few ounces of milk from the mare will be found very effective—this mixture may be repeated from time to time as the condition of the patient may demand. Should the diarrhoea on the other hand, appear to originate spontaneously, it is possibly due to irritation of the bowels, and in such cases no treatment is more successful than the exhibition of one or two tablespoonfuls, or castor oil with a little laudanum to allay any tendency towards griping. No relief being afforded by these measures it is advisable to try an antacid, and for this purpose a tablespoonful of lime water may be given in two or three ounces of milk from the mare every three or four hours, while the strength of the patient is to be sustained by stimulants and nourishment as recommended above.

"In severe and protracted cases of septic origin formalin has been successfully used. This agent must, however, be used with caution, the best mode of administration being as follows: Dissolve one fluid ounce of commercial formalin in ten ounces of water and give of this solution a teaspoonful or a half, according to the size of the colt, in one pint of milk, twice or at most three times a day.

"Small injections of flour gruel or very thin starch containing a little laudanum are also useful.

"The greatest attention should be paid to the sanitary conditions; the stable as well as the patient and the dam should be kept scrupulously clean while the diet of the latter should be closely watched and changed gradually from time to time. The fact that animals on pasture are seldom affected and that the malady once established in a stable, appears to recur regularly, are strong arguments in favor of the adoption of all possible hygienic precautions.

"Another and perhaps the most fatal disease to which young colts are liable is suppurative inflammation of the navel and joints often erroneously termed inflammatory rheumatism. The first symptom of this malady is a difficulty of motion, accompanied by a swelling in the region of the navel or in one or more of the joints, the swelling rapidly increasing in size and terminating in large abscesses containing enormous quantities of unhealthy pus. The progress of the disease is characterized by high fever, rapid emaciation and great weakness followed by stupor, foetid diarrhoea, general marasmus and death. Curative treatment does not appear to be of much avail; the opening of the navel if inflamed should be frequently dressed with carbolic lotion, or other suitable antiseptic, a mild anodyne liniment applied to the swellings, the bowels gently moved by a small dose of oil and the strength sustained by concentrated nourishment and the judicious use of stimulants, while the abscesses when ripe are to be freely opened and the cavities injected with antiseptic solution. The disease is septic and an ounce of prevention is worth a pound of cure. It is almost invariably due to the absorption of germs (streptococci) by the exposed end of the umbilical cord or navel thus affording good reason for the treatment of that part recommended above. With a view to the prevention of this disease also, the most scrupulous cleanliness should be observed in the housing of young foals and their dams; the all too common custom of letting them lie on a couple feet of heated manure thinly covered with straw, or on a cold, wet earthen floor, cannot be too strongly condemned. The floor and bedding should always be dry and clean, while an occasional sprinkling of lime will not cost much and will add greatly to the healthfulness of the inmates.

"Where the existence of infection is suspected the floors and stalls should be thoroughly scrubbed with boiling water and subsequently treated with a reliable disinfectant such as crude carbolic, Creolin, or a solution of corrosive sublimate of a strength of one part to 1,000 parts of water.

"Occasionally the urine continues to dribble from the navel opening owing to the duct from the bladder having failed to close after birth. In such cases the parts should be thoroughly cleansed and rendered aseptic, after which a subcutaneous ligature is to be applied, but this, like all other operations requiring surgical skill, and in fact all really serious or acute conditions should, when possible, be relegated to the qualified veterinarian.

"There are of course numerous other ailments and accidents to which young foals are liable, but those mentioned are responsible for the needless loss of many valuable animals, and should, therefore, be carefully guarded against and promptly, but cautiously dealt with on the first indication of trouble."

Feeding the Work Horse.

Editor "The Farmer's Advocate.":

The problem of caring for and feeding the work horse is one which confronts each farmer and should receive his serious consideration in order that the useful life of the horse is lengthened. By proper feeding and necessary care the efficiency of many working horses would be greatly increased, and while the horse market is holding a high standard in prices it is to the interest and benefit of every horseman to maintain his horses in a working condition for the longest possible time. This will involve the care that promotes a healthy, thriving state of body in conjunction with feed that will produce the economical production of work at any or all seasons of the year without taxing the animal.

There are horses that are kept at a yearly loss to the owner by not being used at a moderate speed while working, or by working without regard for the condition of spirit or flesh that the animal is in. In this way horses that are worked hard during the summer then stalled for winter and receive little or no attention, unless they are cleaned before being taken out to do an occasional day's work, reach spring in anything but a fit condition to commence labor and naturally lose flesh and spirit in a short time. An associate of this condition is the feed, which often is irregular in quality and quantity or always the same whether the horse is idle or working. Such a system will lessen the amount of work that a horse will do with ease at any time and will eventually shorten his days.

In the spring when the horse is to begin the heaviest work he should be gradually tempered to it by the use of exercise or easy labor. This strengthens the muscles without any exhausting effects and he is then capable of doing the most work with the least expense of energy. As the work develops it can be made easier by giving the horses a thorough brushing in the evening as soon as they dry. If this is neglected the dry sweat lies close to the skin and the hair becomes matted making an uncomfortable coat for the animal. On hot days the sweat drying on the inner surface of the collar and on the shoulders will cause irritation and may end in sore shoulders, but if the shoulders are washed in the evening with a solution of salt and water and dried with a cloth the skin is kept in a clean healthy condition and trouble is avoided. The face of the collar should be kept clean and smooth.

The feeds used for working horses will depend on those available and the economy of a combination that will maintain the body weight, with the health and ability to endure hard work. Of the rough bulky feeds timothy hay and clover hay are the most common and most reliable. With common consent timothy hay is the most popular on the opinion that clover hay has a marked laxative effect and hence is not beneficial to a working animal. This may be taken as unwarranted prejudice, the laxative effect coming more from the large amount of this palatable feed that a horse will take if he is allowed it without restrictions. Then the relaxing of the bowels is more marked when a horse is started to work with a full stomach than if he is only allowed a proper amount. Clover hay is also credited with causing heaves which is largely due to the effects of gorging or to dust collected on the hay from improper curing. Greater care must be taken in curing clover hay than timothy hay for the reason that it is more liable to absorb dust or develop a musty flavor which gives a reason for it causing heaves oftener than timothy. From this we may conclude that if the necessary precautions were taken to feed the horses with a regular amount of fine quality hay per day, that a great many of the common prejudices connected with feeding would be removed. The quantity to feed will depend on the size of the horse, the average coming between 14 and 16 lbs. per day.

The system of feeding adopted also makes a difference in the results obtained. Since the horse's stomach is small compared with that of the cow, it is reasonable to expect the best results when time is given for the digestion of hay, or account of the abundance of bulky, crude fibre it contains. A system that has proven its benefits is one where fully half of the hay, or about 8 lbs. for the average horse, is given in the evening. This allows the full night for its digestion. Then the remaining half is divided between the morning and noon meals, when the horse has the least time to rest. Many of the digestive troubles are caused by over-working horses, when they

have a very full stomach, but by adopting such a system the heaviest feed is given when the horse is resting.

The grain fed should be of a reliable quality and for a horse of about 1,300 lbs., the quantity will average about 16 lbs. per day. The reliable mixture of oats and bran in the combination of 3 lbs. bran to 13 lbs. of oats per day, will suffice for ordinary needs. Three equal feeds, fed morning, noon and night is a reliable system, while the horses are working. On Saturday evening a larger proportion of bran should be fed to keep the bowels in working order, or if an occasional run of grass is given the effect is the same. When the horse is idle the grain fed should be reduced by one-half for the first three or four days, when it may gradually assume regular proportions if necessary. The last is a preventive of azoturia, which adds to its value.

Much discussion arises over the questions of grinding grain for horses and mixing grain and chopped hay. The question of grinding grain depends upon the work or age of the horse. Where horses are working hard and the highest degree of efficiency in work is necessary, grinding the grain makes it easier eaten, it saves time. For old horses, or where the teeth are bad, grinding the grain gives it an added value. Outside of this, it is scarcely advisable.

Mixing the grain has a place, where time is precious, where the horse needs the aid to digestion, or where he is in the habit of eating his feed ravenously. For the average feeder, such questions are beyond consideration, except in isolated cases.

Dept. of Agriculture, P.E.I. W. J. REID.

LIVE STOCK.

A glance at the cattle at this season of the year shows very clearly the difference between the good and poor feeder.

Cattle turned to grass before the land becomes fairly solid, after the spring rains which thaw the frost, do more damage by "punching" the sod than by grazing.

If some means could be devised to get the stock on grass gradually they would not be so affected by scouring. A partial ration of dry feed and the remainder of grass is about as near to it as the average feeder can get, but there is no doubt but that where all the stock are turned to pasture at once and where no plans are made to dry feed after grass comes, the stock does not do as well as it might on the very succulent and exceedingly laxative (often purging) grass.

Our English Correspondence.

MILKING SHORTHORNS

Milking Shorthorns are still selling like hot chestnuts on a cold day, in England. On April 2nd, at Cowley Manor, Cheltenham, the home of James Horlick, and 900 feet above the sea level, 59 head sold at an average of \$205 each, or an aggregate of \$12,300. One dairy cow ten years of age went for \$200 and she was not considered a flier by any means. The change in the position of the milking Shorthorn in England is one of the remarkable features of modern stock breeding. Ten years ago the pure-bred dairy Shorthorn held a lowly place among the strains of the premier breed; now she is on equality in popularity and value with her relative of the strictly beef type. The results of a series of sales in the autumn of last year created no little surprise, and gave rise to an impression that the supporters of the milking Shorthorn had allowed their enthusiasm to outrun their judgment.

It may seem a reckless proceeding to give \$1,300 for a bull calf, and from \$500 to \$1,000 for a cow or heifer, which at most can produce milk to the value of only \$200 to \$250 in the year, but the buyers who pay these prices do not look for their return solely in dairy produce; they estimate their bargain on the influences these well-bred animals of proved utility are likely to have upon the future of their herds, and that is quite the correct and business-like way of doing things.

They are introduced to form a foundation from which will be raised a new and improved class of milking stock, and the history of many of the leading herds of all breeds testifies to the soundness of the system, and indeed shows some such proceeding to be a necessary forerunner of success of the highest grade.

The Leeds Agricultural College have had a test upon "The Cost of Food in the Production of Milk." At each visit the morning's and evening's milk of each cow was weighed, and a separate sample of each taken for the determination of the percentage of milk fat. The food, both home grown and purchased, supplied to the cows was

also weighed, while the percentage of fat in the mixed milk of the herd at each milking was also determined. In all, 217 cows came into the tests, but complete records of twelve months were obtained only in the case of 95 cows. The average yield for 95 cows was 687 gallons, 44 cows giving this quantity or more. There was a range of variation in the total cost of feeding on the different farms, roughly from \$45 per cow to \$125.

GOVERNMENT AID TO HORSE-BREEDING.

The English board of Agriculture give \$200,000 a year towards the encouragement of light-horse breeding. Their chief method of procedure in spending that money is to provide an increased number of high-class Thoroughbred stallions for the service of half-bred mares at a low fee, and of about 1,000 selected mares, free of charge. Then, in order to encourage farmers and others to keep brood mares of the correct substance for mating with Thoroughbred stallions, the Board have also arranged, through the agency of country committees, for the purchase of mares of this type for leasing out to suitable custodians at a small annual rent.

To encourage farmers to breed light horses the Board in 1911-12 bought 437 mares at a cost of \$89,323, or an average of \$192 per mare. Quite rightly, representations were made to the Board that in many parts of the country there was a serious shortage of mares of the hunter type, and that farmers and others were giving up breeding owing to the increased difficulties of getting good brood mares of that class, and to the lack of suitable Thoroughbred stallions available for mating them with at a reasonable fee. The Board in its wisdom realized that it would be advisable to encourage farmers to breed light horses of that type for which there is little or no demand, and in view of the fact that there is always a call for the heavy-weight hunter type, they decided to provide funds for the purchase of mares likely to throw stock of that class. With that object in view, grants amounting to \$100,000 have been made to thirty-six county committees for the buying of mares, which are to be leased at a rental of \$10 to suitable custodians for brood purposes. One of the conditions of the grant is that the average price of the mare is not to exceed \$250 and though representations have been received by the Board that that amount is not sufficient, it is satisfactory to report that many excellent mares have been purchased below the figures named.

The Board of Agriculture are encouraging breeders to use only sound stallions and with a view of placing on the roads as many stallions as possible free from hereditary disease, and suitable for breeding purposes, the Board undertake the veterinary examination free of charge of all stallions the service fee of which does not exceed \$50, and it issues certificates of soundness to all animals which pass inspection. Owners of stallions are beginning to recognize the advantage of having their horses registered in such a manner as this. In the year under review 715 stallions were accepted for registration, and of that total 220 had been on the list in the previous year and 90 refused, and of the latter 20 had been registered in 1911. Shires, 247; Clydesdales, 57; Suffolks, 36; Cleveland Bays and Yorkshire Coach horses, 4 each; Hackneys, 60; Thoroughbreds, 172; Ponies, 116; and Hunters, 19; are among those registered.

CLYDESDALE DOINGS.

Mention of Clydesdales reminds me that Scotland has been busy with its parades of stallions. At Edinburgh markets, Gorgie, a prominent exhibit was T. Purdie Somerville's very fine young horse, Scotland's Favorite, hired by the East Lothian Horse-breeding Society. He is regarded as one of the best horses that have been shown in the Edinburgh circuit for some years.

A. & W. Montgomery had two horses on the ground, Pride of Blacon, the hero of so many fights in his young days, and Baron Newton, a young horse bred at Harviestoun. The latter, with Scotland's Favorite, shared to some extent the honors of the show. He is by Baron's Pride out of the Hiawatha mare Cleopatra, and has the right kind of bones with beautifully placed limbs. The other heavy horses shown included Andrew Brook's Gamecock, formerly owned by the Seabam Harbor Stud Company. Mr. Watt showed Walter's Memento, whose usual average of foals is over eighty per cent. A. & W. Montgomery have shipped seven stallions to Russia. Six of them are three years old. Messrs Montgomery have also sold two two-year-old fillies to go to Sweden.

Berkshire hogs are selling well in the Old Land. At Reading Corporation Farm sale 85 head averages \$50 each, a lot going to Russia.

BERKSHIRES.

The Berkshire breed has had a class at our Royal Show since 1862 and since that time it has proved its merit as an economical bacon and pork producer.

As a test of this we naturally turn to the re-

sults of the Carcass Competition at the Smithfield Show, London, which is open to all breeds; we find the striking result that, during the past eight years the Berkshires have gained 67 awards against 28 by all other breeds combined.

During the period 1901-1910, the pedigree pigs imported into the Argentine were: Large White 440, Various 409, Berkshire 1,795. Thus the importations of Berkshires exceeded by four times the number of any other pure breed and twice the number of all breeds put together—conclusive evidence of the high opinion of the Berkshire pigs held by the largest breeders of live stock in the world.

OTHER STOCK NOTES.

John Jones & Sons, Colwyn Bay, have shipped to Mr. Cox, an Ontario buyer, five Hackney and three Welsh ponies. The former includes the great pony stallion, Little Briton, sold at a tempting figure.

Among the important events of this summer will be the dispersal of the old-established and celebrated Babraham flock of Southdown sheep, including all the noted and prize-winning animals. Mr. Adeane founded this flock nearly thirty years ago, and the majority of the pedigrees go back to sires bred by Mr. Henry and Mr. Jonas Webb. The remarkable success of this flock in the showyards and its uniformity of type is largely due to the use of this blood. Babraham Southdowns are largely in demand, not only for the home flocks, but also abroad, but last year a Colonial breeder purchased two rams for three hundred guineas.

The entire flock of ewes and rams will be sold without reserve; the lambs of 1913 will not be included in the sale. The date chosen is the 17th of July, the week following the dispersal of the late Mr. Henry Duddings famous Lincolns.

Thirty Shetland ponies, a consignment of 29 mares and fillies and one stallion, have been sent by John Anderson & Sons, Hillswick, Shetland, to buyers in Western Canada.

About 100 American and Canadian farmers are due in England on July 11th, and will stop until the 18th, to enquire into our methods of agricultural co-operation. They are to be right royally entertained by our agricultural organization societies.

London, Eng.

G. T. BURROWS.

Our Scottish Letter.

The weather is by far the most pressing topic at this time. We have had a wretched time during the past week or ten days. March ended very well. It came in like a lion and went out like a lamb, and the first ten days of April were very fine, but on the eleventh came a blizzard which wrought untold havoc among the lambs. These are now very numerous, and their numbers are daily increasing. But they are getting a very cold reception in this weary world, and numbers of them are succumbing. At the same time one is greatly surprised at the amount of cold which lambs will endure. The Blackface breed in particular is wondrously hardy, and the survival of such a large number of these youngsters is a standing answer to the croaking criticisms regarding deterioration of the breed with which we have been made familiar.

An important topic in connection with hill farming is the condition of the herbage on the hills. Many maintain that these hills are not making such good lambs and hogs as were made by them half a century ago. It is, however, to be borne in mind that the hills are much more heavily stocked now than they were then, and the constant drain upon the phosphates in the herbage has undoubtedly lowered its feeding value. No one has, as yet, been able to find an economic way of top-dressing hill pasture with

phosphates, potash and nitrogen. The lightest manure is, of course, basic slag, and where the hills are not too high it has been applied with conspicuous success to mossy land. It also gives good results on clay soils, but when applied to light, gravelly soils its effect is less apparent, unless the phosphates be supplemented by liberal dressings of potash and nitrogen. Until some means is devised of reinvigorating the herbage, it is premature to maintain that our hill pastures are not making such good lambs as they did half a century ago.

The revision of the United States tariff is naturally of considerable moment to many departments of agriculture here. It affects wool in a marked degree, and brokers here are rather nonplused by the sudden effects of the revision. It is good news, yet they did not expect it, and it has caught them almost wholly unprepared. Potato growers are also rather interested. Were there only a moderate tariff on potatoes, our growers could often furnish the United States with a substantial addition to their stock of sound, wholesome food. While, no doubt, the abolition of the duty on potatoes would benefit our growers it would equally benefit the people of the United States, and be a step in the direction of annihilating the principle of cutting off one's nose to spite his face. Here we get the benefit of the American high tariffs in another sense. The surplus machinery products come in here duty free and our farmers get the benefit, but at the expense of his American brother. That gentleman has to buy all his implements and machinery in a highly-protected market. He can get no reduction in prices as there is no foreign competition. Wherever there is a high tariff the farmer pays the penalty, and the manufacturer waxes fat and kicks. Whether the manufacturers of this country ever will get what is called Tariff Reform, it is abundantly certain that the farmer stands to lose every time by the imposition of duties on machinery and implements.

The horse shows in London this year finished as per usual. The finest fixture was that of the Shire horses in the last week of February. Naturally breeders were greatly elated by the successful sale held in the previous week at Lord Rothschild's farms, at Tring, when a two-year-old colt, which after became the London champion, was sold for 4,100 guineas, an almost unprecedented figure for a draft stallion. It will, however, be long before any attempt is made to equal the Clydesdale record of £9,500 for Baron of Buchlyvie, 11263. At the Hackney Horse Show, held in the first week of March, there was a notable display, and many very fine horses. But the outstanding feature of the event was the success achieved by three sons of the great old champion mare Ophelia. One of the three, Hopwood Viceroy, won the supreme championship of the show. He is a lovely horse and a great mover. The other two sons of Ophelia were Polonius, which won the group prize for five horses or mares in hand, and Mathias the sire of the best group of harness horses in the show. The champion driving horse of the show, King of the Air, was got by Mathias. He is a beautiful mover, and one of the "airiest" harness horses seen for many a day. Referring to horses, one is rather surprised to learn that the International Horse Show at Olympia, which, for several years had paid a dividend of 20 per cent., last year (1912) only paid 5 per cent. This is not a bad dividend, but the sudden fall from 20 to 5 per cent. is rather indicative of the temporary character of the public taste. The high-water mark seems to have been reached in the Coronation year. Last summer the directors attempted to compete with Ascot. They supposed that the swells would patronize Ascot during the day and Olympia at night, but the swells thought otherwise, hence



Some Choice Sheep.

Making meat and wool, killing weeds, and enriching the soil. Thousands of farms would be greatly benefited by the addition of a flock of sheep.

the diminishing revenues of the International shareholders.

Farmers here are having quite a good time. Prices are unusually high, and experts do not anticipate much fall. Beef and mutton are both selling very dear, and store cattle are, of course, high-priced in sympathy. Indeed, both breeders and feeders are doing well. Ireland is, of course, sharing in this prosperity and making up, in some measure, for the big losses sustained last year through the outbreak of foot-and-mouth disease. The trade between the two countries has been resumed, but not on the same footing as before the outbreak. All the stock landed here has to be detained for twenty-four hours, and inspected for contagious disease. Regarding this detention Irish breeders are making loud complaint, but the British Minister and his Department are resolute, and no one can blame them who desires to be fair. The experience of the past year have taught us that, however anxious, the Irish Department may be to administer the contagious diseases (animals) Acts, they do not get, from the rank and file of breeders and dealers, the cordial and hearty co-operation which is invariably extended to administrators of the law in Great Britain. As one gentleman, deeply interested in the Irish store-cattle trade, put it to us only recently, the man who works hard to uphold the law in Ireland is viewed with suspicion, while the man who evades the law or sets it at defiance is regarded as a hero or a martyr. Under such conditions the British Department has no opinion but to take every available means of protecting the herds and flocks of Great Britain from disease, and, therefore, the twenty-four hours quarantine of Irish cattle on landing here is likely to be permanent. The effective means of removing it is for the Irish breeders and dealers to play the game, and back up their Department to obtain, for the country, a clean bill of health for all farm animals.

The great improvement which has taken place in Irish Shorthorns was strikingly illustrated at the Dublin Spring Show a few weeks ago. The exhibits were nearly all from Ireland, the total from this side of the water numbering little more than a dozen. On Wednesday and Thursday sales of Shorthorns, Aberdeen-Angus and Hereford bulls and cows were held, and Irish-bred and reared Shorthorns made unprecedented prices. South American buyers were operating, and Dan MacLennan, a veteran exporter to the Argentine, bought three bulls at 1,000 guineas, 800 guineas and 600 guineas respectively. The highest priced one was a two-year-old, the champion of the show, bred by Mr. Beamish near Queenstown, and exhibited by Mr. Toler-Alyward, a noted Irish breeder. The 600-guinea one was the second-prize winner in the same class, an Augusta on the dam's side, and a good shipper being well colored and with plenty of flesh. The 800-guinea bull was a yearling, bred and exhibited by Mr. Ogilby, of Pettiphan, Dungiven, in the north of Ireland. He was the champion yearling of the show, and was got by the 1,500-guinea bull calf at the Loanhead (Aberdeen) sale in October 1910. His sire looked a dear calf when bought, but Mr. Ogilby showed three yearling bulls at Dublin by him, which far more than recouped the total sum invested in their sire.

Mention of the Loanhead sale recalls the fact that since I last wrote A. M. Gordon, of Newton, Insh, Aberdeen, one of the consigners to the Loanhead sale and one of the best known public men in Scotland, has passed away. Mr. Gordon was a man of splendid physique, a gentleman to the core, and by general consent the typical representative of northern agriculture at all public and official functions. He was also a distinguished breeder of Shorthorn cattle, and, along with his son, Captain A. T. Gordon, who succeeds him, the founder of the Loanhead sales. Prior to their institution at Insh or Warte, the joint sales were held alternately at Newton and Pirriessmill, where that splendid type of a Scottish gentleman, the late John Wilson, had his herd. There was a fine atmosphere about these joint Gordon-Wilson sales, the two owners being men of unusually high character and successful breeders of Shorthorns. The late A. M. Gordon achieved great distinction about twenty-five years ago by the success of his Scots-bred bull, Mario, at the English shows. Mario was the first Cruickshank bull which really convinced Southern breeders, wedded to Booth and Bates lines of breeding, that the Aberdeen type had come to stay, and would be on top. Mr. Gordon also bred several other very noted bulls, such as Pride of Morning and Newton Crystal, and altogether justified the high esteem in which he was universally held.

This great improvement in Irish-bred Shorthorns, marked in recent years and confirmed by the sale this week, has admittedly been effected by the use of Scots-bred bulls. For many a long day a Cruickshank bull was an anathema in Ireland. They were not wanted at any price, and breeders who hinted that they might be useful were viewed as heretics. There was some

reason for this attitude, and the Department of Agriculture is now face to face with a very genuine problem, not unconnected with the successful use of Scots bulls in the Shorthorn herds of Ireland and for the production of store cattle. It cannot be denied that dairying properties are not the strong point of the Cruickshank variety of Shorthorns. Ireland is to the extent of, at least, one-third a dairying country, and for many a day the great idea of its cattle breeders was to produce milk and butter. The whole creamery Shorthorns, and the problem is to reconcile this demand with the successful production of beef cattle for the feeders of Great Britain. Some maintain that the thing cannot be done, that it is not possible to breed store cattle and maintain a high milk yield, that the cow which produces milk to a profit is not the cow which will put up with the dual-purpose cow worth a trial, and they have founded a Register for Irish dairy cattle. The test of admission into this Register is individual merit plus a milk record—not the milk record only, which would produce dairy cattle, nor individual merit only, which would tend to produce cattle capable of laying on flesh—but both in combination, so that the dual-purpose animal may be brought into being. The experiment is novel, and its development will be followed with keen interest.

Tuberculosis in cattle is to be grappled with in dead earnest forthwith. An order comes into force on May 1st under which this becomes one of the scheduled diseases in cattle. The meaning of this is that cattle seen to be affected with tuberculosis must be notified, and the Local Authorities are vested with powers to destroy such, subject to payment of compensation on a declared basis to the owners. The previous attempt to accomplish this end fell through to some extent because of the opposition of stock-owners who were to bear the whole burden of the loss, and also to some extent because of failure to pass a Milk and Dairies Bill for England and Scotland, such a bill being a necessary preliminary to carrying out this order with efficiency. Such bills have now been introduced, and the determination of all parties is to pass them forthwith. The proposal of the order is that one-half of the compensation paid will be refunded to the Local Authorities by the treasury. Some Local Authorities, especially those within whose areas large markets are held, are up in arms against this proposal. They maintain that they will have to pay for the destruction of cattle that are only passing through their markets. The Board of Agriculture and Fisheries does not seem likely to give way, and the Glasgow Authorities are endeavoring to work a boycott of the order. We suspect the Board will score in the end. It generally does.

SCOTLAND YET.

Hog Cholera.

Hog cholera is a contagious disease of swine, well explained in Bulletin No. 15, of the Health of Animals Branch of the Dominion Department of Agriculture, which may be had upon application. The disease appears in Canada from time to time, and owners should be on their guard. The disease spreads whenever the germs from a diseased hog gain access to a healthy one. These germs are given off in the urine and manure of the diseased animal, and may be carried on the feet of animals, birds or men.

Another mode of infection has recently come to light and is responsible for many outbreaks of the disease in Canada. This takes place through the feeding of uncooked garbage and swill containing scraps of pork, bacon rind, etc., in the raw state. The explanation of this lies in the fact that in the United States many hogs are sent to the slaughter house when in the early stages of hog cholera, and are killed, turned into pork and consumed for food without hindrance. This is possible because there is a lapse of some days between the time when the hog becomes infected and the time when he shows symptoms of it. This is known as the period of incubation, and hogs killed during this period may, and often do, show no symptoms to the meat inspector that anything is wrong. The meat from such hogs contains the germs of the disease, and such processes as salting, spicing, or smoking, do not destroy these germs. Cooking does not destroy them, and as a quantity of United States pork is consumed in this country owners are cautioned not to feed kitchen refuse to hogs unless it has first been cooked.

Infection may also be carried from farm to farm in the water of a stream flowing through an infected pasture or pig-pen.

SYMPTOMS

The early symptoms are not characteristic of the disease and may not enable a definite opinion to be formed. The hog loses its appetite, partly

or altogether, is sluggish, disinclined to move, and if compelled to do so may cough. These symptoms occurring among hogs in the vicinity of an outbreak of hog cholera should be viewed with suspicion and the nearest veterinary inspector should be notified at once.

The sick hogs soon become thin and weak, walking with a staggering gait, especially with the hind legs, but the hogs may die in a few days, before they have had time to lose much flesh.

The skin frequently becomes red in patches, the color turning deeper and more purplish as the disease advances. These patches usually occur inside the legs, under the body, or behind the ears, but may be seen anywhere.

The eyes discharge mucous secretion and the lids may be gummed together by it.

The bowels are generally loose, and a profuse diarrhoea may occur, although in some cases there may be constipation.

The sick hog generally goes off by himself, and is found lying in a quiet corner of the pen. If compelled to get up, he does it unwillingly, stands with his back arched and his belly drawn up, or moves in a weak, staggering manner and may fall over.

A sick hog seldom shows all the symptoms described above, and in many cases it requires an expert to decide what is the matter. Usually one or two of the symptoms are well marked, such as coughing and rapid breathing, or diarrhoea and tucked up appearance, or redness of the skin and discharge from the eyes.

The symptoms have been described at some length, so that the farmer may be on his guard if any of them are noticed, and call in the inspector before the infection has time to spread.

There is a great difference in the severity of the disease in various outbreaks. Sometimes it is of a severe or virulent type and rapidly fatal. In other outbreaks the type is mild and recovery frequent. The latter type may be considered just as dangerous to the community as the former, as it is more difficult to detect, and the recovered hogs are apt to spread the disease far and wide before it is recognized.

The duration of the disease is uncertain. A hog may die in a few days, or may live for some weeks. Death does not always follow an attack of the disease, and a small number of hogs would survive an outbreak of the disease if it were thought wise to permit them to do so. Such hogs, however, are carriers of the disease. The germs exist in the blood, although producing no active effect. The hog is immune, but can give the disease to other hogs that are not immune. For this reason it is a bad policy to attempt to cure the disease. The more recoveries you get, the more chances of getting fresh outbreaks of the disease as soon as new hogs are brought into the neighborhood. It is far better to stamp out the disease by killing all the diseased hogs and disinfecting the premises.

It is often necessary to examine a dead hog to make sure of the nature of the disease, and the following appearances may be looked for:—redness of the skin; bloody red spots on the surface of any of the internal organs, such as lungs, heart, bowels and stomach; a peculiar speckled appearance of the kidneys when the outer covering is stripped off, something like a turkey's egg; ulceration of the inner lining of the large bowel, especially near its junction with the small intestine; redness of the lymph glands; enlargement of the spleen; inflammation of the lungs (pneumonia.) The examination should be made by an expert if possible.

When hog cholera is suspected, notify the veterinary inspector without delay. The owner or person in charge is bound by law to do this, and, if he fails to do so, may lose his compensation for any animals slaughtered under the Act, besides being liable to a heavy fine for his neglect.

DISINFECTATION

The following are the official rules for the cleansing and disinfecting of premises after outbreaks of hog cholera:—

After infected hogs have been slaughtered, the carcasses should either be completely burned or buried at a depth of at least eight feet; if buried they should be covered to a depth of several inches with quick lime.

In most cases it will be found safest and most profitable to remove and burn the floors, partitions and lining of pens previously occupied by infected hogs, as also any rails, loose boards or other lumber to which such hogs have had access.

Pens, other buildings and fences with which affected hogs have been in contact, are, when possible, to be thoroughly gone over with hot steam or boiling water before being coated with fresh lime wash, each gallon of which should contain a pound of carbolic acid, creolin or other germicide of equal strength.

The surface soil of pens and yards should be removed to a depth of at least six inches and well mixed with fresh lime, which should also be freely applied to the surface of the newly-exposed soil. Ground so treated should receive over the

lime a fresh coating of earth or gravel. Fields, orchards and gardens to which the diseased hogs have had access are to be plowed as soon as possible.

Every precaution should be taken to prevent the conveyance of infection from one place to another by means of the clothing or shoes of persons who have been attending to or otherwise dealing with diseased hogs.

Visitors should be discouraged during outbreaks of disease or until cleansing and disinfecting operations as above indicated have been completed.

Animals, especially dogs, are frequently the means of conveying the disease and should, wherever possible, be prevented from entering infected premises.

When, owing to severe weather or other unavoidable cause, it is found impossible to cleanse and disinfect immediately pens or yards formerly occupied by diseased hogs, such pens or yards should be closed up in such a manner as to prevent persons or animals obtaining access thereto until such cleansing and disinfection can be properly carried out.

Owners of diseased hogs should bear in mind that inspectors cannot recommend the release from quarantine of any premises, the disinfection of which has not been carried out in a satisfactory manner.

Getting Rid of Horns.

As pointed out in our last week's issue the Toronto Live Stock Exchange has placed the ban on horned cattle and buck lambs. After the first day of April, 1914, two dollars per head is to be deducted from the sale price of all cattle marketed with horns on. Dehorned cattle are much more docile and quiet, feed better, and even though a fight is precipitated among them upon rare occasions the danger of injury is far smaller. We have always favored the dehorning of cattle destined for the butcher's block. Stock breeders and feeders have been rather slow in some sections to take up the work. Now that it means a larger sale price, dehorning will be more generally practiced.

In view of the fact that more horns must be removed it may not be out of place to again outline the best methods of dehorning. Undoubtedly the most satisfactory of all is to prevent the horn growing by the use of caustic. All that is necessary is to get a stick of caustic potash, moisten it well and rub it over the buttons on the head where the horns make their appearance, sometime before the calves are three weeks of age. Be careful not to spread the caustic over the head or let it come in contact with tissue surrounding the embryo horn. Put it on the horn only, and if necessary repeat the application. This does not hurt the calf if properly applied and is an effective method of preserving the polled condition.

Mature cattle from which the horns are to be removed require a little more care. Dehorning should always be done in moderate weather during either spring or fall, when it is too cold for "blow" flies and not cold enough for severe frosts. The horns may be removed either by a saw or the use of dehorning clippers, the latter being preferred by most operators. Newly dehorned cattle should be kept away from straw and hay stacks, as there is a danger of them keeping the wounds irritated by rubbing around the stacks and getting dirt and chaff into the sore places. In most cases it is not necessary to apply anything after dehorning, but, where healing does not take place in a normal manner, the wounds should be carefully washed and a lotion of one part of carbolic acid to twenty parts of water applied three times daily. If from any cause suppuration ensues and an unhealed cavity remains from which fluid escapes, the animal's head should be turned on either side three times a day to allow the fluid to escape and afterwards a four-percent of carbolic acid should be injected into the cavities and the head again turned to allow the escape of the fluid. Properly done and in the right season, there is little or no danger of trouble of this kind.

Properly done, dehorning seems to inconvenience cattle very little. It is good practice in the operation to smear the hair at the base of the horn with vaseline or some such substance and turn this long hair back. Tie the animal with a chain or rope securely, but in such a manner that it can be easily and quickly loosened. A pair of what some call bull-dog forceps, or pinchers are handy, as by placing them in the animal's nose the head may be drawn around towards the animal's flank. The dehorning clippers should then be applied as close to the head as possible, removing about one-fourth inch of the skin with the horn. This close cutting prevents the growth of unsightly stubs. Some apply, though it is not always necessary, pieces of cotton batting about one or one-and-a-half inches square, and dipped in boracic acid, over the wound. In cut-

ting, it is well to cut at a slight angle from below upwards, sloping the horn from the lower side of the base upward to leave a nice smooth-angled poll.

Stop the growth of horns in all the calves destined for the block, as this is the easier method, but with young steers and heifers to be marketed after next April, or even before, little risk is run by dehorning and such would be advisable.

THE FARM.

Mr. Miner's Wild Ducks Returned.

Editor "The Farmer's Advocate.":

When the "yellow kivered" magazine arrives at our humble home there is always more or less of a scramble to see who is going to have the first glance at its pages, and "Nature's Diary" usually contains something for me. Therefore I believe I should contribute my mite.

I have often made the statement that birds come back year after year to their old haunts; but someone puts the question "how do you know this?" Then I would usually refer to the wild geese that come to my park, bearing certain marks, etc. Then I have been asked, "Can you prove it?" when I would be compelled to switch, the subject. But those that believe and persevere shall be rewarded is my firm belief. And on or about December 10, 1912, four of my hand-raised wild Mallard ducks disappeared, each having a metallic label on its leg, containing my address. I waited quite anxiously all winter to hear how and where they met their fate; but at 3 a.m. March 14, I heard strange quacking of ducks, and sure enough when I arose in the morning, here was one of my dear welcome pets come flying to me for her breakfast, and how she did eat of this "prize-winning corn of Essex." Then on March 18 I was delighted to see that another one had arrived. But she had brought her Yankee hubby with her. This Canadian hospitality seemed too good to be true, and he would take wing at the very sight of my red hair, but her sweetheart would call him back, and she may have told him that I was a converted Jessie James to the fowls of the air. He was soon convinced that all was O. K., and the reader can form an opinion as to his behaviour, since we have named him "Brigham Young." Well on Sunday, March 29, at 5 p.m., the third duck came quacking down out of the heavens—she had her two wing feathers shot out and is quite lame, but she is as fat as mud while the other two were very poor. So three out of the four ducks are home again, after an absence of over three months, and when one stops for a moment and tries to trace where they have evidently been, across lakes, and up winding rivers, into ponds and marshes, seeking shelter from snow and storm, shying the thousands of hunters lying in ambush, often blinded with fog, etc., then realizes that each one was her own guide back to the old home again, before they are ten months old, it will surely convince one and all that there was no guess work, and that birds do know things that the human family have never learnt. I am going to make a British subject out of "Brigham Young," and when he returns to the United States, he too will carry an aluminum band marked, "Box 48, Kingsville, Ont."

Essex Co., Ont.

JACK MINER.

Harrowing After Drilling.

Editor "The Farmer's Advocate.":

I see in your last issue a reference made to harrowing after drilling, and I wish to say, that, I would never miss rolling and harrowing after drilling in dry weather, either spring or fall. In wet or damp weather seed will readily start with a very slight covering, but when dry, it sprouts and takes root more readily where the soil has been compacted around the seed. This can be seen on the head-lands, where the horses in turning with the drill, have firmed the soil and brought it more directly in contact with the seed, or where occasion has required the horses and wagon to go over the newly-drilled field. The effects of horses and wagon may be seen the first week and remain visible throughout the whole season, and noticeable in the stubble after harvest. Then too, the compacting of the soil around the newly-sown grain is conducive to a stronger development of roots and leaves in dry weather, than otherwise, for gardeners and nurserymen know also, that, in transplanting trees or shrubs, the compacting of the soil—even very firmly—around the roots is a necessity. In experimenting in seed growing, I have known seeds to germinate when the ground was apparently as dry as dust, but only where very firmly packed. The harrowing should always follow the roller, as the loosening of the surface tends to lessen evaporation.

Bruce Co., Ont.

WM. WELSH.

Acetylene Lighting.

A satisfactory system of lighting has been one of the problems of all rural districts. A good light and a comparatively cheap light is demanded and kerosene lamps and lanterns have been used to fill the bill in most houses and barns since the candle burned itself out because of its dull and poor light. Work and reading must be done by artificial light and particular attention must be paid to the amount of eye-strain caused by the light used. The care of the eyes is an important matter only realized by those whose sight has failed from some cause. Lighting is an important branch of household and stable economy. One of the very best lights is the acetylene light produced from the colorless gas of that name. The light is clean, strong and brilliant and easy on the eyes. So far as light goes it is about all that could be desired.

As in all practical questions actual experience is the best guide, so we have written to a few subscribers who had acetylene lighting plants installed and their replies are of interest to all those face to face with the problem of installing a lighting system. The letters follow:

Editor "The Farmer's Advocate.":

I have been using acetylene lighting plant for about five years and I am well pleased with it in every way. It is a carbide feed, lights eighteen rooms with twenty-nine lights, also a gas range in kitchen and a gas heater in bath-room. It costs to run it on an average about two dollars a month and cost about one hundred and sixty dollars to install it; this covered the whole cost. It takes about one hour to empty and fill the water-basin about four times a year and about five minutes to refill with carbide whenever necessary. I do not consider that there is any danger to speak of in anyway, as there is never enough gas in gas bell anytime to cause an explosion to harm anyone, if the machine is working right; still I never take a light in the room while re-charging. I have the plant in the cellar under the kitchen near the furnace, and a gasoline engine pumps water six feet away from it. It is much safer than kerosene, as lights are out of the reach of the children, and with a light in every room there is no need of carrying a lamp around. It is a very easy light on the eyes, always steady and never flickers or varies any, and yet it is a very strong light. I used electricity and coal gas for years, and would rather use the acetylene gas than either for my own use.

Middlesex Co., Ont.

JAMES BAIRD.

Editor "The Farmer's Advocate.":

We had the acetylene lighting system installed last June. It is carbide fed and we have light in seventeen rooms counting two cellars—the total cost being \$280. It has cost us about \$1.50 per month, of course our family is small and we never have a lot of lights at once, unless we have company. I can re-charge in from one-half to three-quarters of an hour each time. I don't consider the risk any more dangerous than kerosene, but I would not think of charging only in day time. It would not be best to go around the generator with a light. We are well satisfied with the quality of the light. I would not like to go back to kerosene lighting.

Norfolk Co., Ont.

SIDNEY B. SWANTON.

Editor "The Farmer's Advocate.":

I have had an acetylene gas plant in for over ten years, and only once in that time have the people been left in the dark, and that was caused by the generator springing a leak. The cost of putting in gas plant and putting pipe on street, and putting pipe in house and store was \$300. I supply the following people with gas: The doctor's house and office, Methodist Church, Presbyterian Church and the hotel, another residence, the saw-mill, two stores, one street light. In the winter time about Christmas time I use one hundred pounds of carbide in six days. Now I use one hundred pounds in ten days. In caring for the plant at this time of the year not much trouble is given. I just put in some carbide every evening and draw off the slush once a week. In the ten years I have never seen anything that any man should be afraid of. I always care for the plant in the evening. I very seldom charge it in the day time; I can go around my gas machine any time with a lantern or lamp. But I use no lantern, I have a gas light at the machine. At the Methodist Church they used to have eighteen lamps and now only have nine gas lights, and they have more light at a cost of \$1.50 per month. At the hotel they used kerosene one month and the next month they used gas and the oil cost just as much as the gas as they had to use more lamps to get enough light.

Wellington Co., Ont.

A. RUNSTETLER.

Hoe for Removing Shingles.

Editor "The Farmer's Advocate.":

The heavy wind which passed over this country a short time ago was probably the biggest thing of its kind that ever hit these parts. The resultant damage was enormous and while a certain percentage has been repaired it will be some time before things are again ship-shape on the average farm.

Judging from local conditions, the metal and prepared-roofing companies will do a roaring business this year. There also will be considerable steel used for frames and rafters, which is perhaps one of the best moves made for some time. All in all, the storm had an influence for good, as construction hereafter will be of a more permanent nature.

I learned something to-day and I want to tell you about it. Early this morning I mounted the workshop roof and attacked the shingles with a spade. They had not been on long, but the unusual flatness of the roof had caused them to rot in places and the wind had done the rest. It wasn't bad at first, but after an hours work, I found I had only seven rows off and that the sun was getting hotter and hotter. Those who have tried standing on a slanting roof and prying off shingles can readily understand the situation, especially where the shingles were green and refused to be pried. I attacked them again, however, but at 9.20 I sat down in a little puddle of sweat which had collected in a depression and started to think it over. Sometimes it pays to think. I like work, but I don't like hard work in big chunks and the job looked as if it would last till Sunday.

"It is said 'Necessity is the Mother of Invention.'" It was nearly noon and the shingles simply had to be taken off by then. I did some tall thinking and three minutes later scrambled down the ladder with an idea. Down below in the shop I found a big, heavy mortar hoe and a stout garden rake with the handle broken half off. Climbing up again, I put the rake above on the cleared portion and went at the roof like some people do a field of corn. Truly it was an improvement. I could stand up like a gentleman and still get the impression that I was working. At five minutes to twelve the shingles were off and still having ten minutes to spare, I seized the little short rake and clawed off the little pieces which persisted in sticking around some of the nails. Candidly that little rake was the whole thing for the job and had fourteen spades beat a mile. All that I can say about the hoe, is, that it is the first hoe I have ever considered a friend. I will go so far as to even say it is the first hoe that can claim my ungrudging, intimate acquaintance.

Now, there are some hundreds of barn roofs to be shingled again this spring, from one cause or another. As a labor-saving appliance allow me to recommend to your use a good, heavy hoe, and a little short rake. Moral—Sometimes it pays to sleep and dream and think.

Elgin Co., Ont. J. C. INMAN.

HORTICULTURE.

Trouble in the Orchard.

By Peter McArthur.

This orcharding seems to be very much like the sporting life—"Always checkered but never dull." With last year's experience to draw on I made all preparations to give the orchard every care. Providing myself with pruning tools and a spraying outfit I proceeded to keep the orchard up-to-date. The pruning was done betimes and the dormant spray given in due course and I was waiting for the psychological moment for giving the second spraying that will protect the blossoms and give a good stand of fruit. Right here I am going to stop to record the fact that the best opinion of the neighborhood was wrong about the chances of having fruit this year. I was assured that last year's crop was due to the fact that the orchard had been cared for on a year when fruit was due and this would be an off year. I need not expect any apples after having a bumper crop last year. But as I had thinned the fruit last year, and as care had been taken when picking the apples not to pull off the little twigs that would make fruit blossoms, I had a sneaking hope that I might fool people and have apples again this year. Until yesterday morning I was feeling jubilant, for an examination of the trees, after the buds began to open, showed that there will be as many blossoms this year as last. Every tree is covered with blossom buds. Though I was naturally sorry to have the settled opinions of people upset in this way, I was glad to find that the scientists are not mistaken in saying that if an orchard is properly cared for it will yield fruit every year. But in spite of this I am all in the air to-day. Yesterday morning a neigh-

bor told me that when examining his trees he found the little leaves and blossom buds covered with little green insects. That started me investigating, and with the lens of an opera glass as a magnifier, I began to examine the trees. To my disgust, I found the buds swarming with green aphids and here and there I found a black insect with wings. On one little leaf that did not have more than quarter of an inch square of surface I counted seventeen aphids. As there were five leaves, besides the small blossoms I estimated that there were over a hundred aphids on that particular bud. Almost all the others I examined looked just as bad. Hunting through the bulletins and the catalogues of the manufacturers of the spraying outfit I found that a spray of kerosene or whale-oil soap was advised for the aphids. I never felt the need of a scientist to consult with quite so badly, but I decided that the thing to do was to act first and consult the scientists afterwards. In dealing with pests of this kind "Jedart Justice" is best. In the good old days of border raiding between Scotland and England they used to hang the raiders first and try them afterwards. I decided to spray for the aphids and find out if I had done right afterwards.

I remember that last spring Mr. Clement remarked, when examining the buds, on one of his visits, that he was glad to see that there were no aphids. As there were none, I neglected to ask him about them, and the books I have say very little about them, except to say that a kerosene spray should be given as soon as they are discovered. But I have read or heard about them somewhere, and I am going to set down the impression I have about these creatures. If I am wrong the patient editor can set me right in a foot-note. I seem to remember that the ordinary poison sprays do not affect the aphids, because instead of eating the leaves they puncture them and suck the juices that have not been touched by the poison. I also have an impression that these creatures breathe through pores on their backs and they can only be killed by an oily or soapy spray that covers them, stops the pores and chokes them. Just how harmful they are I do not know but they are so plentiful that they cannot help being injurious. I remember noticing one branch of a Spy tree last year that had a lot of aphids on it and the leaves looked wrinkled and the fruit greasy and unhealthy. I seem also to remember that the ink-spot on the apples is said to be caused by the aphids. Oh, for ten minutes with a scientist to set me right in this matter. The Encyclopaedia says that the aphids are wonderfully prolific and with the start they have it would not be long until they would be crowded for standing room on the trees. But the soap is boiling on the stove and a messenger has been sent for an extra supply of coal-oil, and before the day is over every tree will be thoroughly soured with the kind of spray that has been recommended. With such a showing for

a good stand of fruit I am not going to take any chances. The spray can do no harm, or it would not be recommended, and the aphids may do a great deal of harm, especially when they are so plentiful.

As whale-oil soap was recommended for this spraying, I tried to get some in Glencoe last night and found that such a thing had never been heard of. And that reminded me of the amusing fact that if there is such a thing as whale-oil soap it is probably either being manufactured by or under the control of two men who were born or brought up within half a mile of where this is being written. A couple of years ago there was a despatch from Vancouver in the papers which said that the whaling industry of the Pacific Coast,—whaling ships, rendering plants, etc., had been bought by Davidson and McRae, who left this part of the country to make their fortunes many years ago. As I went to school with one of them and hunted black-squirrels with the other I should be able to get on the trail of whale-oil soap if I should need it another year in the course of my orchard work. But it is odd to find that whale-oil soap has never been heard of in the home district of the men who probably provide the whale-oil for its manufacture.

There is another matter, in which I have also felt the urgent need of scientific help. We are arranging to plant out seven acres of young apple trees, and I thought I would make a start at the measuring and staking, so that when the trees come we can go at them with a rush. As usual I acted on the best scientific advice available, and as usual, when working alone, I bumped up against a very real difficulty. The article I saved from "The Farmer's Advocate" seemed to be just what I needed until I tried to apply the information it gave. I found that it was intended for marking out a level field, but where we are to plant the trees is rolling land and that makes a great difference. I was able to strike out a base-line along one end of the field where it was level, but when I tried to get a guiding line at the other end of the field I was in trouble at once, for the wire sagged into hollows and was raised by the high places, so that it was a rod or so shorter than at the level end. This would make a considerable difference in the distance that some of the rows would be apart. I couldn't pull it as straight as it had been at the other side of the field even with an anchor post and fence stretchers. It would sag in spite of me, and every sag meant a shortening of a few feet. No doubt there is some easy way of overcoming this difficulty, but I have not discovered it as yet. As matters stand, I have contented myself with staking off the base-line so as to get the rows the proper distance apart at the level end, and have struck out one row across the field at right angles, which will give me the right direction. Then as I figure it out I can get



"Sooky" Sucks the Settlings.

Sweet skim milk in proper quantity, with plenty of good clover, makes good dairy calves.

along fairly well by measuring off forty feet at the rolling end every time we shift the wire. We are planting the trees forty feet apart. Besides we can sight along the rows in different directions when once we get started and that should help to keep us in line. Of course I may get into all kinds of a mess, but I shall be on my guard, because I know that the job of planting trees in straight rows, that will be straight from every direction, is not so easy as it looks.

Judging by the newspaper reports, all the important amendments to the Bank Act are dying in the Committee and it is predicted that the act will probably be passed substantially as drafted within the next few weeks or ten days. Even though we may not accomplish much it will be educative to watch how the beneficiaries of special privilege manage to get their own way even in spite of public protest. The more grasping they are the sooner we shall be moved to take our spraying outfits and go down and give Ottawa the dose of lime-sulphur it seems to be so badly in need of. The aphids are not the only pests that are sucking the juice out of things in this country.

[Note.—Unless a field is very rolling indeed, the plan of orchard planting as described will work out all right. With wire fence stretchers, or double pulleys the wire may be stretched so taut that it will sag little over any but very wide hollows, and here a support may be used. Only a little "physical science" is needed in stretching the wire. Sometimes it may be drawn across the centre of a field, a row of stakes placed here, and another row set across the end by sighting. "Patience."]

FARM BULLETIN.

The Horse Holds Sway in Toronto.

On Tuesday evening, April 29th., his equine majesty, the horse, began his annual reign of a week's duration as absolute monarch of Toronto's most elite society. All other social events counted for naught, for only once each year does this exclusive function take place. From the first evening through to the drop of the curtain on Saturday night as Hercules, one of Hon. Clifford Sifton's great jumpers, carried off the high jump championship amid the cheers of 6,000 lusty voices and the strains of the national anthem, the largest crowds in the show's nineteen years of history attended to do honor to man's faithful friend, king horse. Must the horse go? Never.

The classes for horses under the saddle eclipsed those of any former show, but classes for horses in harness and high steppers were not up to those of former years. No Hackney stallions answered the call of the bugle, but six very flashy fillies of this breed were forward in the class shown on the line. Crow & Murray's Lownsborough Madge, a handsome, true-going, nicely-turned mare went first with Fanny Mary, second for J. G. McPherson, Toronto, and Lochryan Princess, last year's winner of this class, third for Dr. F. C. Grenside, Guelph.

The class for Thoroughbred stallions was one of the best of the breeding classes four extra good horses being forward. Nasbaden, owned by Thayer Bros., of Aylmer, repeated and pranced away with the blue, second going to Selwik, shown by Jas. Bovaird, Brampton, third to the Canadian National Bureau of Breeding horse, Rosemount, and fourth to R. M. Dale, of Willowdale, on Kelston.

Standard-bred stallions were headed by Crow & Murray's speedy Jack McKerron. This was another good class; Eaky, belonging to Alf. Hanley, of Ancaster, and McKenzie, the property of Ashley Stock Farm, Foxboro, also being in the money.

Two classes were listed for Clydesdales in harness but were not extra well filled, the show being the light horse's innings. The Dominion Cartage and the Verral Cartage Companies divided the money on some very useful geldings.

Two very interesting classes were furnished in the commercial section for delivery horses. Dr. Bell and Senator Beith placed the awards in this section, where in light delivery horses the Robert Simpson Co. carried off the blue on Lord Grey, a neat, little gray, and R. Matthews got second on a black horse. The appointments in this class were exceptionally good. Firstbrook Bros. got first in the class for heavy delivery horses on Earl Grey, the Dominion Express Co.'s Marquis going second.

Some very fine roadsters were forward, but not in large numbers, two of the classes having no entries. In the class for mare or gelding (trotter) not exceeding 15.2, Dress Parade, one of the best geldings in his class in the country, won for Crow & Murray; Wm. J. Crossen, of Cobourg, got second on Lady C., a sensational

mare, showing great speed, and Wonder, from the stables of Hon. D. C. Cameron, of Winnipeg, Man., went third. Crow & Murray won the trotting class over 15.2 with Daisy Mobil, with Crossen second on Medion.

The Heavy Harness and High-Stepping Classes brought out some of the good things of the show, Hon. D. C. Cameron, Lieutenant-governor of Manitoba, and Miss L. Viau, of Montreal, having the strongest entries. The Western horses were very sensational actors, and stepped away with a good deal of the money. Crow & Murray captured the first class judged, that for novice mare or gelding under 15.2, with Flashlight, A. Yeager, of Simcoe, getting second on Princess. Only two came out in this class over 15.2, Yeager winning on Look Here.

In the open class under 15.2 Sir H. M. Pellatt won with Lord Kitchener, Flashlight going second, and Fireworks, from the Winnipeg stable, third. Of the mares and geldings over 15.2 Hon. D. C. Cameron had the winners, Lucky Jim going first, and Lintoll second. A nicer pair of actors, straight, bold and true, were never seen in Toronto. Miss Viau got third on Earl Grey, and Yeager fourth on My Pride.

For pairs under 15.2 the Winnipeg stable won again on Flourish and Fireworks, as nice a going team as one could wish. Miss Viau took second with I Wonder and Eye Opener, also a flash pair, third prize going to Winnipeg on Happy Maid and Ladas.

In pairs over 15.2 Lucky Jim and Lintoll repeated for Hon. D. C. Cameron, Col. Pellatt getting second on Casa Lomo Lad and Lord Kitchener, Miss Viau third on Earl Grey and Sir Wilfrid.

Happy Maid won the appointment class to runabout for Cameron, while Miss Viau got first and second in a similar class for a horse suitable for a lady to drive on Eye Opener and I Wonder.

In high steppers Lucky Jim and Fireworks were first and second for Cameron. Judged in pairs Cameron had the first and second prize pairs, Fireworks and Flourish winning over Lucky Jim and Lintoll. Miss Viau got third on Earl Grey and Sir Wilfrid. Ladas captured the King Edward Hotel cup for Cameron, beating Lintoll, his stable mate. Cameron took first and second in tandems, and first in four-in-hands, Miss Viau getting second in this class.

The real feature of the show is always the various classes for hunters and jumpers over the jumps. The high jump, which concludes the show, is always the event which causes the spectator to hold his breath until each entry is over the hurdle. This year the footing was not good, but the hurdle was started at five feet in height and raised six inches at a time to six feet, after which it went up four inches at a time. As the barrier went up the horses dropped out one by one. Confidence, known as the world's champion, and his stable mate The Wasp were the first to make three bad attempts. Hon. D. C. Cameron's Leo and Sifton's Ironsides could not negotiate six feet eight inches and had to quit the conflict, which was won by Hercules with his stable mate Skyscraper second, and Ironsides being awarded third money. All these horses are from the stables of Hon. Clifford Sifton, Ottawa.

All the hunter classes were well contested, and the jumping was remarkably good. It was not without its humorous side, one gelding balking at every fence and finally clearing the entire ten without touching. The champion heavyweight hunter of the entire show was found in the big and beautiful gray, The Viceroy from Cork, owned by the Ennisclare Farms, Oakville, Ont. That sensational middleweight hunter Elmhurst, winner of many memorable battles, carried off the honors of his class for the Sifton stables, and Jao, one of the most consistent jumpers ever carrying a saddle, won the light-weight section for Sunny Brook Farm, Toronto. These are three great horses, and a credit to their respective owners.

The saddle championships also brought forth much applause. For mares or geldings not exceeding 15.2 Last Post won for Sifton, with Leo second for Cameron. For mares or geldings over 15.2 Indian Chief won for Pellatt.

The judging, on the whole, gave good satisfaction. Dr. T. H. Hassard, of Markham, and Robert Graham, of Bedford Park, placed the heavy horses; H. K. Bloodgood, of New York, harness horses; Dr. F. C. Grenside, of Guelph, saddle horses; Dr. Bell, of Kingston, F. Mercer, Toronto, roadsters; Hon. Rob't. Beith and Rob't. Graham, Ponies; H. V. Cult, Genesee, N. Y., and D. B. Sharp, Berwyn, Pa., hunters and jumpers; and Col. Wm. Hendrie, Hamilton, and Dr. Grenside, Thoroughbreds.

Truly it was a great show. Beneath the great kahki-colored canopy which hung high and restfully over the entire spacious armories where the show is held like the cirrus or cirro-cumulus clouds which float in the heavens during the fine weather of early summer was a perfect sea

of color, vying in beauty with that out of doors which, at the time, nature was straining every effort to perfect. Red, white and blue and green and gold was everywhere in decorating form, but the elaborate Parisian gown effects and the latest in striking millinery designs made, beyond all doubt, the high-water mark of all artificial color effects. Society did honor to the horse, and the horse was on his best behavior, and master of the situation.

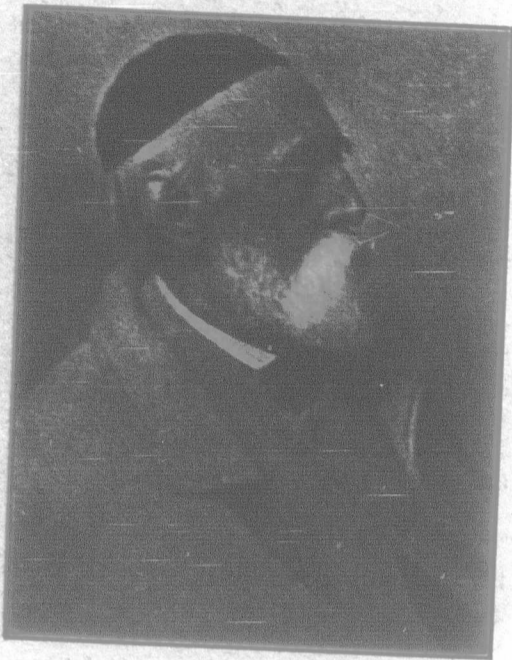
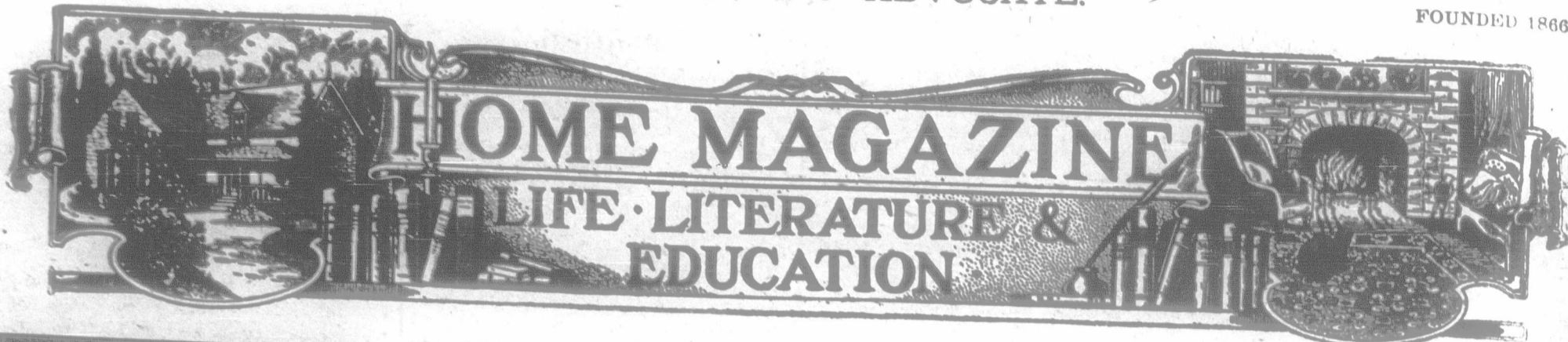
Toronto to Have a Winter Fair.

It now appears that Toronto is to have a winter live-stock show. There has been considerable agitation of late among those interested in live-stock, with the object of establishing an annual national winter live-stock and agricultural-products exhibition somewhere in Canada, and on April 30th, the dairymen, who, since the Guelph Winter Fair, have been talking up a National Dairy Show very strongly, held a meeting in Toronto with a view to urge the necessity of such a show upon the Government and upon the city. A resolution was passed that in the opinion of the meeting the time has come when arrangements should be made for the holding of the annual dairy exhibition, which shall comprise all branches of the dairy industry and be representative of them, and which shall reflect from year to year the progress of the industry.

The matter of a National Live Stock Show was taken up, and it was resolved that in case such a show is established the co-operation of the dairy interests be extended if found feasible to the extent of holding the joint exhibition at the same time and place, but that in any event, the representatives of the dairy interests should retain entire control of their exhibition.

This meeting which was attended by dairymen from nearly every county in the Province was followed the next day by a meeting of live-stock men, attended by about 100 delegates, and called by the Toronto City Council at the instance of Controller Foster, in the hope of inaugurating a Toronto Winter Fair. A lively and enthusiastic discussion took place at this latter meeting, as the notices, which had been sent to prominent stockmen and Government officials, were responded to by a large number. Mayor Hocken presided, and pointed out that the buildings of the Canadian National were practically unused during the entire winter season, and he did not believe that such a fair would in any way conflict with other winter exhibitions. Controller Foster, Prof. H. H. Dean of the O.A.C., J. H. Gridale, Director of Experimental Farms for the Dominion, and several other prominent live-stock men entered into the discussion. The only objections heard were made by the dairymen, who want their cattle separated from the other stock, as to location on the grounds, better accommodation, and a larger representation on the board of management than at first planned. The first resolution, that the opinion of the meeting was that an annual winter live stock and dairy exhibition is desirable in the City of Toronto, was immediately altered by inserting the word "National," to include the entire Dominion, and thus changing it from a local to a national scope. Hon. Martin Burrell, was made honorary president, and associated with him are the names of Hon. James Duff and the Ministers of Agriculture in the other Provinces, and Mayor Hocken. Robert J. Fleming, of Toronto, was made President, with Senator Owens, of Quebec, Joseph Russell, Toronto, and Hon. W. C. Sutherland, Saskatoon, vice-presidents. The executive included the Board of Control of the City of Toronto, who are to look after the preliminary financing of the exhibition, which will include many building changes, including the erection of a large judging arena. John Gardhouse, Highfield, Ont., represents the horse interests; H. B. Cowan, Peterboro, the dairy interests; Joseph Brethour, Burford, the sheep and swine interests; W. F. Ardagh, Toronto, poultry and pet stock; W. D. McKendrick, agricultural, horticultural and floricultural products; Dr. Boulthée, dogs, and Alderman Anderson, grounds. The executive will meet shortly and, it is expected, will decide on the holding of the first exhibition next November, not to conflict with winter exhibitions held at Chicago, Guelph and Ottawa.

A serious outbreak of what appears to be contagious abortion in mares has recently developed in and around Granton in Middlesex County. Dr. Wm. Dann, V. S., of that place informs us that seventy-five per cent of the in-foal mares within a radius of seven or eight miles of that place have aborted, and that a very large percentage of the foals born alive develop navel-ill. The mares are being treated with a streptococci serum, and their external reproductive organs kept sterilized. At present efforts are being made to isolate the organism which Mr. Dann believes has some connection with that causing navel-ill. These colts are from all classes of mares and stallions.



G. F. Watts, 1889.

(George Meredith said of him, "You are he that carries our standard for us, as will be fully known in another age.")

Little Trips Among the Eminent.

George Frederick Watts.
(1817 - 1904.)

Probably the greatest modern master of British art was George Frederick Watts, painter and sculptor.

He was born in London, Eng., on the 28th of February, 1817, and when but a boy entered the schools of the Royal Academy. In 1827 he first exhibited at that institution, and in 1843 he won a prize of £300 for a design for the decoration of the Houses of Parliament, the subject which he chose being "Carcactacus led through the streets of Rome."

The winning of this prize meant much more than honor to the young artist. By means of it he was enabled to go to Italy, the Mecca of artists, and there he remained, painting and studying, for three years.

In 1846, a third competition for the decoration of the Parliament Buildings was organized by the Royal Commissioners, and again Watts was successful, this time winning a prize of £500, for a canvas representing "Alfred inciting his subjects to prevent the landing of the Danes." Immediately afterwards, he was commissioned to paint a fresco for the Hall of the Poets in the Houses of Parliament, and so designed the well-known, "St. George Overcoming the Dragon."

Whether or not the painting of this picture turned Watts' current of interest has not been told—probably he himself had been developing the sympathies which were henceforth to dominate him,—but the fact stands that for the rest of his life he scarcely touched historical subjects, devoting himself instead to allegorical representations and to portrait painting. "Historical pictures," he said, "are highly interesting archaeologically, but they are hardly capable of awakening in the spectator any intellectual activity."

The painter, indeed, he had concluded, should be a teacher, and thenceforth he devoted himself to that end, using his great imaginative intellect, and his wonderful power of rich coloring to bring before the public of England pictures that should cause them to think and feel and become better men and women. Many years later, after "Life's Illusions," "The Good Samaritan," "Hope,"

"Sir Galahad," and "For He Had Great Possessions," had been given to the world, he said, "My intention has not been so much to paint pictures that charm the eye as to suggest great thoughts that will appeal to the imagination and the heart, and kindle all that is best and noblest in humanity." That he did not fail in his great object may be realized by those who have seen even the prints of his pictures.

Another plan begotten of his intense longing for the uplift of humanity, was to paint portraits of the greatest and best men of his time, and present them as a gift to the British nation. The outcome of this was a remarkable series, including portraits of Tennyson, Gladstone, Carlyle, Motley, Browning, the Duke of Argyle, William Morris, and John Stuart Mill. Strangely enough, he never painted a portrait of Ruskin, whom he used to call, "Dear old friend, master, and best teacher." So great was his veneration for the Seer of Coniston that he seemed to feel afraid of not being able to do him justice. He feared, he said, that his hand should be "paralyzed" in expressing all that he would wish to express in regard to him.

Other paintings, also, he presented to the nation, solely with the object of uplifting, "not," he said, "that the nation cares a dump about them." Upon one occasion he offered to fresco the new Euston station in return for the materials alone. His idea was "that those setting out upon a journey by rail might be conscious also of that greater journey which all are taking." The severely-practical railway directors, however, refused his offer.

Watts was never actuated to work by considerations of either fame or wealth. Twice he refused a baronetcy, while in the modern craze for riches he saw a deadly danger to the race, a danger which he strove to stem by his pictures, "The Minotaur," "Mammon," "Jonah," and "For He Had Great Possessions."

Constantly he strove to represent the spirit of Love as a guide and helper, and constantly he strove to take away

filled with peace. That this sermon was not lost, he knew from his receiving many and many a thankful letter from mourners who had been comforted by his pictures.

Watts spent the greater part of his life, working hard always, at "Little Holland House," Kensington, and at his beautiful country home, "Limnerslease," in Surrey.

He was twice married, in his early youth to the actress, Miss Ellen Terry—an unhappy union that was soon dissolved—and later to Miss Mary Fraser-Tytler, a woman of literary and artistic ability who became his second self, a woman filled, like himself, with sympathy for a struggling humanity, with anxiety to awaken an indifferent one. Recently she has published a biography of her husband, speaking little of his art, but much of that side of him which the world could not know as well as she.

His religious ideas, she says, "were identical with those of Tennyson. Religion that begins and ends in simple Faith was not enough. He asked for active love and self-sacrifice for the cause of humanity."

"I would lead to that church with many doors," he said, "which is illuminated by the great light shining through many windows—the Eternal Truths preached in the Sermon on the Mount especially."

Watts died on the first of July, 1904, at the ripe age of eighty-seven. Almost to the last, even when over eighty years of age, he continued his work, painting still for the cause of humanity.

[This concludes our series on British painters.]

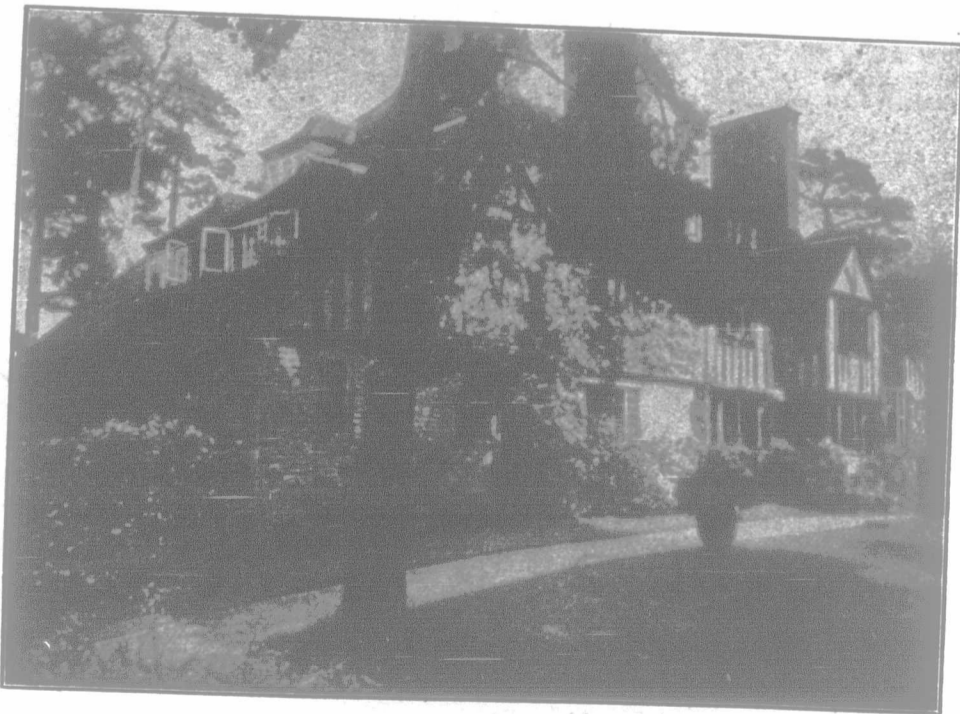
Letters From Abroad.

ON MEDITERRANEAN SHORES.

IX.

Tunis, Africa, March 19, 1913.

My dear Jean,—Have I told you about the cafes of Tunis? They are one of the most pronounced features of the Arab



"Limnerslease," Country Home of Watts.

from poor mortals the fear of death. "I want to teach people," he said, "to think of Death as the nurse who comes to put the children to bed in the joyful anticipation that they will awake to the sunshine and the flowers." To himself, the Great Reaper had no terrors, and so, over and over, he painted the figure, usually represented in so horrible a guise, as one of dignity and grandeur and solemnity, majestic, it is true, yet

quarter. In certain parts of the town the streets are lined with them, and at certain hours of the day they are packed with men—playing cards and gambling and smoking, and sipping coffee out of tiny cups. Just as many sit outside the cafe as inside, so you can imagine what a gorgeous street scene it makes. Think of hundreds and hundreds of red-capped, gayly-gowned, picturesque Arabs, massed together—why, it makes as brilliant a

bit of color as a painter's palette. And there they sit for hours together, doing nothing,—not even talking. They do not stare in the bold way the Italians do; they may look at you, but they do not appear to see you. A passing tourist interests them not the least, even if she is a damsel from the woolly west, and has a kodak in her hand.

For pure, unadulterated laziness and indifference, the Arab beats the world. If he can't find a bench or a stone to sit on, he will rest on his haunches like a dog. You can see rows of the poorer classes sitting like this, leaning against a sunny wall, their hoods pulled over their faces, and many times I have seen them lying prostrate on the pavement, sound asleep. The pavement is the only bed, and the cafe the only home of many of them. I enclose a snap-shot of the cafe of the Whitewashers and Painters. You know the Arabs are the greatest whitewashers in existence. Six times a year they whitewash their houses, inside and out. The men in the picture are sitting in a row, with their pails and brushes in front of them, waiting for a job.

But I must tell you about having my fortune told by a sand-diviner—the same one who appears in the picture enclosed. The gates of the city are the favorite haunts of these sand-diviners. They sit cross-legged on the ground, with a big, square panful of sand in front of them, and a box of writing materials and Arabic reference books beside them. For a few pennies they will tell your fortune. Mine was so remarkable that I must repeat it to you.

First I had to take a handful of sand and let it dribble through my fingers on the sand-heap. This was examined solemnly by the Arab, after which he scribbled a lot of hieroglyphics and figures on paper, and then uttered these mystic sentences—in French.

"You are going away in a few days on a boat. You have been sick, but you are better. You had something that affected your voice. You are going to get a letter containing good news. There is a man far away from here thinking about you. He wants to marry you."

As this forecast would apply equally well to any other travelling spinster in Tunis, I was not tremendously impressed by it. Of course, it was nice to know there was a man far away thinking of me in a matrimonial way, but then I am also having trouble with one near by who is doing the same thing. I wish he was far away.

Miss Morris had her fortune told, too. Among other startling revelations, he told her she was a collector of works of art! I suppose he meant baskets, as that is her pet hobby.

Yesterday we were lucky enough to see an Arab snake-charmer. He was giving an exhibition on the street, surrounded by a ring of admiring Mohammedans, standing about five deep. They very politely made room for us in the front row, and we saw such a blood-curdling, hair-raising performance that we had chills for hours afterwards.

The snake-charmer had two thick leather bags crammed full of snakes. On the ground there were five or six big snakes, each one with a heavy stone on its tail to keep it from crawling away. Every few minutes the snake-charmer would put his hand into one of the bags and pull out seven or eight yards of squirming snake. Then he would run wildly around in a circle, yelling, leaping, and gesticulating like a madman. He would the snakes around his head, his neck, his body. He fastened one on his nose and began running around the ring, jumping in the air and shrieking as if in awful agony, the snake's body meanwhile flying out horri-

zontally like a ribbon in a gale of wind, and all the other snakes on the ground rearing their heads and hissing fiercely. In his frenzy, his red fez fell off, and I saw the long tuft of hair the Arabs wear under the fez. It is grown for the special convenience of Mohamet, who pulls them up into heaven by this hairy handle when they die.

We have been in Tunis two weeks to-day, and to-night we sail for Italy. At first we were perfectly enamored with the picturesqueness of the Mohammedan life, but later on we heard so many revolting details of the inner life of this strange people that our admiration turned to disgust. I really felt a strong desire to go out and horsewhip every Arab I saw. But, of course, they are not all bad. Some of them are really kind, after a fashion, but even the best of them are tyrants. Think of a lot of men who keep their wives and daughters in a condition of complete servitude. The women are bought and sold just the same as animals. The father sells his daughter to the highest bidder, and the affianced couple never meet till the marriage day. The girl may be sold to a young man, or to a very old one. If she does not happen to please her husband, he will divorce her whenever he gets tired of her. They say there are as many divorces as marriages among the Mohammedans. The form of divorce is very easy. A man just says, "I divorce you," three times, and the thing is done.

We asked our guide, Ali, who had just been married a short time, if his wife was pretty.

"Oh!—she not bad," he said.

"Will you ever let her go out on the street?"

"No, nevaire," he declared.

"But why?"

"Street not place fur wimmens. Arab man—he ver jalous—no let his wimmens out house. Other Arab man—he see her."

Another Arab told us he had been married sixteen years, and his wife had only been outside of the house four times, and on those occasions she was taken to the public baths. I suppose once in

four years is better than nothing. The wives of the wealthy Arabs are allowed out in carriages, but the carriages are closed, and the windows covered with thick, red muslin.

The Mohammedan men never eat with their wives. The women wait on the men, and take anything that is left. The ignorance of the women is something appalling, but what could the poor things know under such crushing conditions. There is no family life as we understand it. The children never play together as they do in our country. As soon as the girls are about seven, they are kept indoors, and become slaves to the men of the house. They address their brothers as "my lord," and wait upon them like servants. The sons have no respect for their mothers, and kick and abuse them just as they would a dog. One of the saddest sights I saw was a little girl of seven, wrapped from head to foot in a haik, with a thick black veil covering her childish face. She was walking solemnly along the street with an infirm old man. I thought of the contrast between the happy Canadian children and the poor little Mohammedan girls, doomed to a life of seclusion, ignorance, and servitude.

The mourning customs of the Mohammedans are very peculiar. When a

relative dies, he is mourned over for forty days. The women do most of the mourning, as it is a disagreeable function, and, of course, the men try to get out of it. The women wail regularly every morning, tearing out their hair, and scratching their faces. At the end of the forty days their faces are raw and sore, and very often are deeply scarred as a result of the mourning process.

I never expected to be glad to leave this land of beautiful burnouses, but I am. I'm glad I've been here, and I'm glad I am going away. Above all things, I am glad I am not a Mohammedan woman. This glimpse of the Orient has made me appreciate more than ever the freedom and liberty of the Land of the Maple Leaf.

LAURA.

Hope's Quiet Hour.

Faithful in Little Things.

He that is faithful in that which is least is faithful also in much: and he that is unjust in the least is unjust also in much.—Luke xvi.: 10.

I begin to feel almost overwhelmed by the kindness of our readers. Last Wednesday I received a letter from one of them, enclosing \$5.00 for some poor girl that needs it very much. The next day a letter arrived from "Another Country Woman" enclosing \$7.00 for someone in need. The givers are obeying our Lord's command, bestowing their alms in secret; and there is no doubt about the recompense promised by Him Who seeth in secret (S. Matt. vi.: 3-4). I expect to spend some of the money this afternoon—giving it to poor patients in the hospital. The rest I shall probably lay aside as a little fund for some case of urgent need which may present itself. I thank the generous givers, on

behalf of my poor friends, and will try to be a faithful steward.

To-day I want to talk about the faithfulness in trifles, which is such an important thing in life. We may speak slightly about "trifles," but faithfulness is never a trifle. When I was in charge of a settlement, a few years ago, I soon found out that common, ordinary faithfulness was worth far more than charming personality, brilliant genius, or a long purse. Sometimes a bright, attractive woman, would undertake the charge of a class of poor children, enthusiastically promising to teach them sewing, drawing, or cooking. When the novelty wore off, and she found the children inattentive or uninteresting, she showed the faithfulness or unfaithfulness of her character. Some of my class-leaders were most unreliable, staying away for very insufficient reasons, or for no reason at all. One stormy day there were seven teachers absent, and I had to handle the children as best I could. But some of my helpers were absolutely faithful. I knew that there was no need to worry about their classes, for they would be on hand in good time, if possible; and, if unable to come, would provide substitutes. Any Sunday-school superintendent would agree with me in saying that simple faithfulness to work



Sand-diviner at One of the City Gates.

Great Captain is watching each soldier in the army, and always knows whether he is at his post and doing his appointed work. What does it matter whether the outside world is indifferent or admiring? The heart of a true servant of God must rejoice if the Master is pleased, and no reward can equal His glad commendation: "Well done, thou good and faithful servant."

Sometimes a man is faithful to duty—faithful unto death—and the world awakes long afterwards to the glory of his deed. When Vesuvius poured out rivers of burning lava on the doomed city of Pompeii, when the air was thick with ashes and black with smoke, a sentinel stood at his post in the midst of the wild confusion, while the people fled madly for their lives. Rome's soldiers were expected to remain at their posts until given permission to leave, and this sentinel chose death rather than disobedience to orders. For seventeen hundred years he was buried under the ashes and lava, and when the city was uncovered, he was found standing erect in his rusty armour, and the skeleton fingers still grasped the spear. He was "faithful unto death"—may we be as faithful to the orders of our Captain! Anyone can do interesting and easy tasks, but the Master's praise is won only by those who work on faithfully—even when the work is wearisome and tiring—until He gives the word to rest.

"Faithfulness" does not mean useless self-martyrdom, it does not mean that we should "work at top speed" all the time. Such foolish waste of life-material is really unfaithfulness. You know that God each day gives you certain duties, and—in order to do them thoroughly and joyously—you must keep yourself as far as possible in good condition.

If you are to harvest your grain swiftly and satisfactorily, your men, horses, and machines, must be strong, and in first-rate condition. So, if we wish to be polished instruments in God's hands, ready to be used by Him wherever and however He may choose, we must do our utmost to keep body, mind, and spirit, healthy and unstrained. We must try to secure needful rest and exercise for mind and spirit, as well as body. If we are always too tired or too busy to pray, or read the Bible, then we are steadily weakening our souls and making them unfit for service. We are being unjust to our Master, stealing for our earthly concerns time that belongs to Him.

"He that is unjust in the least is unjust also in much." We must beware of being unfaithful in little things, of borrowing and neglecting to repay, of promising carelessly and forgetting to keep the promise, of telling secrets which have been told to us in confidence, of doing in slovenly fashion the work which only God is likely to notice.

What a wonderful help and inspiration it is to know that our everyday work, which seems so commonplace and unim-



Arab Whitewashers and French Soldiers.

undertaken is as valuable as it is rare. The world needs faithful workers everywhere, and they are worth their weight in gold always.

Perhaps you are longing to do great things, or feel disappointed because you are not exceptionally clever or accomplished. Remember that the greatest heights are always close beside us, calling for our climbing feet. The opportunity for doing great deeds is within your reach, for there is nothing much greater than everyday faithfulness—the faithful and cheerful doing of the tasks God has appointed.

"O, trifling tasks, so often done,
Yet ever to be done anew!
O, cares that come with every sun,
Morn after morn, the long years
through!
We shrink beneath their paltry sway,—
The irksome calls of every day.

"The restless sense of wasted power,
The tiresome round of little things,
Are hard to bear, as hour by hour
Its tedious iteration brings;
Who shall evade or who delay
The small demands of every day?"

"The boulder in the torrent's course,
By tide and tempest lashed in vain,
Obeys the wave-whirled pebble's force,
And yields its substance, grain by grain;
So crumble strongest lives away
Beneath the wear of every day.

"We rise to meet a heavy blow:
Our souls a sudden bravery fills;
But we endure not always so
The drop by drop of little ills;
We feel our noblest powers decay
In feeble wars with every day.

"Ah, more than martyr's aureole,
And more than hero's heart of fire,
We need the humble strength of soul
Which daily toils and ills require;
Sweet Patience! grant us, if you may,
An added grace for every day!"
It is a grand and glorious thing, this doing of one's everyday duty. The



"For He Had Great Possessions."
From a painting by Watts, Perry Print.



Sir Galahad.

From a painting by Watts, Perry Print.

...to the big world around us, is of great value in God's eyes. At least He cares a great deal about the way we do it, and the motives which lie hidden from every eye but His. If all the world should praise, and God did not care of what profit would our work be! You can delight in your everyday tasks—the "chores" and household duties, which will all have to be done again to-morrow and the next day—for you are working always under the eye of the Master; and quiet, cheerful faithfulness is very precious in His sight.

Those who are really working for God will never shrink from service because it is "common" work and seems undignified. If our Master did not think it beneath Him to stoop down and wash the hot and dusty feet of His servants, then we need not consider any useful work beneath us. A worker in the spiritual kingdom once said that fishing for souls might include digging the bait, carrying the tackle, and rowing the boat. I once asked a nurse, if she would visit some of the children of our settlement in their tenement homes. "Yes," she answered, cheerily, "I will do anything you like. I will take a scrubbing brush along and scrub the floors, if you think it would be any help." Such scrubbing—done for Christ's sake—is surely as sacred a thing as the work of a missionary.

Why should not all scrubbing be sacred? and sweeping and cooking, too? Any work may be made beautiful and glorious—if it is the work God has appointed—by holding it up to be transfigured by the sunshine.

When everything seems to go wrong, when work and prayers bring no visible result, the remembrance that God is your

was ruler over Egypt. God knew where to find the man who had served as a slave, so faithfully that his master made him overseer over his house, and put all his affairs confidently in his hands. He had been faithful in that which was least, had been tested and proved, and was just the right person to be ruler over a great nation.

Be faithful in little things just where you are. At a meeting in Glasgow, a voice called out: "Do you see, sir, how the streets of the New Jerusalem are kept clean?"

"No," answered the clergyman on the platform.

"Well," said the workman, "back one eye sweeps before his own door."

DORA FARNCOMB.

The Ingle Nook.

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

Dear Ingle Nook Friends.—What a distracting thing it is to take a walk down town these spring days—especially if one has not any too much cash in one's pocketbook! Never before, I think, were there such pretty things in the shops. The little hats are pretty, one must confess that while gazing at the inverse ratio of the prices; the new ratine coats are pretty—and they, too, cost horribly; the "latest" crepe de chenes and dimities, cotton crepes and gingham, muslins and silons, embroideries and marquises, are simply dreams. So are the new house-furnishings; the simple, graceful, yet very expensive chairs and tables; the book-cases that make one wild with envy; the hangings of real silk and lace, and the wall-

coverings that range anywhere from a dollar a roll up, at least a still higher price. There is certainly a temptation if one likes pretty things, either to spend wildly, or to be disgruntled because one cannot, and yet—and yet—

Have you ever reflected that, in our anxiety to have pretty clothes and houses, automobiles, and "stunning" carriages, we are really, like the boy in the old school-book tale, paying too much for our whistle?

I am not referring to the high cost of living. I don't mean to emphasize that we are paying exorbitant prices for hard cash for the things we buy, as, presumably, we usually are. I am thinking of the very evident truth—evident to one will but look at it and realize it—that clothes and houses don't make people, although the most of us, taking the world together, act exactly as though we thought just that.

After all, what do the clothes and furbeles really count for in the end? They are soon worn out, and still sooner out of fashion, and that is the end of them. And what do fashionable teas, and such things really count for when the story has been told? Next year they will have been forgotten, gone forever into the oblivion that never fails to swallow up all things that are not really worth while. And so we might go on over the whole list—fine furniture, fine houses, fine carriages, automobiles, offices that depend merely upon wealth or personal ambition for their existence.

True, a little of any of these may be all right. It is not wrong, in fact, it is perfectly right, to want to have a few pretty things, a few merely "sensible" times, if one can afford them. I speak only of the tendency of the majority of people in the present age to spend every bit of time and energy they possess in a mad scramble for, not only enough, but a surfeit of these things. They are paying too much for their whistle. There are other things that count for so very much more.

To illustrate: You and I go through



Death Crowning Innocence.

From a painting by Watts, Perry Print.

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Our Laces were awarded the Gold Medal at the Festival of Empire and Imperial Exhibition, Crystal Palace, 1911

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Lace 1 1/4 in. deep.

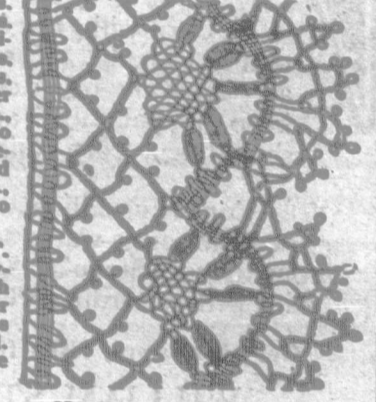
Lace for every purpose can be obtained, and with in reach of the most modest purse. Every sale, however small, is a support to the industry.

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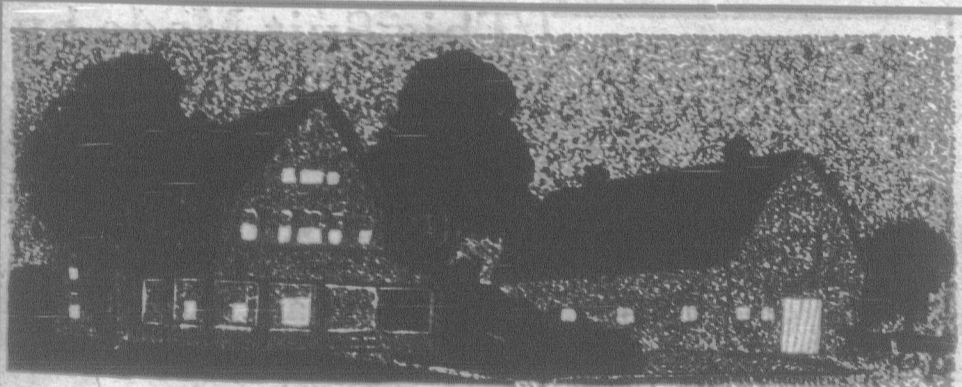


(1 1/4 inches deep.) Stock.—Wheel Design. Price 25 cents each. (Half shown.)



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The Home Electric Light and Water System provides current for regulation electric lighting on a safe low voltage storage battery system—and also stores water under sufficient tank pressure to give good tap flow away up on the second floor.

The equipment is easy to install—almost anyone can set it up. Wiring can be done easily by anyone who can handle simple tools—and the plumbing is very simple.

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So Simple that Your Boy Can Run it
The Home System is very simple. A practically automatic 1 1/2 h.p. gasoline engine that runs without attention. A sturdy pump that draws the water from your well and stores it under about 80 lbs. pressure, in a strong tank, tested to 125 lbs. pressure, 600 gallons an hour capacity. A dandy little high-grade dynamo that generates the current stored in the batteries at the same time as the pump is working—or separately when desired. An improved storage battery, guaranteed not to sulphate, almost "fool proof", requires no complicated knowledge of electricity. Is absolutely safe—couldn't get a shock if you tried. Reliable.

Average Cost 20c. per week
The Home Electric System is shipped ready to install. Write for special terms we are quoting by letter only—or better still, make reservation of your outfit at once. Write to-day.

The Home Electric Light and Water Systems
WELLAND, CANADA

the world meeting a great many humans, do we not? We meet, as a rule, well-dressed, well-fed, pleasant, respectable folk. Some of them talk chiefly neighborhood gossip and little local happenings; others are most interested in real-estate, or, at least, in making money in one way or another; while yet others are more anxious to let you know—and very tactfully they do it—about the little social triumphs that have come to them and theirs.

We enjoy meeting these people—do you and I. They are very kind, and some of them are very sympathetic. But how few of these "ships that pass" do we really remember!—There are so many of each type, all as much alike as so many peas in a pod.

Once in a "blue moon," however, we come upon someone who is, well, "different." Perhaps this new one is a woman, hard-handed from toil, stooped, and weather-beaten, and bony. Perhaps her clothes are all rusty and out of date, and the cart in which she drives to town a ramshackle, old thing with every spoke rattling. But you need only to look into her eyes to see the Vision there. And when she begins to speak you are caught and held, for you realize instantly that your good stars have led you to one of the Queens of the Earth. The words may be in the rude speech that knows not schools, or they may be in the cultured accents of the woman to whom the language of the Bible and of Shakespeare comes as by nature. It makes no difference. There are Ideas and Ideals there. This woman is a Thinker, and almost invariably, a Reader. She has Vision. She has climbed out of the flat lands to the mountain-tops. She has Personality. You mark down your meeting with her as one of the events of your life.

Or perhaps your discovery is a man to whom the silvery beard of age has come. His house there by the wayside may be a little cabin, but it is very likely to be hidden by vines and flowers, and to contain pictures, a musical instrument, and, above all things, books. He has fought the good fight through life, has this man, and possibly, judged by the world's standard, he has been a failure, but you know better. You watch him pottering lovingly among his flowers. You note his friendship with the birds and animals. You watch his kindness to the passer by. And he has the gentleness in him the gentleman, the real gentleman.

Then, perhaps, he speaks to you. You listen to his words of wisdom, you marvel at the keen sense of the balance and worth of things that have come to him. You watch the fire that rises in his eyes and hear it as a kindly, glowing voice, and you thrill to it. As he speaks, you, too, are compelled to think. You are raised above your ordinary level. You perceive that you yourself are capable of higher things. In the words of Emerson, you realize that you are "wiser than you know."

you realize that this man stands alone. You recognize that once again you have encountered a Personality, and take more your record as an event in your life.

Now, I do not mean to imply that Personality (and I speak only of Personality of the highest order) is at all dependent upon poverty (for its realization). You may find it in the man of wealth and position, filled with the sense of his responsibility towards humanity; you may find it in the statesman whose ideal is service (surely there is such an one); you may find it in the young Sir Galahad, setting out, filled with thoughts of high venture; you may find it in the woman of vast possessions, who is great enough to be simple. The point is, that which do you admire most, the hard-handed woman with the Vision in her life, and the grand old man serene among his books and birds and flowers, or the butterfly of the day, interested chiefly in money and what it brings in wearing fine hats and clothes, in entertaining fashionably, and moving in smart society?

Surely it does not take long to choose. And with the choice does not a revelation burst upon you? Personality, the Personality that reaches far above grovelling satisfactions to the things that are Realities is All. Why, then, should we, we folk of the multitude, give up our best energies to attain (wasting precious time thereby, even frittering

away all that counts in our very lives), the silks and satins and furbelows, the offices and silly little social showings of that betoken nothing better than mere wealth and position? This thing is taking place daily in some circles of every city, and it is timidly making an appearance even in some of the country districts where wealth has secured a foothold. Should we not guard against it? Should we not see to it that we give but the dregs of our thought to these frivolities, reserving its best wine for the attainment of Personality, Personality gained not as an end for spectacular purposes, but as a result of best living and development of individuality? For surely Personality can be attained. You cannot think a high thought, or blaze a new trail in the world of Ideas, you cannot read a thought-engendering book, or grasp the golden high-lights of a wonderful lecture or sermon, you cannot feel the beauty of a great painting, or thrill to a strain of wonderful music, without adding to it—to this powerful, undefinable thing that we call Personality.

Would not, then, the part of wisdom seem to be to spend less time, less thought, and energy, less money, on clothes and social ambitions, so that more may be spent on more uplifting things?

To achieve Personality, not for the sake of impressing others, but for the self-realization that it means, to achieve Vision that can lift one above common grovelling, directing the Mental Eye ever to lofty and thrilling and soul-satisfying things—surely this is worth while.

Let us not pay "too much" for the whistle."

A Failure.

The gold that, with the sunlight, lies in bursting heaps at dawn, and glimmers in the silver, spilling from the skies at night, to walk upon, of some life. The diamonds, gleaming in the dew, and He never saw, he never knew, but you know better. You watch him pottering lovingly among his flowers. You note his friendship with the birds and animals. You watch his kindness to the passer by. And he has the gentleness in him the gentleman, the real gentleman.

RE HOUSE DECORATION.

Dear Junia, House-cleaning time is with us once more, and I am coming for help. I would like some suggestions as to decorating some rooms which we are changing this spring. Our sitting-room faces the north with a large window to the north, and a piano window to the east, with a four-foot arch into a small hall on the west side. There are sliding doors between this and the dining-room, which has an east and south window, and a paper would look well on these two rooms, and the hall? I wish you would advise me.

Can a person do the staining of the wood work herself successfully, and what is used? I might just add, there will be a brown and green, with bronze shades, rug, on the sitting-room, and a linoleum, with lawn ground, and green and tan and red figures, on the dining-room. Wishing your department every success.

Lambton Co. Ont.
With such good lighting, you have the choice of many color schemes in decorating your walls. I don't like that word "decorating," in such a connection, but it seems to be the one invariably used. The chief thing that you must remember is that, since you have so many arches, one room being visible from another, all the colorings must harmonize. To achieve this, in such a case, some people paper all the rooms alike, others prefer to paper them in different, yet harmonizing, tones of colors; while some even choose a gradation of tones, placing the lighter one where an effect of space is desired.

Here are a few schemes any one of which would, I think, prove satisfactory provided the right shades were found.
1. Living-room, dull yellow, hall, figure paper in tans and olive greens.

dining-room, olive greens, plain or figured.

2. Living-room, foliage paper in green, old blue, and touches of burnt orange or yellow; hall, dull tan; dining-room, gray-green, or old blue, with touches of yellow in curtains, etc.

3. Living-room, deep, rich cream; hall, warm "stone" color, or figured green and brown; dining-room, tones of green.

4. Living-room, soft stone gray, brightened with old rose in furnishings, etc.; hall, upper portion same, burlap wainscoting in darker tone, say gray-green or dull old rose below; dining-room, grayish tapestry paper, figured with greens.

5. Living-room, buff; hall, tan; dining-room, golden-brown, with cream curtains bordered in brown.

If there is much figure in your carpet and linoleum, you will find it wise to use papers that are either plain or very softly and unobtrusively figured, for your walls.

Some people accomplish staining wood-work very well themselves. It is wisest to buy the prepared stains. Some of these give a dull finish, some have varnish mixed in. The dull finish is considered most artistic, but, of course, that is a matter of taste.

ONE-EGG LAYER CAKE—DELICATE PUDDING.

Dear Junia.—For many years I have been an interested reader of "Ingle Nook," and have found many helpful things in it, and now I would like to try and help some others.

I send my one-egg layer-cake recipe, as Bridget would like it. It is one I make mostly all the time, even when eggs are plentiful, and it is very good. Take 4 tablespoons of butter and beat to a cream, $\frac{1}{2}$ cup of granulated sugar, 1 egg, 1 cup sweet milk, 2 teaspoonfuls of baking powder mixed into 2 cups of flour; flavoring. Coconut or walnut filling can be used.

I thought now that the warm weather will soon be here, I would also give you one of my easy, delicious desserts, called:

Delicate Pudding.—One cup water, 1 cup canned fruit juice, 2 tablespoonfuls cornstarch, $\frac{1}{2}$ teaspoon of salt, sugar to taste, 3 eggs, whites only.

Boil water and fruit juice, sugar and salt; wet starch in a little cold water and stir into syrup; let all boil for ten minutes. Whip eggs stiff, and remove syrup from fire and fold eggs into it and beat till all is thoroughly mixed. Put into mould, set aside to cool, and serve with custard made with the yolks of the eggs, or whipped cream.

"BLUE BIRD."

Lake Muskoka, Ont.

The very heading of your letter, "Lake Muskoka," is enough to give one the wanderlust these spring days. Have you read Kipling's fine Spring song, "The Feet of the Young Men," with its refrain, "Let us go, go, go away from here; On the other side of the world we're overdue," etc.? I think, when he wrote that, it must have been after sitting all winter in an office.

We hear such wonderful stories of the beauties of Muskoka. Lucky you! By the way, thank you for the recipes. Even in Muskoka one must cook! And even if one writes one's self "Blue Bird"!

FINISHING FLOOR—KILLING LILACS.

Dear Friends of the Ingle Nook,—I am but a very recent subscriber to "The Farmer's Advocate," but am beginning to find help from its columns. I hope someone will help me to solve the following problems:

My house is floored with white maple, very nicely laid for the most part. How could I finish it so that it would be both pretty and easily cleaned? I think I should like every second board stained darker before finishing. As I must do the work myself, please make explanations quite plain.

Now, for difficulty No. 2. I have had a carpenter make me some corner cupboards out of nicely-grained white ash, and I must finish them myself. Can anyone tell me how, so that the grain will show well?

And, lastly, is there any way of killing a lilac hedge without rooting it up? It is in a cemetery, and is overrunning its bounds.

Gray Co., Ont.

A NEWCOMER.

Use one of the prepared floor-finishes. Would advise you to write to any good paint and varnish manufacturer (see advertisements in "The Farmer's Advocate") regarding the matter. Most of them supply all sorts of stains and finishes for walls as well as floors. Directions go with the cans.

Your cupboards should be lovely. Use a plain stain, one which has no varnish mixed in with it. This will bring out the grain nicely, and the dull finish will be artistic. If you like a little more polish, wax and rub the surface to a soft gloss. The paint and varnish companies, as a rule, supply floor and furniture wax also.

Keep the lilacs persistently cut down for a while, cutting them especially in June, and they will likely die out.

GOLDEN GLOW—CLEANING CARPET.

Dear Junia.—Will you please tell me if golden glow is unhealthy around a house, and why so? If it is, would it be unwise to use it as a screen from the back door to run by the well, or would it be better to plant it at far side of lawn, from windows and doors?

What is good to brighten colors in a tapestry carpet that has been well beaten and re-laid? Is soap-bark good?

P.S.—What causes dull spots to come on inside of mirrors, about the size of pin-heads, and larger? My bedroom has south and west windows, and the mirror sits back in corner between windows. Can the spots be removed?

SUBSCRIBER'S WIFE.

Durham Co., Ont.

This must surely be a superstition about golden glow. Perhaps someone has confused it with golden rod, which is said to give some people hay fever. We have always had clumps of golden glow close to the house at home, and I can assure you that no ill effects ever resulted from it. If you wish to use it for a screen, you may have to stake it up, as it has a tendency to fall over in autumn. A stretch of chicken-wire fence, covered with morning-glories, scarlet-runners, and nasturtiums, or even with Japanese beans, gourds, or cobs, might be more satisfactory for screening purposes.

Soap-bark is very good for cleaning carpet. Scientific American recommends "Clark's wash for carpets," made thus: Make two solutions. (a) Dissolve 10 parts white soap in 20 parts water, add $\frac{3}{4}$ parts soda and $\frac{1}{2}$ part each of ammonia and alcohol. (b) Mix 4 parts alcohol diluted with water. Apply this second solution first, and when the dirt loosened by it has been removed, apply the soap solution. Rinse.

It is doubtful if you can do anything yourself with the mirror. The spots show that some disintegrating process has been at work, perhaps dampness, perhaps a blistering caused by bright, hot sunshine falling on the surface. An expert furniture man could re-silver the glass for you.

RE HOMEMADE RUGS.

Dear Junia and Nookers.—As I have just finished my mat-hooking, I thought I might help "Isla" out.

We do so much mat-hooking here, in P. E. I., this time of year, that it seems strange to us that everyone does not know how, but I will try and be plain in my description.

You need a hook; that can be bought, by the name of mat-hook, or made, by any blacksmith; also four frames, two to fit the sides, and two for the end of your mat, made from a planed board, three inches wide and one inch thick. Allow both sets a foot longer than your mat requires, so the clamps which hold the frames will be tight when your canvas has been sown in and stretched.

To each of the side frames, fasten with common tacks a strong, double-fold of bed-ticking, to which sew your mat,—after it has been cut perfectly straight,—following a thread of the canvas. Then hem, and bind with braid or strong black cloth or serge, not necessarily new. Next sew your canvas, the long side, to your long frames, place the short frames across the end, and stretch and fasten at the four corners with four clamps. Now rest your mat on four stools; chair-backs are a good height.

Very pretty stamped canvases can be bought ready for hooking. They come in floral and scroll designs, and are

There is nothing like a "Tea Pot" test at your own table to prove its sterling worth!

"SALADA"

TEA "Always and Easily the Best"
BLACK, GREEN, or MIXED. Sealed Airtight Packages Only

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CORN

The King of Crops

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Corn is usually sown from the 15th to the end of May, when the soil is warm and dry. There is therefore plenty of time to order Stone's 2-8-2 or 2-8-6 Fertilizers, which can be applied with the ordinary Grain Seeder; with remarkable results.

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WILLIAM STONE SONS, LIMITED
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Your Local Tailor
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\$25

You can buy it
from us for \$12.50

Why? because we are the largest made-to-measure tailors in England. Your local tailor can't hope to compete with us. We buy all materials direct from the mills, thereby saving the four middlemen's profits your local tailor has to pay before he even starts to make a suit. We give you the benefit of this great saving.

Let us prove it to you. Write us a postal and we will send you 72 pattern pieces of the finest English suitings you ever saw. With these suitings will come a Style Book and a letter, telling you all about our successful made-to-order tailoring system.

As a further proof of our confidence in these suitings we suggest that when you get them, you pick out the pattern you like best; take it to your local tailor and ask him what he will charge to make you an English suit of that quality of material. Then compare his price with that asked in the Catesby catalogue. We are content to abide by your judgment. That's fair, isn't it? Write for these patterns to-day. They will be sent by return mail. Address Canadian office nearest you.

The "ANDOVER" is the fashionable type of single-breasted, two button suit that is now being worn extensively in London and New York. You will be delighted with it. \$12.50.

If these coats are made double-breasted style, 75c extra.
Duty Free and Carriage Paid.

CATESBYS, Ltd., Dept. A. 119 West Wellington St., Toronto.
Coronation Bldg., Montreal.
160 Princess St., Winnipeg.

Or CATESBYS LTD., Tottenham Court Road, London, England.

Your suit is shipped five days after your order is received in London. We guarantee perfect satisfaction in every particular and detail of the transaction. The price includes the payment of all duty and carriage charges by us.

marked as to color, which you can vary according to taste.

The plain canvas can be bought for about 12 cents per yard, single width, and 1 1/2 to 1 3/4 yards in length makes a well-proportioned mat. If you have any artistic talent, you can imitate an Oriental rug by drawing your pattern on the stretched canvas. Or you may cut scrolls, ferns, roses, and leaves from stiff paper, pinning to the canvas firmly, and tracing with pencil or ink.

The scrolls should be veined to each point from a stem running through the middle. These stems and veins should be your darkest shade, shading out to the lightest at the tips.

To make plain, I will tell you how I shaded my mats. I had a scroll, which, as the saying is, "I cut out of my head," and by laying it on the canvas four times, the points met and separated the border and middle, making a very pretty shaped middle. I hooked the scrolls first, veining with very dark brown; and shading to very light brown, just tipping the points with a pale yellow or lemon color. The borders were black, and the middles a mottled gray, for which I used an old blanket with warp and gray filling.

In the second mat, I made the scrolls shaded green and crimson, dividing the scroll by hooking one side next border of the main stem red, and the inside green, and tipping only the green part with lemon color.

To give them the plush effect of Oriental rugs, draw up your rags a little higher, and, with a sharp scissors, or pen-knife, cut each loop and clip off any unevenness. For this you need all-wool rags, as the cotton shows and fades. Diamond dyes will supply all colors and shades. To save time, prepare your rags first by dyeing, cutting, and tying in bunches, or rolling in balls, the different colors and shades; these can be

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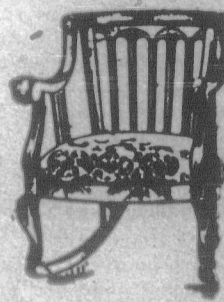
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No. 7

Adams

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We are cutting the price in half, and selling our KING EDWARD HAND-POWER VACUUM CLEANER for

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in order to introduce our celebrated Cleaner among the farm homes of Canada. Thousands of satisfied users in the cities testify to the merit of the KING EDWARD.

This is one of the best offers ever made to the readers of "The Farmer's Advocate." We want you to benefit by it, as the regular price of this machine is \$16.00.

Satisfaction Guaranteed, or Money Refunded.

Cash must accompany order. Don't Delay. Order to-day.

The GEO. H. KING CO. Limited
WOODSTOCK ONTARIO

When writing advertisers please mention this paper.

kept in boxes, and so save much of the confusion of mat-hooking.

In hooking scrolls, you have to follow the curves, but in borders and middles, and wherever possible, hook by a thread of the canvas, each loop near enough the last one to keep the foundation from showing, or about two threads each way. Kitchen, and common, every-day mats, where hard wear is needed, may be made of poorer material, and cotton and coarser rags used, and still, with a little taste, made pretty. We are using mats that have been eleven years in constant use in a kitchen that has been occupied by a family varying from eight to twelve, and are still fairly good; they are as easily cleaned as any other carpet, and save a lot of scrubbing, besides being a warm floor-covering, especially where there are little children.

Make in less elaborate designs what we call "hit and miss," or dark border, filled in with whatever you have, alternately, streaked with a little bright color, or by marking off in squares, four, six or eight inches each way, and tracing with black, then hook the squares alternately across and up and down, shading from dark to light so that they each come in steps all through your mat. In this way, all colors may be used, and by selection, a very pretty rug made.

I am afraid I have made a long story of it, but hope that those to whom it is new may be able to understand my description, and will find it as interesting work as I do. If you succeed in making one mat you will have the "hooking fever" every March, when the bad roads and dreary days come. More than that, it is catching, and all your neighbor friends may take it. Just here I would like to recall the pleasant hooking parties which we so much enjoyed when girls, but which have almost become a thing of the past, but my letter is entirely too long now. No wonder my



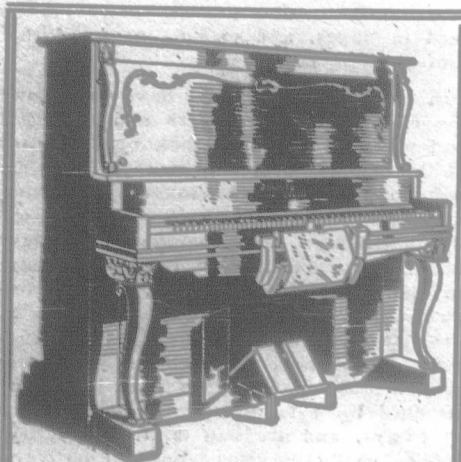
Peep again in your oven.
See those loaves, those *pleasing* loaves you've made.
How fat—rounded—substantial.
No, they *wont* fall when colder.
Because the *Manitoba strength* that is in FIVE ROSES will hold them up till eaten.
This sturdy *elastic* gluten has kept them from dropping *flat* in the oven.
No unsightly holes 'twixt crust and crumb—*never*.
All risen *evenly*—to stay risen.
Never heavy—sodden—soggy—indigestible.
Yours are the FIVE ROSES loaves—
Crinkly and *appetizing* of crust.
Golden brown and tender.
Snowy of crumb—*light* as thistledown.
FIVE ROSES helps a lot.
Try it soon.

Five Roses Flour

Not Bleached



Not Blended



A Piano Owner Paid Us Only \$225 HE NOW OWNS AN 88-Note Player Piano

HE WRITES:—
"The Player Action installed in our Piano a short time ago, we are glad to say, has come up to our expectations. We are much pleased with the simplicity of the Player Action and the instrument as a whole is very satisfactory. We also might say that you need not hesitate to recommend the Doherty Attachable Player Action and I would be pleased to advise anyone should they write me personally."

Write for particulars.
W. DOHERTY PIANO & ORGAN CO., LIMITED
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CONNOR Ball Bearing WASHER

also has handle for turning washer, wringer handle and wringer adjustments all on the same side. No walking around this washer necessary. Another feature is the absence of any centre post or other obstruction around which clothes might wind and tear. Write for booklet describing this washer fully.

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If you have a face void of good looks, spotted, blotched, discolored and poor generally and want a healthy, clear skin, use

Princess Complexion Beautifier
An external remedy that is simple and easy to use, and that produces results. It clears away tan, freckles and other discolorations quickly.
Price \$1.50 delivered
Superfluous Hair, Moles, Warts, etc., permanently removed. Booklet "F" explains. Send for it and free sample of toilet cream.
HISCOTT INSTITUTE Estab. 1892
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COLUMBIA DOUBLE DISC RECORDS

DOUBLE VALUE FOR YOUR MONEY

"good man" says no one will ever want to get a second letter from me.

Spring has truly come, and the narcissus and daffodils are "out." How I long for the gardening-time! I often wonder if I have a "Kindred Spirit" among the "Nookers" and "Patchers." How much I would like to meet them, or hear from them. Now, I must stop, or I will be telling you all about our last summer's garden.

P. E. I. **MINNIE MYRTLE.**

Very many thanks, Minnie Myrtle. You have gone to a great deal of trouble to explain all this. Yes, I fancy there are many kindred gardening spirits among the Ingle folk.

ONE-EGG LAYER CAKE.

Dear Ingle Nook Friends,—In your issue of April 10, Bridget asks for a No. 1 layer cake with one egg. Since Aunt Dee's does not contain baking powder, and I have one which does, and also fills the requirements, as I have repeatedly taken prizes on it, sometimes getting first with fifty competitors, I thought I would send it along, hoping it will be of some use to someone.

Always use same size cup in measuring ingredients. One egg, 1 cup granulated sugar (small measure), butter size of an egg, ½ cup sweet milk, a little salt, and desired extract, 1½ cups flour through which 2 small teaspoons of baking powder have been sifted.

Never melt the butter, but in cold weather, if it is hard, warm the crock you are going to mix the cake in, then begin by mixing the butter into the sugar until it has all disappeared, then break in the egg and beat until creamy, add the salt, milk, and extracts, stir well, and add flour containing the baking powder, then beat until nice and smooth, and bake at once.

Half the success depends on the oven in cakes. If you have too hot an oven and a crust forms on the cake before it has risen, you will spoil your cake. I like this plan: Put a pinch of flour in the oven, and if in three minutes it is a nice brown (not scorched), your oven is at a nice heat, then when you put your cake in, place thin wrapping paper over it, taking care that it is not sagging in the center. In three or five minutes the cake should have risen well at the edges, and so remove the paper, and the center will now come up nicely, and you will have an evenly-topped cake. Opening the oven door will never cause the cake to fall if it is done gently; it is the jarring that causes this. Be careful in closing the door gently also. I might add that I always use a large four-tined fork in mixing, and never put a spoon into cakes.

ANNIE MARIA.

Middlesex Co., Ont.
You are surely generous, Annie Maria. We should put "a nick in the post" to mark having been given a recipe that brings prizes.

ONE-EGG LAYER CAKE.

Dear Junia,—Will you please tell me where I can get black bone? I have tried several places without success.

Here is a good recipe for a layer cake: One egg, 1 cup sugar, ½ cup sweet cream, ¼ cup milk, 1 teaspoon vanilla, 1½ cups flour, 2 full teaspoons baking powder. **LUE.**

Lambton Co., Ont.
Have you written to the T. Eaton Co., or Simpson Co., Toronto, for the article in question?

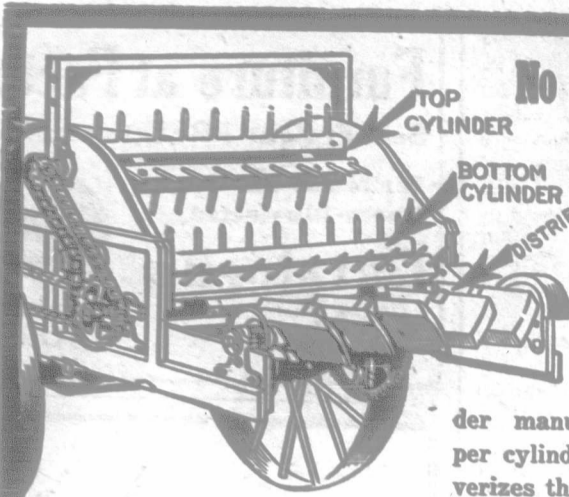
TO SOFTEN CAKE FROSTING—

"1-2-3-4" CAKE.
Dear Junia,—To soften cake frosting, if it should harden before putting it on a cake, add a teaspoon of cream and stir quickly. This will soften it long enough to enable it to be put on smoothly.

I will send a cake recipe: 1-2-3-4 Cake.—One cup butter, 2 cups sugar, 3 cups flour, 4 eggs, 1 cup milk, 3 teaspoons "Magic" baking powder. This is a most useful cake, as it can be varied so many ways. At one time, caraway seeds may be added; at other times, raisins, currants, or citron peel.

A COUNTRY LASSIE
Eggleton, Ont.

LOTION FOR CHAPPED HANDS.
Dear Junia—As I have had many use-



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THE New Idea Manure Spreader has three times as good a pulverizing system as ordinary single-cylinder manure spreaders. The upper cylinder of the New Idea pulverizes the top of the load and the

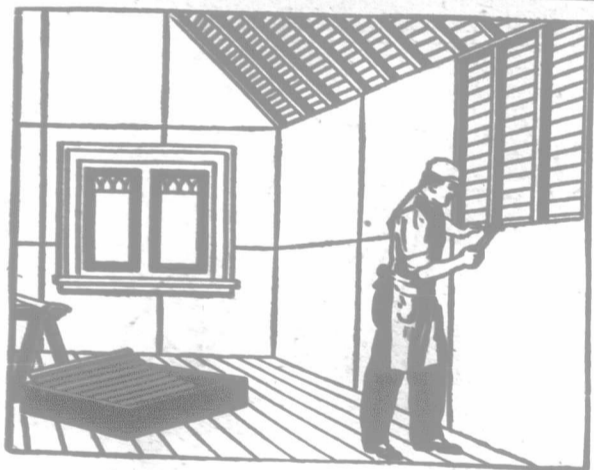
lower cylinder the bottom—doubly as sure as the single-cylinder method. Cut if a chunk of manure should happen to squeeze through the sharp-pointed cylinder teeth, the knife-edged distributor paddles complete the pulverizing—three times as certain as the single-cylinder method. These distributor paddles of the

New Idea Manure Spreader

are set at an angle and spread the manure like a shower, and spread it wider—guaranteed to cover the wheel tracks. The New Idea is the only spreader with any radical improvements. Others have been little changed in thirty years. Write for booklet, explaining complete construction of this light-draft, gearless, powerful, steel-wheel, low-down machine.

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BISHOPRIC WALL BOARD AND SHEATHING

Bishopric Wall Board is made in sheets 4 x 4 feet by imbedding dressed laths, under 500-lbs. pressure, in one side of a sheet of hot Asphalt-Mastic and surfacing the other side with sized fibre-board. It comes to you in crates of 16 sheets, ready to nail on the wall, and any handy man can put it on in far less time than skilled workmen can apply lath and plaster.

Bishopric Wall Board goes on DRY, so that you can move into the house the day it is finished, without weeks of waiting for it to set and dry.

On account of the lath (and Bishopric is the only Wall Board made with lath) it makes a flat, rigid, substantial wall. On account of the patented Asphalt-Mastic it makes a moisture-proof, rat and vermin proof, fire-resisting wall, warm in winter and cool in summer. On account of the surface of sized fibre-board it makes a wall that is easily painted or papered.

The first cost of Bishopric Wall Board is less than that of lath and plaster—it never falls off, so costs nothing for repairs—and it saves on the fuel bills every winter.

If you are building or re-modeling, fill out and mail the coupon above—it will bring you information of real dollars-and cents value.

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This is the grandest Washer the world has ever known. So easy to run that it's almost fun to work it. Makes clothes spotlessly clean in double quick time. Six minutes finishes a tubful.

Any Woman Can Have a 1900 Gravity Washer on

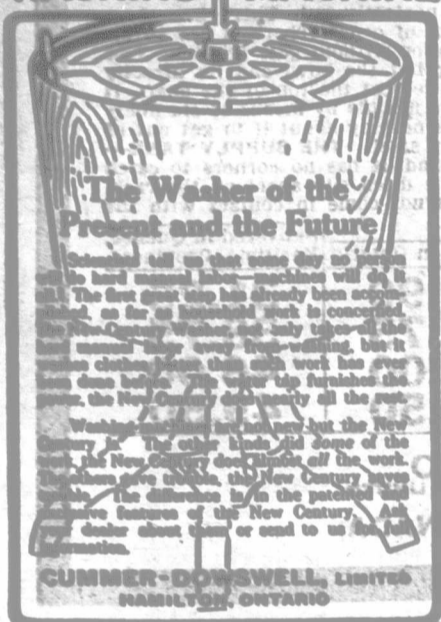
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Don't send money. If you are responsible you can try it first. We pay freight. See the wonders it performs. Thousands being used. Every user delighted. They write us bushels of letters telling how

It saves work and worry. Sold on little payments. Write today for particulars and beautiful illustrated Free Book. All correspondence should be addressed to me personally.

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UNIVERSITY KINGSTON ONTARIO

ful hints and questions answered in your "Ingle Nook," I thought I would send you and your many subscribers a very good lotion for chapped hands. As it costs only fifteen or twenty cents at a drug store, it may easily be had.

Lotion.—Two drams gum tragacanth, 2 ounces glycerine, 5-cents' worth oil of bergamot. Soak the two drams gum tragacanth in one pint rain water for 24 hours. Strain through a coarse cloth, and add glycerine and oil of bergamot.

Thanking you for past kindnesses, I am
A FARMER'S DAUGHTER.
Lambton Co., Ont.

News of the Week.

CANADIAN.

An earthquake occurred in Ottawa and Montreal on April 28th.

The condition of the Duchess of Connaught, who underwent an operation in England, is still serious.

Parliament has taken steps towards the expansion and development of the Canadian Art Gallery at Ottawa.

A wireless-telegraphy station may be erected on Toronto Island in the near future.

Stefansson, the Arctic explorer, will take twelve scientists with him on the Canadian expedition that is to sail for the far North in June.

Dr. Friedmann returned to Montreal on May first to see his patients, and to form a Canadian Company for the sale of the serum. A large United States drug company has bought the right of distributing the serum for \$125,000 cash, and \$1,800,000 stock in 36 tuberculosis institutions to be established in various parts of the United States. The first has already been started in New York City.

Kenneth Forbes, of Toronto, age twenty, has had a picture accepted by the Royal Academy, London, for this year's exhibition.

BRITISH AND FOREIGN.

President Wilson's tariff-revision scheme is meeting with bitter opposition in the sugar and wool States.

The love letters of Browning and Elizabeth Barrett Browning were recently bought by Sabin, in London, for £6,550.

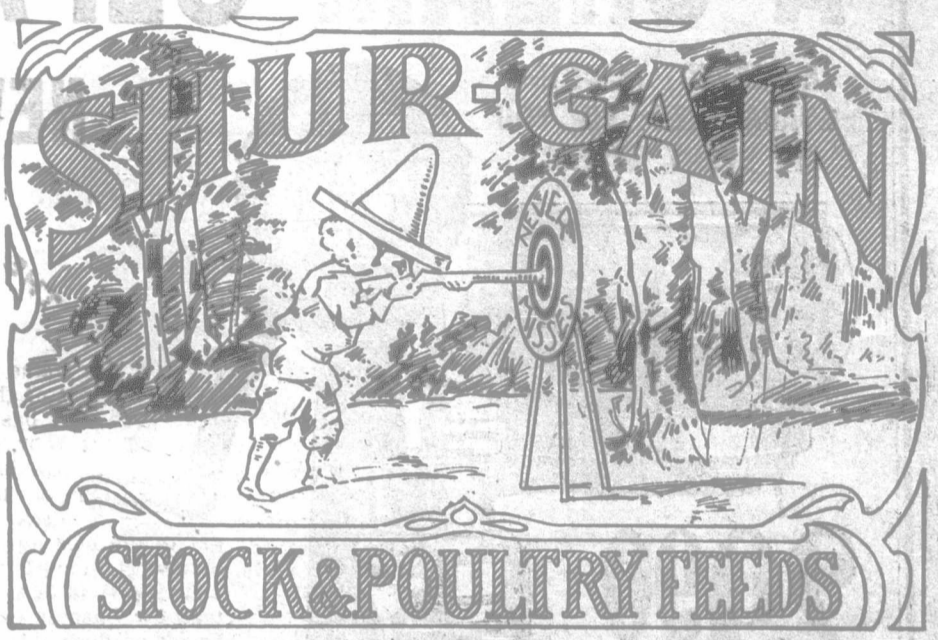
As a result of the council held at Cettinge on May 3rd, King Nicholas of Montenegro decided to yield to the Powers and evacuate Scutari.

A new inner "skin," designed to protect the vessel in case of collision with icebergs, has been placed in the Olympic, at a cost of over \$1,000,000. A similar lining is being placed in the new Imperator, of the Hamburg-American line, which will be the largest vessel afloat.

Dr. Sun Yat Sen will visit America this year. It is thought that his visit will relate to his task of developing a railway system in China.

The London police are said to have discovered a suffragette plan to set fire to London in various places, and to cut all telephone wires in the vicinity of each. A plot to remove Mrs. Pankhurst from England by aeroplane has also been unearthed. On April 30th, six leaders of the Women's Social and Political Union were arrested, and their books and documents seized. The publication of the suffragette weekly organ, of which Christobel Pankhurst is editor, was also suppressed, on the grounds that it has been advocating criminal attacks upon property.

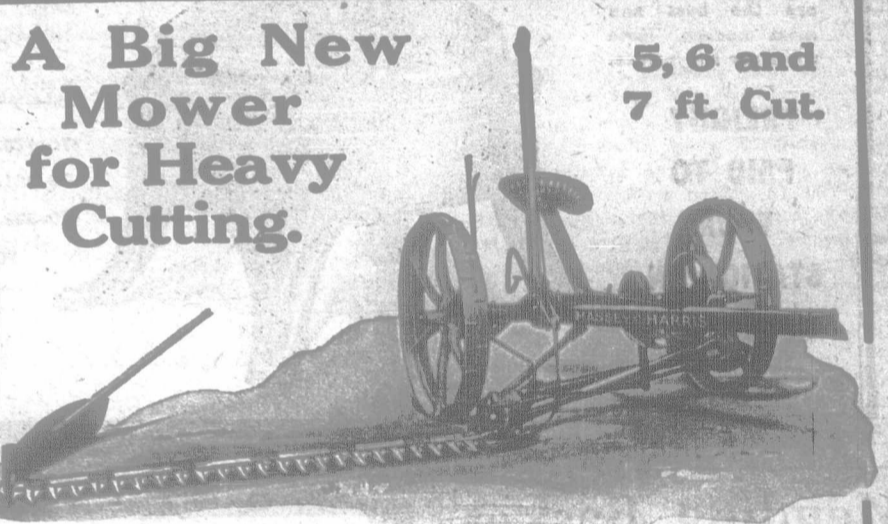
GUNNS



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Or any other line of Stock or Poultry Food. Write:

GUNNS LIMITED, West Toronto



A Big New Mower for Heavy Cutting.

5, 6 and 7 ft. Cut.

Wide Tread—Wider than on any other Mower—ensuring steady running and overcoming side-draft.

Improved Clutch and Throw-out Device.

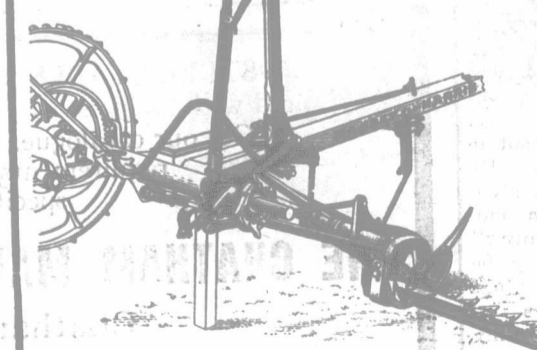
New Simplified Lift—(See Cut)—Attached direct to the Frame. Pole may be removed, without affecting the Lift or any other parts.

Push Bars are especially heavy and stiff, have Screw Connections at both ends and both ends are machine fitted.

Hinged Coupling has long broad Bearings and heavy Pins, doing away with any looseness of the Bar.

Lift Spring is placed at the rear, giving a direct connection and is easily accessible for adjusting.

The Sections are longer than on any other Mower, giving longer cutting edges and greater clearance.



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PER HOUR

These Separators
skim very close, are
strongly built, and
are the best and
most modern. Note
the size and price.

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The frame of our new Separator encloses every particle of gearing. The bowl casing is a part of this solid one-piece frame, and it is impossible for it to get racked out of true. The base is heavy, and cast in one piece. It is just high enough to lift the frame off the floor, and open enough to allow of sweeping underneath. The top cap lifts off, giving access to the top drive gear. The door in the frame just below the bowl casing opens to expose the worm and lower gear wheel, thus all parts are readily accessible, yet entirely enclosed, so that no dust or dirt of any kind can get to the bearings, nor can fingers or clothing be caught in any exposed gearing. The frame is low. The top of the supply tank is only 34 inches from the floor—just waist high. This allows milk to be poured into it without high lifting, and makes it convenient to use the supply tank for washing the skimming device in. There are no protruding shelves, as your pails can be set on floor safe and solid. The crank handle is just the right height, where your hands grasp it naturally without bending low or reaching. The design of the frame is graceful, and the finish, a rich red, gives it a handsome and distinguished appearance, in keeping with its mechanical excellence.

WORKS PERFECTLY—WILL SAVE YOU DOLLARS

GEARINGS are all made of the best-known materials, accurately and perfectly cut. There are absolutely no frail parts or intricate intermediate gears to break or get out of order. There is not an interval of lost motion between the teeth of gear, thus insuring steady motion without gear friction. THE RATCHET—When you stop turning the handle everything stops turning but the bowl and its directly connected parts. Our ratchet for this purpose is situated under the spin gear at the top of the shaft. It is positive in its action. THE PATENT NECK BEARING is made flexible by means of six finely tempered springs, which are easily adjusted by hand. There is nothing about it to get out of order. THE BOWL is made seamless. It is one piece, of Shelby steel. THE SUPPLY TANK—This is seamless, is thoroughly retinned, self-draining and round. It has no corners to catch dirt. CLEANING—The skimming device is easily cleaned. The discs slip apart on the rack, so that in washing there is not a speck of surface that does not come in contact with the water. We guarantee it.

Number.	Capacity.	Delivered in Ontario.	Delivered in Quebec, Maritime Provinces.
70-320.	300 to 350 lbs. of milk per hour.	29.90	31.25
70-321.	500 to 550 lbs. of milk per hour.	38.75	38.75
70-322.	700 to 750 lbs. of milk per hour.	46.00	46.00
70-323.	850 to 900 lbs. of milk per hour.	49.50	49.50

THE T. EATON CO LIMITED
TORONTO -- CANADA

Mending Basket.

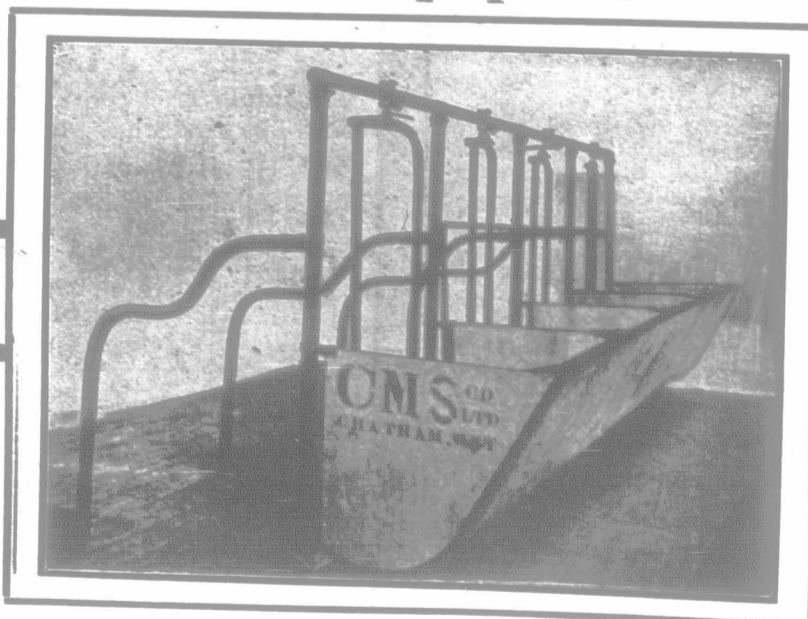
A Plea for Clean Bread.

Editor "The Farmer's Advocate and Home Magazine":

Spring is now well advanced, and the hot summer days will soon be here. With the coming of these dry, hot, summer days, the farmer's wife will again be tempted to buy baker's bread, and escape at least a portion of baking-day's misery. Of late years this has become a general practice, and the town baker, calling at the door two or three times a week, has greatly simplified the baking problem. Assuming that baker's bread has the same food value as the homemade article, and that it is made and delivered in a perfectly sanitary condition, the proposition looks exceedingly good, and, in all, a decided advantage.

Now, the writer has no desire to pick a quarrel with the bakers, nor to run down their bread in general, but when it comes to sanitary conditions, the average town baker doing a country-delivery business, is in a class by himself. We will not touch the bakery itself, but assume that it is sanitary, through Government inspection, and view the baker or his man as he comes to our door. As a rule, he wears dirty, slouchy clothes, and carries the bread in an open wire or wicker basket. He deposits the basket on the back step, right where the dog or cat has a moment ago, and asks, "How many?" Now, wicker or wire baskets may be light and handy, but repeated droppings on the various different classes of ground and back steps must certainly dirty the bottoms, and the dirt must work into the basket. This is not the

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least, though. How many times have you seen the baker carrying a basket piled high with bread, and the top loaves leaning against his dirty coat? Such a sight is disgusting, and is true in the average case.

Most of these bakers also sell a number of loaves to the local grocer for the benefit of persons not on their route. The average bake-wagon will not hold enough bread for this huge demand, and as a result the bread is stacked on top, with a canvas thrown over. All the dirt and dust along the road works in under the canvas and spreads among the loaves. Under the seat a basket of cakes reposes, and wicker-work, of course, is absolutely dust-proof.

All this is unnecessary and preventable at a slight cost, but hundreds of bakers will run the roads with such equipment this summer. The writer knows of one baker in particular who is an absolute disgrace to his community. The rig is nearly a wreck, and huge cracks let the dust sift in on everything. The driver is a perfect slouch, and does not even use ordinary care in handling the bread. The idea of his hands touching the bread would turn the stomach of those who took time to notice. This baker, however, has perhaps the largest sale in the country districts, and his town store is a shining example of perfect order and cleanliness.

Now, the question of clean bread may look small at first, but if the farmers would get together they could demand as good service as their town cousins. If a shining store is needed in town, with white-aproned salesladies, etc., why should the farmer not at least have as good service? There is no reason why, and if we get together we can get what we want. By every right, our bread should be wrapped in dust- and germ-

Calculating Your Profits Per Acre

will be a much more interesting and gratifying undertaking next Fall if you make up your mind to use a quantity of

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on your crops this Spring. Do you want to be among the thousands of prosperous farmers who will, at the end of the season, reap the benefits of increased yield obtained through the use of these materials, or are you going to be satisfied with the usual starvation crop, and know besides that all your Summer's work has been practically wasted, and that you are no further ahead financially than when you started.

It is Up to You to Act at Once

If you will send us particulars of the crops you intend growing, also the nature of your soil, we will assume the responsibility of recommending the fertilizer for you to use.

We are in a position to ship goods in any quantity the same day order is received, and we will prepay freight on all orders for 500 lbs. or more to any station in Ontario. Can you afford to let another year go by without giving Davies' Fertilizers a trial? Answer that question by writing us at once to forward you enough fertilizer for at least one acre of each crop you have on your farm.

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It's close enough to keep small fowl in and strong enough to keep large animals out. Securely locked together at each intersection of the wires. It's many times heavier and stronger than poultry netting, and being well galvanized, will last many years longer. Top and bottom wires are extra heavy. No top and bottom boards required. PEERLESS Poultry Fence is built so strong and heavy, that but half the ordinary number of posts are required. It gives you real fence service.

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Read this Letter
Dear Sir: I am writing a testimonial as to the strength of PEERLESS Junior Chicken Fencing. Mine is four feet high. It turned two horses each weighing 1600 pounds. They ran full tilt into the fencing about 1 rods from each other at the same time. The result was that they both turned a somersault over the fence, alighting on their hands and necks, scratching them up some, but the fence remained intact.
Yours truly,
Surrey Center, B. C. Joe Boothroyd

Think of it—a poultry fence strong enough to withstand the combined weight of two big horses. And that without a top or bottom board either. If you are interested in such fencing, write us. Ask for our literature. We also manufacture farm fence and ornamental gates.

Agents nearly everywhere. Live agents wanted in unassigned territories.
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We now offer a few good young sows sired by S. H. Jack (Imp.) 28515, breeding age. We have also a large number of March and April pigs out of such sires as Oak Lodge Julius, S. H. Jack & M. G. Chester 6th. Pairs not related. We have farmers' pigs at farmers' prices and can handle orders large or small. S. H. Jack (Imp.) 28515, champion boar for three successive years at Toronto, our main sire. S. H. Romeo 38653, sired by S. H. Worsley 4th 25881, another Toronto champion, is a younger sire of great individuality. Write us your wants, we will attend to them promptly and satisfactorily. Our stock of young pigs is par-excellence.

H. S. McDIARMID, Fingal P. O., Ontario.
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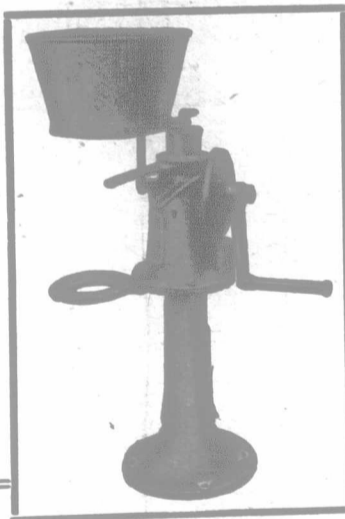
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The kind that lays. \$1.25 for fifteen.
WILLIAM BARNET & SONS
Living Springs, Ontario

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which will secure you the most
profit from your milk
this season.

THE "PREMIER"

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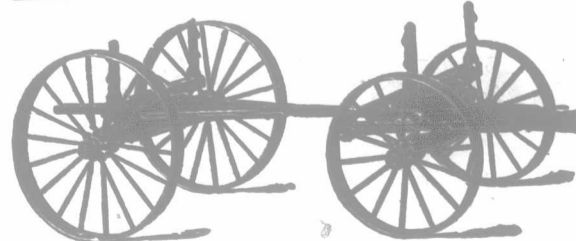
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and will prove
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proof paper bags, as is now the case in large cities. If the bags are needed in the city, they are certainly a necessity in the country. For the present, we could get along with a sanitary delivery-wagon, a heavy-bottomed basket to replace the disgraceful wire one, and last, but not least, white clothes and gloves for the man who handles the bread. We need these things, and we must make an effort to get them. Let us all suggest these improvements to our local bakers, and give our trade to the man who takes the lead for better and cleaner service. A READER.

A LEVEL-HEADED BRIDE.

In an article in the Boston Sunday Post, I noticed an article headed, "Bride and Groom Get Health Certificates Before They Marry." Then followed a statement entitled, "What the Bride Says."

"I consider the matter of a health certificate just as important as the license. There is too much misery in the world on account of sickness. The wife-to-be and the husband-to-be should know in advance that there is no hidden tuberculosis or other disease in the other."

Just below we read what the physician says.

"I believe the time is coming when there will be a law in every State in the Union requiring a certificate of health as well as a license for couples who wish to get married."

(DR. W. H. PETERS, of Providence.)

Light is dawning at last. We feel like congratulating the young woman who wouldn't run the risk of marrying a man until she was certain that no hidden disease lurked within his system which would entail hereditary disease on their offspring. What a comfort for the young couple to know that they are sound in mind and body; to know that their children will not fall victims of hereditary consumption, etc. Surely this knowledge will increase their happiness. It will also exert a favorable effect on their health during future years, as happiness is largely dependent on the state of the mind. The originator of the idea surely deserves a medal for she has shown the world that she possesses good common sense, courage and firmness. It is to be hoped that many others will follow the example of this eugenic couple.

Here in this Province people are marrying and giving in marriage, without a thought of the consequences. Pale, sickly girls, having diseased lungs or other ailments, thoughtlessly marry, and bear children who linger, suffering for a little while, and die, while their frail mothers, worn out by disease and toil, sink into an early grave. What an amount of disease and suffering would be prevented if a law were enacted requiring every person before marriage to submit to a medical examination, and obtain a health certificate.

It is certainly a serious business for a man to marry a sickly, delicate girl, or a girl to marry a diseased man. It is much easier to get into trouble than to get out of it. Young people are generally thoughtless and wilful, but how often they learn lessons in the school of experience. If only the physically sound in mind and body were allowed to marry, how suffering and misery would be lessened. The sooner a law to that effect is enacted, the better for all concerned. It is surely almost a crime for parents to bring children into the world handicapped by hereditary disease. Poor, innocent little ones, brought into the world to suffer for the sins of their parents! Oh, the pity of it all!

It is true that many people appear to take more interest in the physical welfare of animals than they do in that of human beings. Surely much of the sickness and misery at present existing among the human family could be prevented by proper laws enacted, and strictly enforced.

Imagine the disappointment and sorrow which fills the heart of the young, trusting wife, when she finds out, after marriage, that her husband is suffering from an hereditary disease. The man she loved so well has deceived her, and she trusted him fully.

George Elliot wrote: "There is no killing the suspicion that deceit has once begotten."

Young man, would you wish to trans-

mit an ailment to the loving, innocent maiden who has promised to marry you? No, not if you love her truly, and unselfishly, as a husband should love a wife.

Maiden, if you fear that your lungs are unsound, would you wish to lead your lover to believe that you are in robust health? Surely you would not try to deceive him thus! For his sake, and for your own, at least, postpone your wedding and try every means possible to regain your health. Remember the wife has to shoulder the heaviest end of the burden of life. Be warned before it is too late. Instead of marrying, start out in earnest and use every means available in order to recover from your ailment. You have only yourself to look after now. Don't, for pity's sake, attempt to drag others down with you into the sea of trouble.

James E. Roche has written:

And I read the moral—A brave endeavor
To do thy duty, whatever its worth,
Is better than life with love forever,
And love is the sweetest thing on earth.

Young people, if you walk in the path of duty you are safe. It is certainly your duty to preserve your health in the best condition possible. If you violate the laws of health; if you neglect to take out-door exercise; overload your stomach; neglect to inhale plenty of pure air daily, or are not temperate in all things, then you are simply inviting disease. If any person who reads this has inherited weak lungs he has no time to lose. The disease is at work, and is silently but surely undermining his constitution. The longer it is neglected, the harder it will be to effect a cure. Start at once—fight for your life! Camp out of doors; breathe deeply and take exercise; drink milk fresh from the cow; eat plenty of good, nourishing food; swallow five raw eggs daily, and have in mind a woman who, judging from appearances, was dying of consumption, but the out-door life and raw eggs restored her to robust health, apparently. If you live in a city, start for the country and enjoy the wonderful works of Nature. Inhale the sweet perfume and revel in the glorious, enchanting beauties springing up in wild profusion all around you. Here is a beautiful verse written by the poet, Longfellow:
If thou art worn and hard beset,
With sorrows that thou would'st forget,
If thou would'st read a lesson that will keep
Thy heart from fainting, and thy soul
From sleep,
Go to the woods and hills! No tears
Dim the sweet look that Nature wears."
ANNIE RODD,
Prince Edward Island.

Scotch Division.

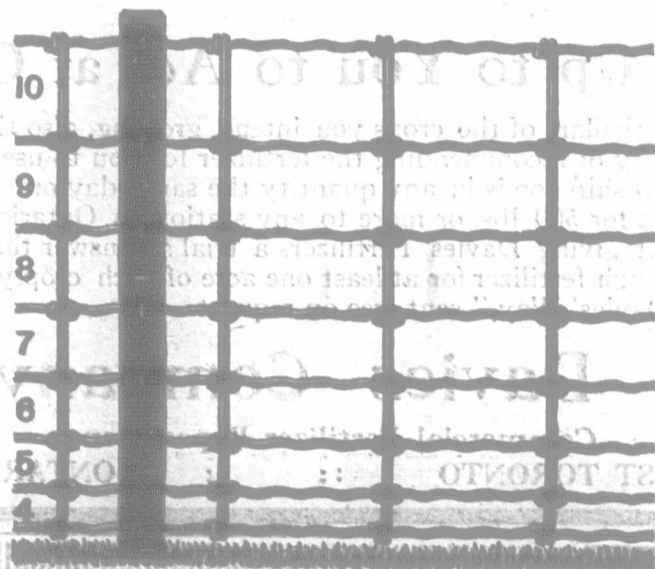
At a school north of the Tweed the teacher was instructing his class in the rudiments of simple division.
"If," he said to one of the boys, "I had twenty marbles and I wanted to divide them, Willy, between you and MacGregor, how many would you get?"
"Ten, maybe," said the boy.
"Why 'maybe'?" asked the master.
"Because, sir, MacGregor wouldna gie me ten unless you were standing by."

Trade Topic.

Zenoleum is an effective destroyer of lice and other vermin, and is a safe and reliable disinfectant and antiseptic. The manufacturers of Zenoleum have published a little book, "Zenoleum Veterinary Adviser," which contains much of interest to farmers and stockmen. It gives methods of treatment of diseases common to all classes of stock. Zenoleum has come to be a very popular thing among owners of live stock in Canada, the United States, and foreign countries. It is recommended by good authorities, as shown by testimonials in the Zenoleum Veterinary Adviser. This book gives descriptions of diseases, their cure, and symptoms. Sixty-four pages of this information may be had free by any reader of "The Farmer's Advocate" who writes The Zenner Disinfectant Company, 312 Sandwich St., Windsor, Ont.

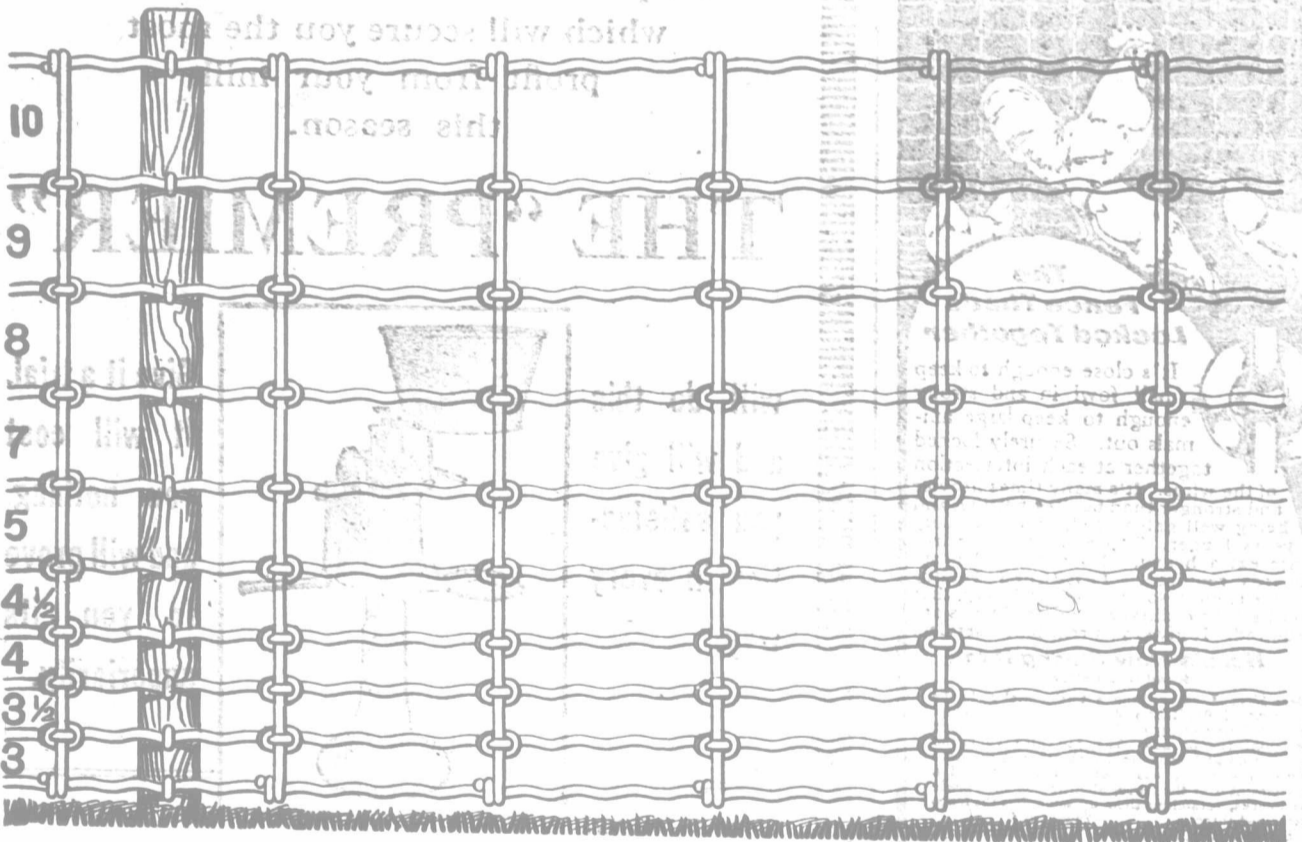
THE CANADIAN FENCES

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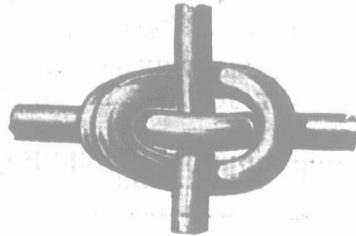


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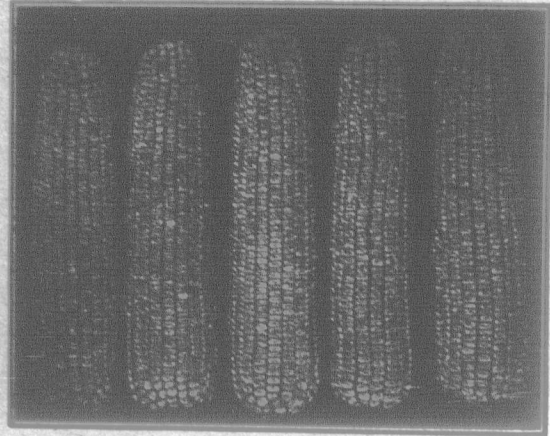


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EARLY OHIO

Choice stock, the earliest and best, \$2.00 per bag.

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IRISH COBBLER

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DELAWARE (Late)

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SEED CORN

BUY YOURS ON THE COB

All Tested.—We will not send seed out that does not test 85% and better.

Wisconsin No. 7, on the cob. Something special, field selected, fire-dried, full of life, tests almost perfect. Nothing better to be got anywhere. We do not believe there is anything half so good on the market. The price is high but we want you to prove, as we have proved, that it is well worth it. How much would it cost you in good hard dollars and loss of crop should your Seed Corn prove to be no good? It would cost you a great deal to replant it. It would cost you loss of time and make your Corn late in maturing. In fact it would not mature before frost comes from the second planting.

We have available the very choicest of Corn. It is extra fancy. Nothing better could have been grown nor reserved elsewhere.

At the great convention of Corn growers in Windsor last winter experts discussed the price of good seed Corn. It was admitted that the lowest price that should be charged for the real thing should be \$3.00 a bushel. We can put you in this very best at this low price, \$3.00 per bushel of 70 lbs., bags free.

Below find our prices ex-warehouse, Toronto

Wisconsin No. 7, Ontario grown,	price on the cob	\$1.35	per bus.,	bags free.
White Cap Yellow Dent, Ont.,	shelled	1.35	"	"
Improved Leaming	on the cob	1.25	"	"
Longfellow Flint	shelled	1.25	"	"
Compton's	on the cob	1.50	"	"
King Philip	shelled	1.50	"	"
North Dakota White Flint	on the cob	1.75	"	"
	shelled	1.50	"	"

The Eureka Hand Corn Planter, \$1.25 each.

her mother, for she loved her dearly. The clock had just struck two when she started off, but the moon was shining already. The storm came with all its fury before they had expected it. It was a very blinding snowstorm. She wandered around, up and down hills, but she never reached the town.

Meanwhile, her parents were searching all night, but they could not find her. At daybreak her mother spied one of her footprints. She followed the tracks down a hill, past a long, stone wall, down to a small bridge. She could not trace any more footprints, so they concluded that she was drowned. Yet some people still believed that she went along as merrily as ever.

I wish some of the senior Beavers would write to me. I would be glad to reply. Wishing you every success.

EFFIE STOLZ.

(Age 18, passed Entrance.)

Auburn, Ont.

The "Farmer's Advocate" Fashions.

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Order by number, giving age or measurement as required, and allowing at least ten days to receive pattern. Also state issue in which design appeared. Price ten cents PER NUMBER. If two numbers appear for the one suit, one for coat, the other for skirt, twenty cents must be sent. Address Fashion Department, "The Farmer's Advocate and Home Magazine," London, Ont. Be sure to sign your name when ordering patterns. Many forget to do this.



7464 Semi-Princess Dress for Misses and Small Women, 16 and 18 years.

7412 Boy's Russian Suit 2 to 8 years.



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7728 Semi-Princess Gown, 34 to 42 bust.



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Get the Cream

Don't be content with skim milk profits from your livestock; get the best of it, all that is due you. Just put your horses, cattle, sheep and hogs in condition to do more work, produce more milk, make greater gains in flesh. That is the secret of success. This is easy! Just use

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Good for man or beast. They quickly cure cuts, wounds, sores, galls, burns. 25c, 50c. Sample mailed for 2c. "Your money back if it fails!"

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Have you bought a Cream Separator yet? If not we would like to send you a "Melotte" Cream Separator on trial. You are under no obligation to buy unless it gives you perfect satisfaction, and unless you like it better than any other separator you have ever seen.

Stop and think for a moment what our offer really means. You must instantly recognise that we or no one else could afford to make this liberal proposition unless we had a separator that would back up every claim that we make for it. Here are our claims:—



We claim that the "Melotte" Cream Separator will skim to rated capacity.

We claim that the "Melotte" Cream Separator will turn easier than any other separator made in the world.

We claim that no separator can beat the "Melotte" Cream Separator as a close skimmer under any conditions.

We claim that the "Melotte" Cream Separator under average farm or dairy conditions, is vastly superior to any other separator made.

We claim that the "Melotte" will give the best of all round service and satisfaction.

The "Melotte" Cream Separator has won 162 Grand prizes in the important competitive dairy exhibits in Europe and in foreign countries. It would be useless for anyone to tell you that it won them on anything but merit. Nothing but merit could win in this number of contests, and no separator but the wonderful "Melotte" could walk away with practically every first prize in all the important exhibitions.

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Use our Long Distance 'phone 1478 at our expense any time.

Rebecca of Sunnybrook Farm.

By Kate Douglas Wiggin.

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CHAPTER XXIX.

MOTHER AND DAUGHTER.

Two months had gone by,—two months of steady, fagging work; of cooking, washing, ironing; of mending and caring for the three children, although Jenny was fast becoming a notable little housewife, quick, ready, and capable. They were months in which there had been many a weary night of watching by Aurelia's bedside; of soothing and bandaging and rubbing; of reading and nursing, even of feeding and bathing. The ceaseless care was growing less now, and the family breathed more freely, for the mother's sigh of pain no longer came from the stifling bedroom, where, during a hot and humid August, Aurelia had lain, suffering with every breath she drew. There would be no question of walking for many a month to come, but blessings seemed to multiply when the blinds could be opened and the bed drawn near the window; when mother, with pillows behind her, could at least sit and watch the work going on, could smile at the past agony and forget the weary hours that had led to her present comparative ease and comfort.

No girl of seventeen can pass through such an ordeal and come out unchanged; no girl of Rebecca's temperament could go through it without some inward repining and rebellion. She was doing tasks in which she could not be fully happy,—heavy and trying tasks, which perhaps she could never do with complete success or satisfaction; and like promise of nectar to thirsty lips was the vision of joys she had had to put aside for the performance of dull daily duty. How brief, how fleeting, had been those splendid visions when the universe seemed open for her young strength to battle and triumph in! How soon they had faded into the light of common day! At first, sympathy and grief were so keen she thought of nothing but her mother's pain. No consciousness of self interposed between her and her filial service; then, as the weeks passed, little, blighted hopes began to stir and ache in her breast; defeated ambitions raised their heads as if to sting her; unattainable delights teased her by their very nearness; by the narrow line of separation that lay between her and their realization. It is easy, for the moment, to tread the narrow way, looking neither to the right nor left, upborne by the sense of right doing; but that first joy of self-denial, the joy that is like fire in the blood, dies away; the path seems drearier and the footsteps falter. Such a time came to Rebecca, and her bright spirit flagged when the letter was received saying that her position in Augusta had been filled. There was a mutinous leap of the heart then, a beating of wings against the door of the cage, a longing for the freedom of the big world outside. It was the stirring of the powers within her, though she called it by no such grand name. She felt as if the wind of destiny were blowing her flame hither and thither, burning, consuming her, but kindling nothing. All this meant one stormy night in her little room at Sunnybrook, but the clouds blew over, the sun shone again, a rainbow stretched across the sky, while "hope clad in April green" smiled into her upturned face and beckoned her on, saying:—

"Grow old along with me,
The best is yet to be."

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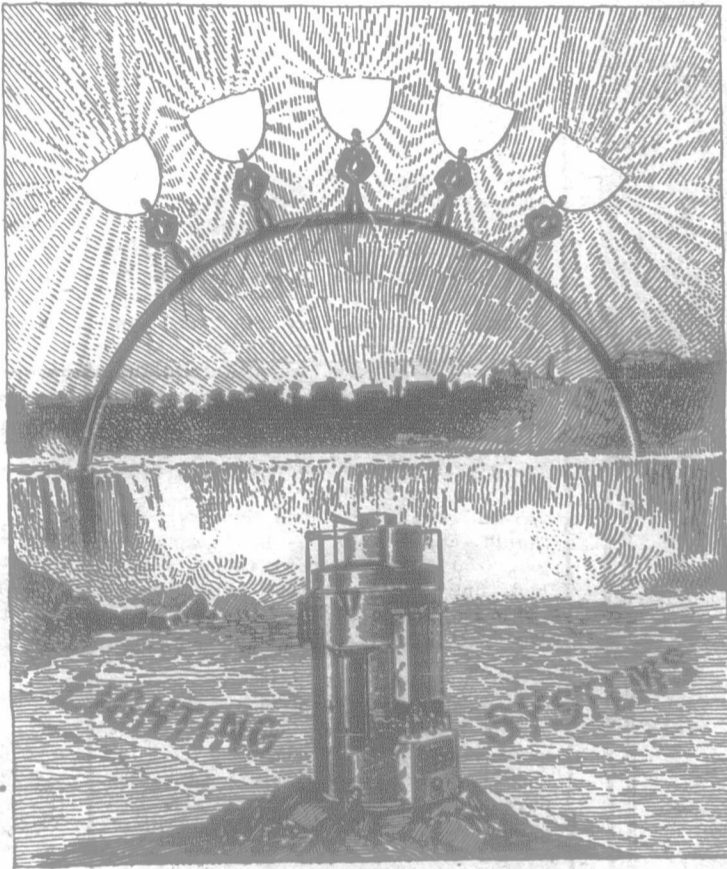
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The little machine shown in this picture can be placed in one corner of your cellar, and will supply beautiful light to beautiful chandeliers in every room of your house, as well as to your barns, in enclosed globes; also supply gas for cooking, the same as in any city home.

Lights anywhere by merely pulling a chain or pressing a button—no matches necessary.

BE INDEPENDENT—have YOUR OWN system for lighting and cooking. Costs no more than the value of a good horse to instal one.

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State how many rooms you have, and we will tell you exact cost to instal a System, also send you one of our illustrated booklets.

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CANADIAN CARBON CO., 50 West King St., TORONTO.

ADVOCATE ADVERTISEMENTS PAY.

Threads of joy ran in and out of the gray tangled web of daily living. There was the attempt at odd moments to make the bare little house less bare by bringing in out-of-doors, taking a leaf from Nature's book and noting how she conceals ugliness wherever she finds it. Then there was the satisfaction of being mistress of the poor domain; of planning, governing, deciding; of bringing order out of chaos; of implanting gaiety in the place of inert resignation to the inevitable. Another element of comfort was the children's love, for they turned to her as flowers to the sun, drawing confidently on her fund of stories, serene in the conviction that there was no limit to Rebecca's power of make-believe. In this, and in yet greater things, little as she realized it, the law of compensation was working in her behalf, for in those anxious days mother and daughter found and knew each other as never before. A new sense was born in Rebecca as she hung over her mother's bed of pain and unrest,—a sense that comes only of ministering, a sense that grows only when the strong bend toward the weak. As for Aurelia, words could never have expressed her dumb happiness when the real revelation of motherhood was vouchsafed her. In all the earlier years when her babies were young, carking cares and anxieties darkened the fireside with their brooding winds. Then Rebecca had gone away, and in the long months of absence her mind and soul had grown out of her mother's knowledge, so that now, when Aurelia had time and strength to study her child, she was like some enchanting changeling. Aurelia and Hannah had gone on in the dull round and the common task, growing duller and duller; but now, on a certain stage of life's journey, who should appear but this bewildering being, who gave wings to thoughts that had only crept before; who brought color and grace and harmony into the dun brown texture of existence.

You might harness Rebecca to the heaviest plough, and while she had youth on her side, she would always remember the green earth under her feet and the blue sky over her head. Her physical eye saw the cake she was stirring and the loaf she was kneading; her physical ear heard the kitchen fire crackling and the teakettle singing, but ever and anon her fancy mounted on pinions, rested itself, renewed its strength in the upper air. The bare little farmhouse was a fixed fact, but she had many a palace into which she now and then withdrew; palaces peopled with stirring and gallant figures belonging to the world of romance; palaces not without their heavenly apparitions too, breathing celestial counsel. Every time she retired to her citadel of dreams she came forth radiant and refreshed, as one who has seen the evening star, or heard sweet music, or smelled the rose of joy.

Aurelia could have understood the feeling of a narrow-minded and conventional hen who has brought a strange, intrepid duckling into the world; but her situation was still more wonderful, for she could only compare her sensations to those of some quiet brown Dorking who has brooded an ordinary egg and hatched a bird of paradise. Such an idea had crossed her mind more than once during the past fortnight, and it flashed to and fro this mellow October morning when Rebecca came into the room with her arms full of goldenrod and flaming autumn leaves.

"Just a hint of the fall styles, mother," she said, slipping the stem of a gorgeous red and yellow sapling between the mattress and the foot of the bed. "This was leaning over the pool, and I was afraid it would be vain if I left it there too long looking at its beautiful reflection, so I took it away from danger; isn't it wonderful? How I wish I could carry one to poor aunt Miranda to-day! There's never a flower in the brick house when I'm away."

It was a marvelous morning. The sun had climbed into a world that held in remembrance only a succession of golden rays and starlight nights. The air was fragrant with ripening fruit, and there was a mad little bird on a tree outside the door nearly bursting

New Hose Free

Send for six pairs of Cotton or Cashmere Holeproof Hose. Six pairs guaranteed to wear six months. If any wear, tear or break a thread in six months, you get new hose Free! Light, medium, and the heavier weights. All guaranteed.

Six guarantee coupons with every six pairs.

More than a million people in the United States and Canada now buy their hose from us in this way. They save all the darning they formerly had to do. They never wear darned hose now. They save money, too, for twelve pairs a year keep their hose whole forever. Six pairs for men cost \$1.50 to \$3 a box. Six pairs for women cost from \$2 to \$3 a box. Three pairs of children's Holeproof Stockings, guaranteed three months, cost \$1.

Our \$60,000 Inspection insures this quality in every stitch. We pay that amount in salaries to inspectors yearly. They examine each pair twice over, carefully, to see that it lacks every possible flaw. We do this to protect ourselves as well as to insure the wear to our customers. There is no better way that we know to make hosiery, and there are no better hose to be had. Don't you think that our million customers prove it?

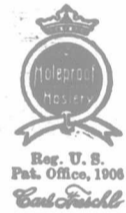
The figures above refer to our business in both Canada and the United States.

Think What It Means!

Think what such hose—at the price of common hose—save in time, trouble and money. Forget the darning. Forget hurtful darned places that make the feet sore. Forget the whole question of hosiery by simply buying two boxes a year!

Our 13th Year

We have been selling fine hose in this manner for the past thirteen years. In that short time we have come to be the largest house of our kind in existence. Our success is due solely to making the hose that the most people prefer. The same people buy them again and again because of their wonderful quality. In all our experience, 95% of our output has outlasted the six months' guarantee. That amounts to 24,700,000 pairs.



"Wear Holeproof Hose and Find the Mend"

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Send today for six pairs of these hose to try. See what they save. Note the comfort they give. Send the money in any convenient way. Mark the grade, size and color plainly. Send the coupon below, or a post card or letter. Do it right now, while you're thinking about it. We guarantee satisfaction as well as the wear.

Holeproof Hosiery Co. of Canada, Ltd.
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Holeproof Hosiery Co. of Canada, Ltd. (432)
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Gentlemen: I enclose \$..... for which send me one box of Holeproof Hose for..... (state whether for men, women or children). Size..... Color.....

Weight.....

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City..... Province.....

How About Your Wife?

Nearly every day one hears of some new device for eliminating confusion, waste of time and misdirected energy in a business office.

How would you feel by 5 o'clock if you had done your day's work without a phone, a typewriter and a filing system. When you got home you would feel just as tired and worried as your wife looks if she hasn't the advantage of business system in the kitchen.



See to it that she has a
LOOK FOR THE TRADE MARK

KNECHTEL KITCHEN CABINET
REGISTERED

to eliminate confusion, waste of time and misdirected energy. It will save her more steps than you know of, and just halve-up her trouble and work. What's more, it will improve the kitchen, simplify the cooking and soon save its cost. A Knechtel Kitchen Cabinet is the best "filing system" for the kitchen.

Send for our Booklet "D," and let your wife choose the one she likes best. She will more than appreciate it, and wonder how she ever got along before without one.

The Knechtel Kitchen Cabinet Company, Ltd.
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SKINS AND RAW FURS

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Ship Early.

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85 Front Street East TORONTO

his throat with joy of living. He had forgotten that summer was over, that winter must ever come; and who could think of cold winds, bare boughs, or frozen streams on such a day? A painted moth came in at the open window and settled on the tuft of brilliant leaves. Aurelia heard the bird and looked from the beauty of the glowing bush to her tall, splendid daughter, standing like young Spring with golden Autumn in her arms.

Then suddenly she covered her eyes and cried, "I can't bear it! Here I lie chained to this bed, interfering with everything you want to do. It's all wasted! All my saving and doing without; all your hard study; all Mirandy's outlay; everything that we thought was going to be the making of you!"

"Mother, mother, don't talk so, don't think so!" exclaimed Rebecca, sitting down impetuously on the floor by the bed and dropping the goldenrod by her side. "Why, mother, I'm only a little past seventeen! This person in a purple calico apron with flour on her nose is only the beginnings of me! Do you remember the young tree that John transplanted? We had a dry summer and a cold winter and it didn't grow a bit, nor show anything of all we did for it; then there was a good year and it made up for lost time. This is just my little 'rooting season,' mother, but don't go and believe my day is over, because it hasn't begun! The old maple by the well that's in its hundredth year had new leaves this summer, so there must be hope for me at seventeen!"

"You can put a brave face on it," sobbed Aurelia, "but you can't deceive me. You've lost your place; you'll never see your friends here, and you're nothing but a drudge!"

"I look like a drudge," said Rebecca mysteriously, with laughing eyes, "but I really am a princess; you mustn't tell, but this is only a disguise; I wear it for reasons of state. The king and queen who are at present occupying my throne are very old and tottering, and are going to abdicate shortly in my favor. It's rather a small kingdom, I suppose, as kingdoms go, so there isn't much struggle for it in royal circles, and you mustn't expect to see a golden throne set with jewels. It will probably be only of ivory with a nice screen of peacock feathers for a background; but you shall have a comfortable chair very near it, with quantities of slaves to do what they call in novels your 'lightest bidding.'"

Aurelia smiled in spite of herself, and though not perhaps wholly deceived, she was comforted.

"I only hope you won't have to wait too long for your thrones and your kingdoms, Rebecca," she said, "and that I shall have a sight of them before I die; but life looks very hard and rough to me, what with your aunt Miranda a cripple at the brick house, me another here at the farm, you tied hand and foot, first with one and then with the other, to say nothing of Jenny and Fanny and Mark! You've got something of your father's happy disposition, or it would weigh on you as it does on me."

"Why, Mother!" cried Rebecca, clasping her knees with her hands; "why, mother, it's enough joy to be here in the world on a day like this; to have the chance of seeing, feeling, doing, becoming! When you were seventeen, mother, wasn't it good just to be alive? You haven't forgotten?"

"No," said Aurelia, "but I wasn't so much alive as you are, never in the world."

"I often think," Rebecca continued, walking to the window and looking out at the trees,—"I often think how dreadful it would be if I were not here at all. If Hannah had come, and then, instead of me, John; John and Jenny and Fanny and the others, but no Rebecca; never any Rebecca! To be alive making up for everything; there ought to be fears in my heart, but there aren't; something stronger sweeps them out, something like a wind. Oh, see! There is Will driving up the lane, mother, and he ought to have a letter from the brick house."

(To be continued.)



"I always do a little painting at house-cleaning time," says one housekeeper. It improves so much the appearance of the various rooms; it makes them sanitary and wholesome; and the walls, woodwork and floors, when painted and varnished, are much easier to keep clean."

This is the experience of many expert housekeepers, and it will be your experience too if you will use a little paint and varnish this spring. Finish the scratched, worn floors with Floor Paint or Floor-lac. Use Family Paint on the woodwork and cupboards. Finish the walls with Flat-tone. Touch up the shabby furniture with Floor-lac or Varnish Stain. There is a SHERWIN-WILLIAMS agent in every town.

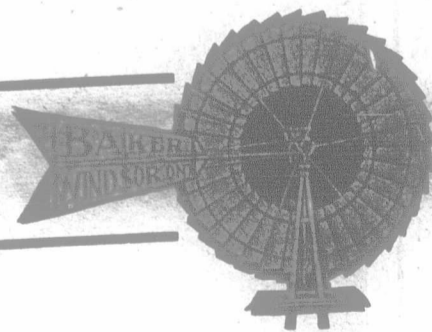
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"BAKER" GALVANIZED STEEL WIND ENGINE

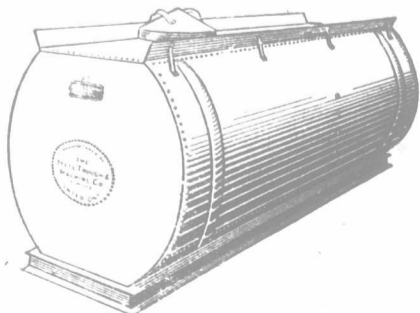
It needs no paint or repairs, can't crack, shrink, swell or blow over. It is fire-proof and vermin-proof. Once set up it will practically cost you nothing.

The towers are made of galvanized iron, have heavy flat steel braces instead of wire or rods as used on other towers, bolts and nuts are thoroughly galvanized.

Furthermore, all parts are made exact, and when assembled the tower and windmill need no tinkering or adjusting.

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This tank is for drawing a supply of water for boiler of threshers' outfit. These tanks carry a small quantity of fuel on top where traction engine is used.

Made of heavy galvanized steel. Built on steel channel frame, strongly hooped. This

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is a clean, sanitary proposition. Does not get water soaked like the wooden ones. Is light and easy to handle. Has large man-hole. Fitted with bulk-heads to prevent water rushing backwards and forwards. Strongly riveted and soldered so cannot leak. Send for illustrated price list and catalogue.

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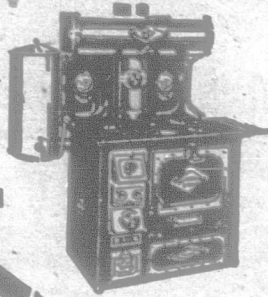
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MAKES IRONING EASY AND A PLEASURE
Pronounced "The World's Best" by over 500,000 satisfied customers. No hot stove—easy to operate. Heat regulated instantly. SATISFACTION GUARANTEED. Highest in quality—lowest in price. Highly polished and nickel plated.
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Write for catalogue and terms.
MacLaren & Co.
Merrickville, Ont.

PLEASE MENTION THE ADVOCATE

Book Review.

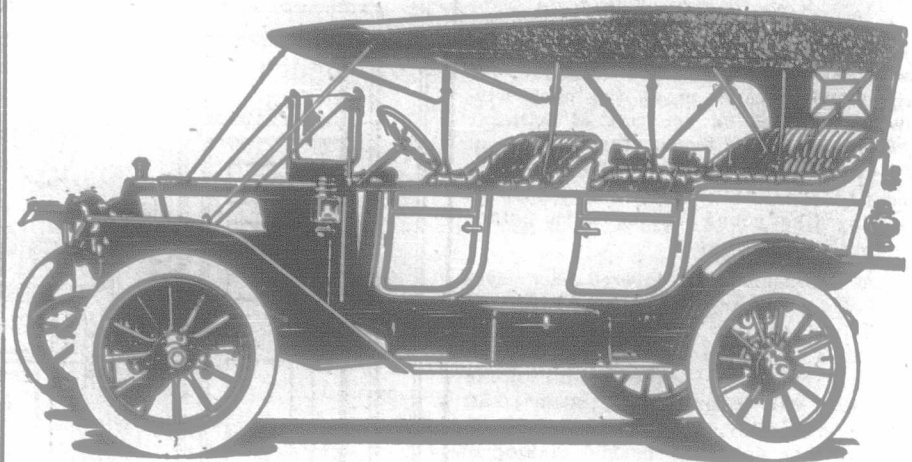
A BOOK FOR YOUNG FARMERS.

"The Young Farmer: Some Things He Should Know," is the suggestive title of a useful volume from the pen of Prof. Thos. F. Hunt, author of previous works, published by the Orange Judd Co., on Forage and Fibre Crops and Cereals. Alert agricultural teachers and investigators, like Prof. Hunt, have realized, no doubt, the practical unpreparedness, of many young men reared under town conditions, for "going into farming," as they put it. "Even farmers of experience," he observes, "do not always realize the training required to succeed in farming." And one might infer so from the sort of schooling given their sons, and the little encouragement doled out to enquiring and naturally willing youngsters on the farm by parents who ought to be keenly alive to every opportunity of awakening in them appreciation of the farm and its processes. The book under review is not designed to make good such neglect, but rather to present a sensible understanding of the rudimentary aspects of the business side, as well as the practice of farming. For example, he discusses the ways of acquiring land by purchase, lease, working on shares, the selection of a farm, the farm scheme, equipment, cost of operations and products, farm labor, grain farming vs. live-stock husbandry, shipping and marketing. He does not mislead young men when he tells them that "farming is no pink tea." Concluding the chapter on "Opportunities in Agriculture," Prof. Hunt thinks that the future problem will not be so much the harvesting and transporting, as the growth of crops. It seems to "The Farmer's Advocate" that quite as live a problem pressing for solution is the more efficient and equitable distribution of farm crops. The chapters on laws affecting land and labor and rural legislation are particularly applicable in the United States. The book closes with a bright chapter on "Rural Forces." Persons desiring copies of the book may obtain them through this office, at \$1.60 each, postage paid.

Gossip.

A HUME'S AYRSHIRES.

Another year has passed to history for the great Ayrshire herd of Alex. Hume, of Menie, Ont., and in that year the same system of progressive management has controlled the herd's destinies, the system that has brought the herd to a standard of breed and type perfection, to a standard of producing ability officially recognized, and to a standard of show-ring quality attained by few herds in this or any other country. All this, of course, is well known by students and admirers of this great dairy breed of cattle. Suffice it, then, to say that the herd of to-day is of a little higher general standard than in any former year. Practically all of the mature cows are in the official R. O. P. records, as well as many of the younger ones. Several two- and three-year-old heifers are now in the test, averaging 48½ lbs. per day for the latter, and 40 lbs. per day for the former, all with an average test of 4 per cent. The noted show bull now at the head of the herd, Imp. Auchenbrain Hercules, is proving a remarkable sire, his get being decidedly the best ever bred in the herd. The splendid quality of all the young things up to two years of age, looks like added honors for the herd at this year's shows. Mr. Hume reports a big demand for, and a large number of sales of Ayrshires. He has lately shipped to the Asylum Farm at Penetanguishine, the splendid young bull, Sprightly's Spicy Sam, together with twenty-four grade cows, and is now offering choice females and young bulls, out of R. O. P. dams; also Yorkshires.



Motor Cars for the Farm

MANY uses can be made of a fine motor car on the farm. You can enjoy the pleasures of long-distance touring. You can also use it to advantage in your business, to carry produce and in the general routine of the farm.

These rebuilt cars are genuine sacrifice sales. We took them in exchange for new Russells.

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2. A six-cylinder Napier car with seven-passenger body. An imported car, in fine running order. Very cheap. Price \$1,200.
3. A beautiful four-cylinder roadster. 30 h.-p. Powerful, very neat and in splendid shape. Newly painted and varnished. Looks as good as new. Price \$500.

If you desire you can make a truck body and put it on any of the above cars and make a first-class delivery car. It will more than repay your investment the first year.

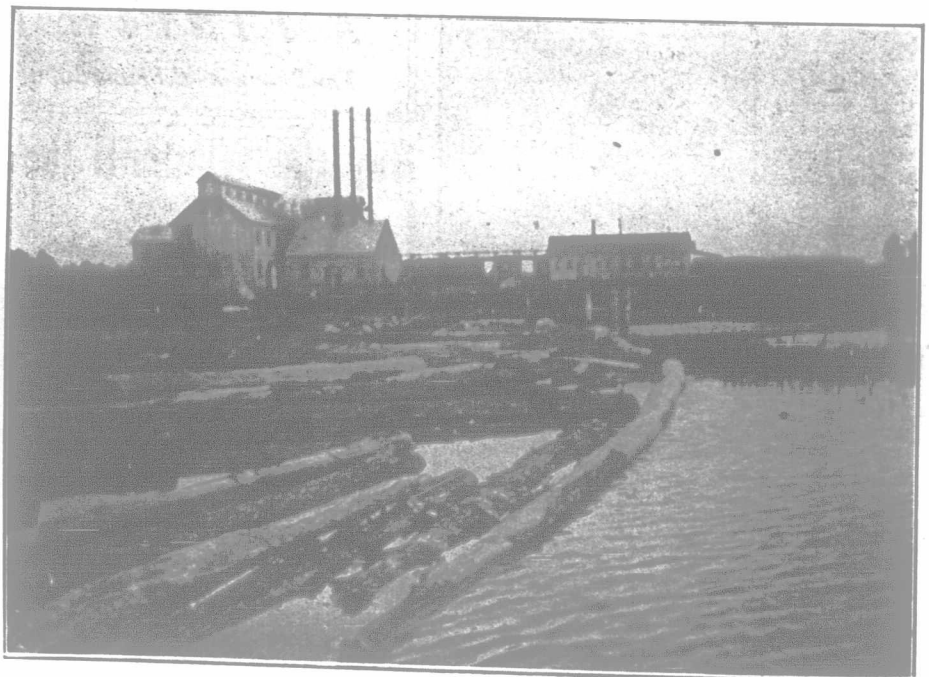
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Ask us about Hotbed Sash and Greenhouse material.

Write us for catalogue and price lists.

The M. Brennen & Sons Manufacturing Company, Ltd.,
HAMILTON, CANADA.

Gossip.

Readers interested in high-class Jerseys, or needing some new-milch cows very soon, should look up the advertisement of Jersey cows for sale in another column of this issue.

Who says Berkshires are not prolific? A correspondent to the Breeders' Gazette writes that he has a sow which has farrowed, in eight litters, a total of 124 pigs, never raising less than nine, and several times as many as thirteen, and \$1,196 worth of pork has been marketed from her, after keeping a pig from each litter for home consumption.

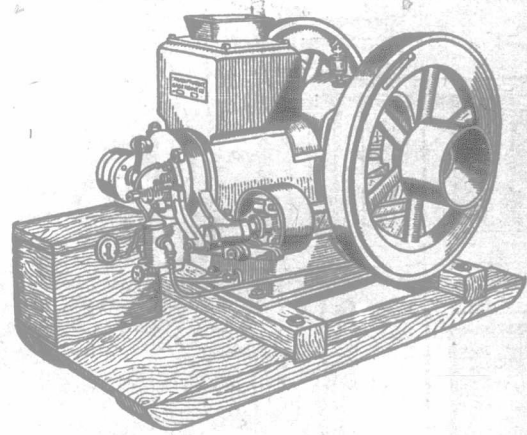
FUTURITY CLASSES AT INTERNATIONAL.

Final arrangements have been made for the Futurity Classes at the International Live-stock Exposition in 1913. The International Live-stock Exposition has appropriated \$200 for each of the four draft breeds, and the Record Societies have appropriated a like amount, so that the stakes already amount to \$400 on each of the four draft breeds. This, plus the money received from exhibitors who make entries in the Futurity stakes, will make a handsome sum for the yearlings to compete for. The Futurity principle is already so well established, and has met with such enthusiastic reception from the draft horsemen, both east and west, that detailed explanations are not necessary. Parties desiring to enter Percheron colts in the International Futurity stakes for 1913, should address Wayne Dinamore, Secretary of the Percheron Society, Union Stockyards, Chicago; for Clydesdales, address Robert B. Ogilvie, Secretary of the Clydesdale Association, Union Stockyards, Chicago; for Shire colts, address Charles Burgess, Sr., Secretary of the Shire Association at Wenona, Illinois; and those desiring to enter Belgian colts, will address J. D. Conner, Jr., Secretary of the Belgian Association, Wabash, Indiana. Printed blanks are in the hands of each of the Secretaries, and are available on request. The preliminary entries close June 1st; second payment August 15th, and final payment October 1st. The first payment is \$2; second \$1, and closing payment \$2.

That Tillsonburg is one of the greatest centers for Holstein cattle in all Canada, is again demonstrated by recent official tests carried on in that vicinity. The cow which has broken the Canadian record for seven days, in the full-aged class, is owned by M. H. Haley, of Springford, who has been so afflicted with rheumatism as to be unable to get to his barn during most of the past winter. Mr. Haley was very anxious to test this cow, Queen Butter Baroness by name, to see if she could improve the record made last spring of 28 lbs. Mr. McQueen offered to take her and work her along with some of his own that he had recently started in test, and Mr. Haley readily consented. The third day in test she made nearly 5 lbs. of butter, and everybody began to sit up and take notice, and on the eighth day she gave over 5 lbs. of butter. She made in seven days: milk, 538.3 lbs.; butter, 33.177; per cent. fat, 4.93, thus winning Canadian championship honors in the aged-cow class. She made in thirty days: 2,898.3 lbs. of milk; 127.745 lbs. of butter; 4.26 per cent. fat, thus coming very close to beating the Canadian record for thirty days, which is 128.57. It is very evident from this cow's history that, given a well-bred animal to start with, a great deal depends on the way she is developed and handled to bring out what she is capable of doing. This cow, as a two-year-old, in public test, at Guelph Winter Fair, in three days, made 159.96 points, and was 34 points ahead of her nearest competitor. As a junior three-year-old, she made a seven-day record of 23.66 lbs. butter, and was Canadian champion in this class for some time. As a five-year-old, she made 27.9 lbs. butter, and now, as a six-year-old, 33.177 lbs. Who knows but that in another year she may make the 40-lb. mark. Mr. Haley has every reason to feel proud of this cow.

A Power Plant For Every Man

With farm help getting scarcer and wages higher, the time is fast drawing near when every farmer will have to have his own power plant. Certainly a gasoline or kerosene power plant is a very profitable investment for any farmer. It relieves him of so many hours of heavy work, and does the work cheaper and quicker than a hired man.



Barrie Engines

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gines and pumping engines. All sizes, from 2 h.p. to 400 h.p. Natural gas, producer gas, gasoline, kerosene and distillate. The Barrie Line is complete in every respect. Tell us what work you have for an engine to do, and we will tell you the size and style of power plant suited for your purposes.

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We offer, subject to sale, the following stock, which we guarantee to be true to name. No. 1 stock in every respect; 5 to 7 feet high. Price, f.o.b. Pointe Claire, Que., \$27.00 per 100.

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WRITE TO-DAY

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on Spraying and
Apple Evaporating
The Fruit Machinery Co., Ingersoll, Ont.

Questions and Answers. Miscellaneous.

Selling Waste Paper.

Can you inform me where I can dispose of old newspapers?

AN ENQUIRER.

Ans.—Sell them to the rag, bone and bottle man, or burn them.

Lightning Rods.

Would you advise me as to the relative value of copper and aluminum as lightning conductors on barns? About what price would each be per foot? Do you consider buildings properly rodded with either of the above safe from electrical storms?

A. C. M.

Ans.—We can do no better than direct your attention to an article on "Lightning and Lightning Rods," on page 765, of our issue of April 24th.

Farm Drainage.

Where can I get information on farm drainage, and what instruments, such as levels, etc., are required, and what would they cost? Could I get these things in the local stores? Could an ordinary, handy man use and do good work with them?

J. C.

Ans.—Write Prof. Wm. H. Day, Ontario Agricultural College, Guelph, Ont., for copies of his bulletins on this subject. Most of the tools, except the spirit level, can be easily made by a handy man.

Weak Colt.

My foal, two weeks old, when standing, rocks back and forth on his hind feet. What is the trouble, and what is the remedy?

C. E. M.

Ans.—This is likely due to weakness, and the colt in all probability will straighten up on his legs as he becomes stronger. Feed the mare well, and keep the colt in a place where exercise may be had. Do not allow him to rest on damp, cold ground, until he is older, and has gained strength. Colts are very often quite crooked and weak in the hind legs, but if they are healthy they gradually outgrow the trouble. If after a reasonable time has elapsed he is no better, call in your veterinarian.

Equitable Tax Convention

At the November session of the County Council of Grey County, Ont., a resolution was passed that said Council memorialize all the other County Councils in the Province with a view of having representatives of the same meet on some convenient date in the city of Toronto, and have the matter of more equitable equalization of taxation threshed out, and, if need be, obtain an interview with the Provincial Cabinet, and, whereas: Railway Companies have received large subsidies and bonuses, and under parallel conditions and circumstances, United States railways in many States pay, approximately, three or four times the amount of taxes than did railways in Ontario, and still afford a lower freight and passenger rate than obtains in Ontario, therefore, this Council seriously urges upon the other counties to appoint the aforesaid delegation, and to notify the clerk of the appointment, when a definite date and place for the meeting will be arranged for. John Rutherford, Owen Sound, is the Clerk to notify. John R. Philip, one of Grey County Council members who sends us the foregoing notice, also informs us that the counties of Simcoe, Bruce, Norfolk, Victoria, Peterborough, Waterloo, Durham, Lambton, York, Elgin, Wentworth, Prescott, Russell, and Grey, have already appointed their delegation.

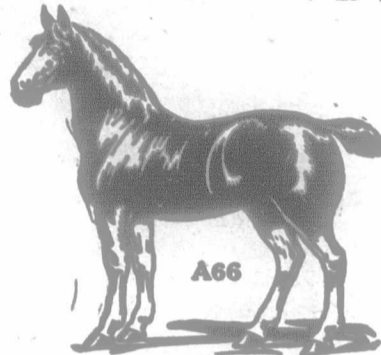
Gossip.

A bill has been introduced into the British House of Commons by Sir John Rolleston, proposing that any person who shall perform, or cause to be performed, the operation of docking upon any horse shall be liable to a fine not exceeding £25, or in the alternative, to a period of imprisonment for one month, with or without hard labor.

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Cures All Kinds of Lameness, Quickly, Positively, Permanently.

Mack's \$1,000 Spavin Remedy is absolutely guaranteed to cure Bone or Bog Spavin, Ringbone, Thoroughpin, Curb, Capped Hock, Shoe Bole, Sprung Knee, Lacerated and Ruptured Tendons, Sweeney and all other forms of lameness affecting a horse, or your



money back in a jiffy. It's a powerful remedy that goes right to the bottom of the trouble and cures the lameness in just a few days, and the animal may be worked as usual. Contains nothing that can injure the horse and heals without leaving scar, blemish or loss of hair.

Ask your druggist for Mack's \$1,000 Spavin Remedy—if he cannot supply you, write direct to us. Ask for our valuable Free Book, "Horse Sense" No. 8. If you are not positive as to the cause of your horse's lameness, mark on horse above where lameness occurs and tell us how it affects his gait, also tell age of animal. Our graduate veterinarian will diagnose the trouble and tell you how to cure it. This service is free.

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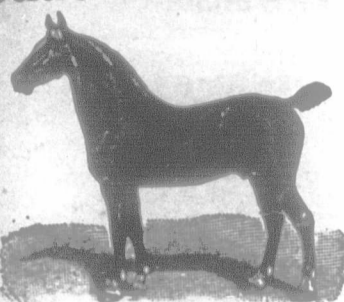
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 Cures all skin diseases or Parasites,
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 Bunches from Horses or Cattle.
 As a Human Remedy for Rheumatism,
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For the cure of Spavins, Ringbone, Curbs,
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 bone in cattle, and to remove
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 This preparation, unlike
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 This is the only preparation in the world guaranteed to kill a
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 prices. Scotch Shorthorns of either sex or age, of
 highest breeding and quality. John Gardhouse
 & Son, Highfield, Ont. L. D. Phone

Questions and Answers. Veterinary.

Tuberculosis.

Cow coughed, and a lump formed in
 her throat. She became worse, and I
 killed her. The lump was the size of
 a large apple, and the contents resem-
 bled moist, yellow sand. I could find
 nothing wrong with the lungs or other
 organs. C. A. Y.

Ans.—This was a typical case of
 tubercular disease of the glands of the
 throat. Nothing could have been done
 for her. V.

Disability in Cow.

It required extreme traction to deliver
 cow four weeks ago. The calf weighed
 110 lbs. The cow has not been able
 to rise since. She eats and drinks well,
 and yields a fair quantity of milk. She
 turns herself, but is unable to get her
 hind legs in shape to rise. She is on
 a cement floor. J. W. M.

Ans.—The symptoms indicate a parting
 of the bones of the pelvis at their juncture
 between the thighs. This is called
 "relaxation of the pelvic symphysis." If
 this condition exists, she will be un-
 able to keep the legs from spreading.
 She will probably be able to stand if
 she be raised, and the feet placed in
 proper position, but as soon as she
 would attempt to move, the legs would
 spread and she would fall. Nothing can
 be done for it. All that you can do is
 to keep her as comfortable as possible,
 and if no improvement be noticed in a
 couple of weeks longer, destroy her. It
 would be better if she were on a wooden
 floor. V.

Simple, Cheap but Effective Cures.

1. Warts can always be removed by
 burning alum until it turns white.
 Powder it and moisten with water to
 form a paste, and apply several times.
 I removed warts from a valuable team
 this way.

2. A scum can always be removed from
 a horse's eye by drying the white por-
 tion of a hen's fresh excrement until it
 will powder, and then blowing a little
 into the eye. I cured a case this way
 several years ago. W. H. T.

Ans.—1 and 2. Many people think they
 have discovered wonderful cures, and
 know much more about veterinary or
 other science than those who have taken
 a few years at college to learn some
 things, and have spent an ordinary life-
 time in active practice. We wonder
 what those people would have achieved
 if they had made a special study of the
 science. The treatment for warts might
 have some effect, but we do not care to
 express an opinion about the eye treat-
 ment for fear we might offend the prac-
 titioner who so kindly wants to teach
 the public; further than to repeat the
 old adage that "something that is got
 for nothing is generally worth about
 what it costs." In treating horses, the
 infliction of unnecessary pain and dis-
 tress (as the eye treatment would cause)
 should be avoided, and the person who
 practices such cruel methods should be
 prosecuted. V.

Miscellaneous.

Lightning Rods.

I have noticed in your valuable paper,
 from time to time, articles on how to
 equip buildings with lightning rods.
 Now as the electric storms are here
 again, to stay until fall, I wish you
 would again describe fully how to equip
 buildings. I notice buildings equipped,
 and wires are brought down side of
 barn instead of end. Does a building
 with steel roof need points on eave
 corners, or would wires just attached to
 or near corners do? Some are advis-
 ing a galvanized pipe, driven in ground
 about seven or eight feet, and wires at-
 tached. Is this as good as wires
 grounded, as it saves digging near barn,
 where it is sometimes inconvenient.
 Now, if you will answer the foregoing
 questions, we farmers will be very grate-
 ful. R. J. W.

Ans.—See the article on page 765, of
 our issue of April 24, "Lightning and
 Lightning Rods."

FROST AND WOOD NO 8



Mower

TIGER Rakes and F. & W. Mowers
 have behind them 70 years of ex-
 perience and skill in making the
 very best farm machinery. The
 rake is all steel, with automatic
 trip, and a truss rod under the frame to hold
 the teeth exactly right. Breakages are
 practically impossible. It will last a life time.

The Frost & Wood Mower has roller bear-
 ings on axle, cross and crankshaft. Its gears
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 "internal gear" principle, which prevents
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Get absolute dependability in your haying machinery.
 This Mower and Rake have in them every feature that
 minimizes stops and accidents during haying. Examine
 them closely. Investigate carefully. They will pass
 the test of service, season after season.

"INTERNAL GEAR" WHAT IT DOES

THE F. & W. Mower
 takes power from the
 inside of a rack on the left
 main wheel. In this posi-
 tion, three rack teeth are
 always in mesh with two
 pinion teeth. This divides
 the wear—means smooth
 running. It is the easiest
 cutter made.

Even after years of use,
 these teeth are still in
 close mesh. The knife cuts
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 moves. This prevents
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 You avoid loss of hay and
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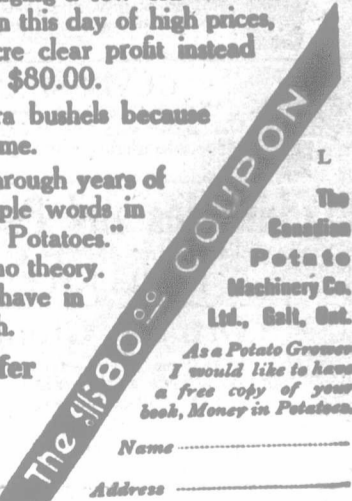


When it comes to a difference of \$80
 an acre on a potato crop, let us take off
 our hats to the Potato experts.

They can show a practical farmer how to turn an
 average crop of 120 bushels per acre into a bumper crop
 of 240 bushels. Simply changing a few old methods
 of potato growing does it. In this day of high prices,
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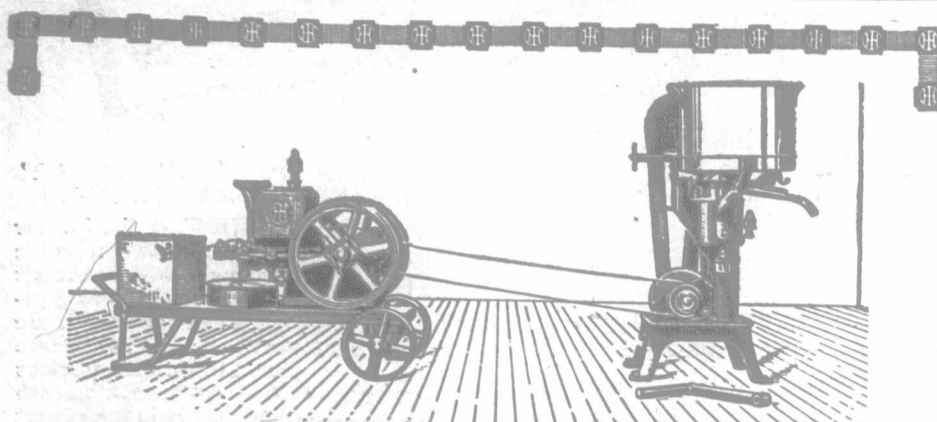
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OF ALL the losses owners are liable to, none can be less prevented or modified in any manner whatsoever than loss by foaling. Notwithstanding the best care and attention, although a mare may have foaled many times successfully, she is always a cause of worry and anxiety to the owner through the fear of losing by death the often very high cash value of the Beast, not to mention service fee, care and expenses incurred for no avail. Why risk such loss when a payment of a few dollars in premiums would cover you should it happen. Reduce the amount of the RISK by insuring, only risking thereby the loss of the Premium if the mare foals allright. We issue 30 days, 6 months and 12 months policies with or without cover on foal.

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WHILE we were getting the opinion of farmers on our new cream separator power outfits, one of them said: "I have been looking for such a combination as this for a long time. I need an engine with that kind of a gear on it to slow down the speed. There are half a dozen small machines on my farm for that engine to run. I want that outfit." You, too, will want it when you see it. The outfit consists of an

I H C Cream Separator Dairymaid or Bluebell

and a one-horsepower back-geared I H C engine. The engine is mounted on a portable truck, and can be used for any farm work to which power can be applied. The back gear adjustment runs at the proper speed to operate any hand turned machine.

The working parts on I H C cream separators are accurately made and all bearings are well lubricated. The shafts and spindle are the strongest used in any separator. The gears are easily accessible for cleaning. Both separators have the famous I H C dirt-arrester chamber.

See the I H C local agent and ask him to explain carefully all of the good points of these outfits. You can get catalogues and full information from him, or, write the nearest branch house.



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They have arrived—my third importation for 1912, stallions and fillies. I have now the biggest selection in Canada, and a few toppers in stallions. High-class breeding and high-class quality—and low prices.

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Clydesdales and Percherons

Stallions and fillies of either breed. Over forty head to select from. Draft horses in ready as well as in name. Highest types of the breeds. Come and see them. Terms and prices to suit.

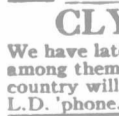
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Prime-winning Clydesdales, imported Stallions and Fillies. Our record one or more winners in every class. We have now prize-winning Stallions and Fillies with breeding and quality unsurpassed—all are for sale.

JOHN A. BOAG & SON, QUEENSVILLE, ONT.

Questions and Answers. Miscellaneous.

An Encroaching Fence.

My neighbor's line fence, which is on the line at one end, runs at an angle across three-quarters of the lot, it being about two rods on my land at this point, the other one-quarter being on the line.

1. Can I force him to remove his part to the proper line?
2. Also, can I build my part on the proper line? Said fence has to be rebuilt this spring.

Ontario. SUBSCRIBER.

Ans.—1. In effect, yes.
2. Yes. We are assuming, of course, that he has not had possession of the part of your land enclosed with his, by the fence, long enough to give him title thereto.

Chickens Die.

I have some little chicks about three weeks old. I have kept them in the cow stable, on cement floor, and have given them gravel and fed them wheat tailings, but mostly rolled oats, bread, and boiled rice, and one by one they are sure to become dizzy, and when they go to eat, fall on their heads; go this way for a couple of days, and then become partly paralyzed, and finally die. Will you please tell me what to do, or what to feed, etc.?

G. B.

Ans.—It is difficult to say just what ailed the chickens. Would advise getting them out of the cow stable and off the cement floor. Give them plenty of fresh air and sunshine and keep them clean and dry. There is a possibility that the stable floor is too cold and damp for them. Feed more of the wheat tailings or cracked wheat, and avoid soft feeds for a time. Give some green feed, or, better, let the chickens have free range during the day. If possible, give skim milk to drink, and be sure to examine all birds for lice.

Flax--Tile Draining.

1. What kind of land is best suited for flax-growing?

2. When, and how much to the acre, to sow?

3. Best way to handle at harvest?

4. Would you advise sowing on land tile drained, the first of May?

5. What are the most important points to watch when laying tile?

6. How do you connect branch drains with mains?

7. In laying, do you start at mouth of drain, or top end?

A. J. A.

Ans.—1. Flax seed will grow in any soil and in any climate where spring wheat does well. Sandy loams are rather better than heavy clay loams. A cool and continuously moist climate and soil are necessary for the best fibre.

2. Sow in the spring after seeding of grain crops. It is rather easily injured by late spring frosts. Sow from 30 to 50 pounds per acre for a seed crop. For fibre, it is sown much more thickly, often as high as three to four bushels.

3. For seed, cut with the binder, and thresh with the grain separator.

4. It would do all right, but might be sown later in backward seasons.

5. To lay them to an even grade as determined by levels previously taken. Would advise that you get Prof. W. H. Day's Bulletin on Farm Underdrainage.

6. At some tile-yards, you may buy tile specially shaped for such junctions.

Where this is not possible, take an old saw and cut the tile according to the angle desired.

7. You can start at either end, provided your ditch is dug true to grade. Many prefer commencing at the mouth.

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No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

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Spavin and Ringbone Paste

Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 5-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of

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But write, describe your case, and we will send our—BOOK—sample contract, letters from breeders and business men the world over, on every kind of lameness and advice—all free (to horse owners and managers).

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Druggists everywhere sell Save-The-Horse WITH CONTRACT, or sent by us express prepaid.

ABSORBINE STOPS LAMENESS

from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone or similar trouble and gets horse going sound. Does not blister or remove the hair and horse can be worked. Page 17 in pamphlet with each bottle tells how. \$2.00 a bottle delivered. Horse Book 9 E free.

ABSORBINE, J. F., ointment for man. Kind. Removes Painful Swellings, Enlarged Glands, Gout, Wens, Bruises, Varicose Veins, Varicocities, Old Sores, Allays Pain. Will tell you more if you write. \$1 and \$2 a bottle at dealers or delivered. Manufactured only by W. F. YOUNG, P.D.F., 258 Lyman Bldg., Montreal, Can.

Aberdeen-Angus of Show Form and Quality. For this season my offering in young bulls and heifers, are toppers, every one. Show-ring form and quality, and bred from show winners. T. B. BROAD-FOOT, Fergus, Ont., G. T. R. and C. P. R.

CEDARDALE SHORTHORNS—To make room for newcomers, I am now offering some rare value in Scotch-bred cows and heifers, beautifully bred and high-class in type; also 1 yearling bull. Dr. T. S. Sproule, Markdale, Ont.

Spruce Lodge Shorthorns & Leicesters Present offering: Young bulls and heifers from grand milking dams. Also a choice lot of Leicester rams and ewe lambs, and ewes of all ages bred to Imp. rams. W. A. Douglas, Tuarora, Ont.

Clover Dell Shorthorns Choice young stock of both sexes. Dual-purpose a specialty. Herd headed by (Imp.) Ivanhoe. L. A. WAKELY, BOLTON, ONT.

Spring Valley Shorthorns

A few of the best young bull prospects we ever had. They will please you. Will sell females too. Visit the herd; we think we can suit you. Particulars on application. KYLE BROS. AYR, ONT.

THE SUPERIOR WAY



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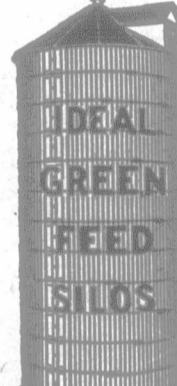
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LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA
PETERBORO MONTREAL WINNIPEG VANCOUVER

I STILL HAVE FOUR YOUNG BULLS FOR SALE AND MORE COMING ON

Several heifers that are bred right and that will make great cows; some of them in calf now to my great breeding sire, Superb Sultan—75413—perhaps the greatest son of the great Whitehall Sultan—55049—that was imported by me and used so long in Mr. Harding's herd. I sell nothing but high-class cattle, but the price is within the reach of all. A few Clydesdales, Shropshires and Cotswolds always on offer. Local and Long Distance Telephone.

ROBERT MILLER STOUFFVILLE, ONT.

The Auld Herd We have females of all ages and of the best Scotch families for sale. **AND PLEASANT VALLEY** Those interested should come and see us. Correspondence invited.

Shorthorns

BELL 'PHONE. Guelph or Rockwood Stations. **A. F. & G. Auld, Eden Mills, Ont.**

10 SHORTHORN BULLS 10

If in need of a bull those that we are offering should interest you. They range from 8 to 14 months old, and are nearly all bred direct from imported stock. We also have females of all ages. Bell 'Phone Burlington Junction, G. T. R.

W. G. PETTIT & SONS, Freeman, Ontario.

Springhurst Shorthorns Four of the first-prize Shorthorns at the late Guelph show, including the champion and grand champion fat heifer, were all sired by bulls of my breeding. I have now for sale ten young herd headers of this champion-producing breeding. **HARRY SMITH, HAY F. O. ONT.** Exeter Station. Long-distance Telephone.

CLYDESDALES, PONIES, BULLS 3 Imported 3 years old Clyde fillies 2 mares 4 years old, in foal. 8 ponies broken to ride and drive, safe and quiet for women and children. Bulls consist of 4, from 12 to 15 months old. All this stock is for sale at reasonable prices. Myrtle C. P. R. and G. T. R. 28 miles East of Toronto.

JOHN MILLER, Jr., Ashburn. (Blairgowrie Farm)

DAIRY-BRED SHORTHORNS

We have for sale Scotch- and English-bred Shorthorns. A few bulls of improved breeding on big milking lines; also others pure Scotch and heifers of both breed lines. L.-D. 'Phone.

G. E. MORDEN & SON, Oakville, Ont.

SHORTHORNS —Records show that cattle bought from the Salem herd won numerous ribbons the past season. We have others. Several young bulls are priced reasonably.

J. A. WATT, SALEM, ONT.
ELORA, G.T.R. and C.P.R.

MEADOW LAWN SHORTHORNS of richest and most fashionable Scotch breeding, and of high-class type and condition. I can supply young bulls and heifers—Clarets, Roan Ladys, Mildreds, Stamfords, etc.

F. W. EWING, R. R. No. 1, ELORA, ONT.
L.-D. 'Phone.

SCOTCH SHORTHORNS One High-class Imported yearling bull 10 bull calves, from 7 to 16 months old. 40 heifers and young cows, all by imported sires. Also some Imp. yearling heifers.

MITCHELL BROS., BURLINGTON, ONT. Farm 1/4-mile from Burlington Junction.

Willow Bank Stock Farm—Shorthorn Herd Established 1856. The grand imported Butterfly bull, Roan Chief—60865—heads the herd. Young cows and heifers bred to him; also an exceedingly good lot of young bulls on hand, fit for service and at very reasonable prices. Some from imp. dams.

JAMES DOUGLAS, Caledonia, Ont.

My present offering consists of fit for service, 10 females, cows in calf and heifers, 1 show yearling Clyde filly and 1 filly foal good enough to show any place.

5 YOUNG BULLS

Prices very moderate. Claremont Station, C. P. R. Pickering Station, G. T. R.

JOHN MILLER, Brougham, Ont.

5 Shorthorn Bulls 5—We have for sale at moderate prices 5 Scotch Shorthorn bulls, including one of our herd bulls. Also a number of high-class heifers and heifer calves.

A. J. HOWDEN & CO., COLUMBUS, ONT. Long-distance 'phone
Myrtle G. T. R. & C. P. R.

Questions and Answers.
Miscellaneous.

Caked Udder--Cow Dies--Flooring.

1. Would like you to tell me some remedy for hardness in fresh-calved cow's udder. Have been using hot water for bathing, and applying oil, but it does not seem to help much.

2. A neighbor's cow died the other day. She had just freshened. The cow was in good condition, and he cannot understand what caused her to die. She was a very valuable cow, worth \$150. Could you give any information as to what might have been the trouble?

3. Is it compulsory to have cement floors for all cow stables? I had heard that it was, but thought I would ask you.

J. D.

Ans.—1. Try rubbing the udder well at each milking with lard and coal oil.
2. Without knowing symptoms, we could not venture an answer. It may have been due to a sequel to parturition, or digestive troubles may have caused death.
3. No.

School Tax.

The township of W— is partly organized and partly unorganized; two school sections organized. In the one I refer to, the schoolhouse is built in C—, to be maintained by C— and W—. In the other school section there is nothing done; no schoolhouse nor school. I am not a resident of the township of W— at present, but have lived there, and done part of my settlement duties, and have all my payments made, and intend going back. I have no children attending the school in question. If I were there, it would be impossible for children to attend that school, the road not being all open through, and the schoolhouse being four miles from my residence. I did not sign any petition for that school, and was not asked to do so. We have children of school age. Last year when I was assessed for school tax for that school, I was living there, and put in a protest as being too far from that school. They have threatened the law on us if we do not pay this tax. This year they have assessed again, and raised the valuation for buildings and improvements. Can they lawfully collect this tax?

Quebec.

Ans.—We are inclined to think that they can.

Re Cyclamen--Dahlias.

1. Cyclamen flowered splendidly all winter (red and magenta) has stopped now. Will you please tell me what should be done with the bulb? Is it worth keeping?

2. Also dahlias grew very large and strong, but only had a couple of flowers on a plant last year, the others turning brown and dropping off while in the bud. Are they likely to flower this year? One root grew as large as a two-quart pail, and did not grow any small tubers at all.

J. W. M.

Ans.—1. Let the cyclamen rest during the summer months, placing the pot out of doors in a shady, airy place, and giving just enough water to prevent the roots from drying out. Re-pot in September, and give more water. Cyclamens require a rich soil, with plenty of sand in it.
2. Probably the almost continuous rains of last summer accounted for the failure of your dahlias. Bailey condemns watering every evening for these plants thus: "This practice is very injurious, as it causes a rapid but soft growth, and as the soil is seldom stirred, the roots become so enfeebled for want of air that they are unable to supply the needs of the plant; as a consequence, but few buds are formed, and they generally blast before developing into flowers." There seems no reason why the tubers you have saved should not grow. Give them a rich, thoroughly-prepared bed, worked up to a considerable depth. Till the soil thoroughly until the plants begin to bloom, then merely stir the surface often to a depth of one to three inches. If the soil is kept thoroughly stirred, there will be little need of watering, unless in a time of exceptional drought, until the plants begin to bloom, when a thorough watering once a week will be beneficial.

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"METALLIC" Ceilings are artistic, sanitary and will last as long as the building.

In the kitchen and bathroom they are of particular sanitary value as they can be easily cleaned and are absolutely rust-proof.

While inexpensive, they give an air of distinction to any home.

Write us for free booklet. 690

THE METALLIC ROOFING CO. LIMITED
MANUFACTURERS
TORONTO & WINNIPEG

Shorthorns!

Bulls of useful age all sold. Would appreciate your enquiry for females. Catalogue and list of young animals.

N. Cargill & Son, Cargill, Ont.

1854—1913
MAPLE LODGE STOCK-FARM

Am offering a very fine lot of young Shorthorn bulls just now. Excellent breeding, and most from splendid milking dams. The kind that is needed.

House is one mile from Lucan Crossing, G. T. R.

A. W. SMITH, Maple Lodge P.O., Ont.

Glengow Shorthorns

Have two very nice bull calves left; both 10 months old. Their dams are exceptionally heavy milkers. Write for prices and particulars.

WM. SMITH Columbus, Ontario.
L. D. 'phone.

Shorthorns, Cotswolds, Berkshires

For sale: 10 bulls, from 7 to 10 months; also cows, heifers, and heifer calves. Would sell a few young Cotswold ewes, No Berkshires to offer at present.

CHAS. E. BONNYCASTLE
P.O. and Station, Campbellford, Ontario

Oakland—50 Shorthorns

Present offering. Red Baron—81845—. He is a fine massive bull, of a capital milking strain, 2-year-old, our own breeding and all right. Also one good red two-year-old and one sixteen months. All of the Dual-purpose strain and can be bought worth the price. Write, or better still, come and see them. **John Elder & Son, Hensall, Ont.**

SHORTHORN Bulls and Heifers—choice lot, and heifers in calf. Former sires Joy of Morning (Imp.)—32070—and Benachie (Imp.)—69954—. Present stock bull, Royal Bruce (Imp.)—55038— (89909). **GEO. D. FLETCHER, R. R. No. 2, Erin, Ont.**

Woodholme Shorthorns

I have for sale a number of choice young bulls, from 8 to 14 months old (pure Scotch); also a number of heifers, 1 to 2 years old, of this level type, and richest breeding. **G. M. FORSYTH, North Claremont, Ont.**

Shorthorn Bull for Sale—Roan Admiral (Imp.) (100298), 6 years old; as active and sure as a 2-year-old. Only reason for selling—we have so many heifers sired by him, a change is necessary. Address: **HAFFEY BROS., Mono Mills, Ont.**

Ontario Wind Engine & Pump Company's
LINES ARE SUPREME



**Buy Service,
 Not Cast Iron**

When you buy an Engine you want power; a Well Drill, water; a Feed Mill, ground feed; a Windmill, something that will stand and give you service; the Tank that is tight; a Water System guaranteed to supply water.

Our business is the manufacturing of these lines. It has taken time, money and brains to produce what we are listing in this ad. It will pay you to get our catalogue.

If your dealer does not handle our lines, write the **ONTARIO WIND ENGINE & PUMP CO., Ltd.**, at Montreal, Toronto, Winnipeg or Calgary.

Mutton and its Value as Food.

Farmers' Bulletin 526, "Mutton and Its Value in the Diet," which has just been issued by the United States Department of Agriculture, tells of good ways of preparing old dishes, and of new ways to utilize, and new dishes which can be made from mutton.

Mutton and lamb have always been regarded as particularly wholesome, and there is reason for this belief. Of the two meats, lamb has been the more popular in the United States in recent years, perhaps because special attention has been given to raising it for the market and to extending its season. On the other hand, mutton is the favorite in England. The whole question is simply one of taste, and mutton in some form or other has always been a staple and favorite food, used in large quantities, and on account of its good qualities, worthy of much more extensive use.

In composition and nutritive value, mutton is practically the same as beef, and the average loss in weight in preparing the two kinds of meat for the table is also practically the same, yet mutton has for some time been a cheaper meat in our markets than beef. Buying in quantity is recognized as economical where the housewife has facilities for storage. There are many cases where a side of mutton could be economically purchased for home use where a side of beef would be too large for such a purpose. This would imply an economy in the selection of the mutton.

As regards digestibility, there is no practical difference in beef and mutton, both being very thoroughly assimilated. The characteristic flavor of mutton is commonly said to have its origin in the fat. It is generally relished, and may be developed or modified by various methods of cookery to meet the tastes of the family. That mutton fat can be used in the household in many ways has been demonstrated by experiments which have been made with it.

The ways in which mutton can be prepared for the table are very numerous. Some of these are well known to the housewife, and others are less familiar. All are worthy of a trial, since the ability to make many dishes with any given foodstuff is an easy way of securing variety in the diet, which is so desirable. The housewife who wishes to economize can make many savory dishes from the inexpensive cuts of mutton, which are palatable as well as wholesome.

Judged by its composition, palatability, wholesomeness, digestibility, relative cost, and the number of ways in which it can be prepared for the home table, mutton is an important foodstuff, which is well worth the attention of the housekeeper who wishes to provide her family with an attractive and palatable diet at a reasonable cost.

Trade Topic.

A SHIP WITHIN A SHIP.—The "Aquitania," which was launched on Monday, April 21st, from the yard of the builders, John Brown & Co., Ltd., Clydebank, combines all the good things learned from experience of the "Lusitania" and "Mauretania," and the many other famous ships which fly the Cunard flag. The "Aquitania" is 901 feet long, 97 feet broad, 92 feet 6 inches in depth from keel to deck, and has a gross tonnage of 47,000, a speed of 23 knots, accommodation for 3,250 passengers, and a crew of nearly 1,000. This great leviathan necessitated in its building a complete rearrangement of the yards in which it was built. Extending throughout the most vulnerable parts of the ship, as in the "Lusitania" and "Mauretania," there is that great desideratum, a ship within a ship. There are two watertight shells; the space between the outer and inner skins averages about 15 feet, and is divided into small compartments by bulkheads. From a viewpoint of strength, the "Aquitania" embodies all that is good. Lifeboats are installed to accommodate every passenger on board, and two motor lifeboats will also be provided. This new floating palace is a credit to the Cunard Line, whose advertisement runs in these columns.

Watch Them Grow
 —the vegetables and flowers and field crops that spring from Ewing's Reliable Seeds!

They are husky and vigorous, true to name and strong in the qualities that make each particular variety popular.

The new 1913 Catalogue of



offers a selection that cannot be beaten—the good old favorites, and all the new and improved varieties that have made good.

Write for this Catalogue—it will certainly help you to choose the right seeds for bumper crops next year.

Then, if your dealer cannot supply you with the Ewing's Seeds you want, order from us direct.

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

Ryanogue Farms
AYRSHIRES

At AUCTION on
 Thursday, May 22, 1913

Ryanogue Farms, Brewster, N. Y., will sell 75 head of their famous Ayrshires. In this lot will be a number of Advanced Registered cows and others now on test. A number of animals from their famous Champion Show herd. A few splendid young bulls from the heaviest-milking cows in the herd, and a grand lot of heifers, making altogether the finest lot of Ayrshire cattle that has ever been offered at auction in this country.

FOR CATALOGUE ADDRESS:

L. F. HERRICK, Auctioneer
 Worcester, Mass.

Fertilizers For information regarding all kinds of mixed and unmixed fertilizers of the highest grade write.

The William Davies Company, Limited
 WEST TORONTO :: :: ONTARIO

BRAMPTON JERSEYS The spring trade is on; we are doing the largest business we ever did, chiefly with our old customers; young bulls and heifers from sires with tested daughters.

Several imported cows and bulls for sale. Canada's Greatest Jersey Herd.

B. H. Bull & Son, Brampton, Ont.

Ayrshires and Yorkshires—We now offer at bargain bull calves dropped in July 1912. All bred from (imp.) sire and from either dams with good records, or their daughters either imported or home-bred. Some choice February pigs; also young pigs.

Alex Hume & Co., Menie, Ont.

Stonehouse Ayrshires Of choicest imported stock and with imp. sires and dams. I am offering young cows, 3, 4 and 5 years of age; a grand bunch of imp. yearling heifers, and a particularly good pair of young bulls.

L.-D. Phone.

HECTOR GORDON, Howick, Que.

75 Hillcrest Ayrshires Our Ayrshires are selected and bred for big production, and show-ring quality. Many of the heifers we are offering are grand-daughters of the two Ex-World's Champions, Jean Armour, Rec. 20174 lbs., and Primrose of Langley, Rec. 16195 lbs.

F. H. HARRIS,
 Mount Elgin P.O. & Sta.

CITY VIEW Record of Performance Ayrshires Two young bulls and one of Jan. 1913. All from R. O. P. cows and sired by bulls from R. O. P. dams. Will pay young cows that are capable of making good. Eggs for setting. R. C. and S. C. Rhode Isl. Reds, selected for laying qualities, \$1.50 per 15. Jas. Beag & Son, R.R. 1, St. Thomas.

Woodbine Holsteins Herd headed by King Sigs Pontine Lad, whose sire's dam is the champion cow of the world. Sire's sire is the only bull that has sired five three-year-olds. His two great grand sires are the only bulls in the world that have sired two 37-lb. cows. Bulls and bull calves for sale.

A. KENNEDY, AYR, ONT.

FOR SALE Choice White Pea Beans for seed "home grown" \$2.25 per bushel F.O.B.; bags 25c. T. D. McDonald, Olanda. Phone 105 Leamington.

CATTLE AND SHEEP LABELS

Size	Price doz.	Fifty tags
Cattle	75c.	\$2.00
Light Cattle..	60c.	1.50
Sheep or hog .	40c.	1.00

No postage or duty to pay. Cattle sizes with name and address and numbers; sheep or hog size, name and numbers. Get your neighbors to order with you and get better rate. Circular and sample mailed free.

F. G. JAMES, Bowmanville, Ont.

For Sale—Jersey cows and heifers and bulls for exportation. All pedigree and Herd-book stock. For further particulars apply to **A. T. SPRINGATE, Breeder and Exporter,** Gorey, Jersey, Europe.

JERSEY COWS FOR SALE Two granddaughters of Arthur's Golden Fox imp., 4 and 5 years old, in calf to grandson Golden Fern's Lad, due to calve 25th and 27th May. I guarantee all right in every way. Apply:

BOX 988, WOODSTOCK, ONT.

DON JERSEY HERD offers young bulls and heifers for sale; heifers bred to Eminent Royal Fern.

D. DUNCAN, DON, ONTARIO
 Phone L.-D. Agincourt. Duncan Sta., C. N. R.

High-class Ayrshires—If you are wanting a richly-bred young bull out of a 50-lb.-a-day and over cow, imported or Canadian-bred dam or sire, write me. Females all ages. Prices are easy.

D. A. MACFARLANE, Kelso, Que.

Work at Ottawa for the Live Stock Industry.

For a number of years, until a few months ago, the work of the Live-stock and Health of Animals Branches of the Department of Agriculture at Ottawa, was carried on under one head. The work embraced a very extensive field, involving an expenditure of a sum annually of considerably more than half a million of dollars.

According to the annual report of the united branches for the year ending March 31st, 1912, just issued, three more or less distinct lines of effort are carried on. A well-organized system is in operation to protect the live stock of the country from disease, not only guarding against its introduction from abroad, but by preventing the spread of infection already existing among Canadian herds and flocks. In this division, regulations are enforced to deal with such diseases as hog cholera, tuberculosis, glanders, dourine, mange, anthrax, sheep scab, and rabies, any of which uncontrolled might cause very serious losses to the farming industry.

The meat-inspection division seeks, by wise regulations, carried out by an extensive, well-trained staff, to prevent diseased or otherwise unwholesome meats from being sent from one Province to another, or out of the country. It also compels operators of food-canning establishments to maintain their factories in a sanitary condition, and to put up only sound goods. During the year reported, it is shown that 6,151 carcasses of cattle, 241 of sheep, and 2,832 of hogs, as well as many portions of carcasses, and 12,702 lbs. of poultry, were condemned. The report names the diseases and conditions responsible for these losses.

The work of the Live-stock Branch is shown to be of an entirely different character. In a number of ways, efforts are made to throw light upon the paths of the stock-raisers, and to encourage the extension and improvement of the live-stock industry. Reference is made to a comprehensive investigation of the market conditions affecting wool and mutton carried on by a commission. To improve the light-horse stock of the country, bonuses are paid to owners of Thoroughbred stallions used for service. To assist dairy farmers in ascertaining where high-producing breeding stock may be secured, a Record of Performance has been established for pure-bred dairy cattle. The report just issued shows that 801 cows entered for test for this record during the year.

In addition to the report of the Veterinary Director-General and Live-Stock Commissioner, the volume, which contains almost 500 pages, including many illustrations, embodies 24 appendices, including reports of officers, and a number of publications that have appeared as separate works, including Report No. 4, of the Record of Performance; Bulletin No. 15, of the Live-stock Branch; the Report of the Third General Convention of the National Live-stock Association; the Report of the National Record Committee, and others. The selling price of this blue book is fixed at forty cents, but provision has been made for supplying copies free to those who apply for them to the Chief Officer of the Publications Branch of the Department of Agriculture at Ottawa.

At the Royal Dublin Annual Spring Show and Sale, April 15-18, handsome prices were obtained for Shorthorn cattle. The top price, 1,000 guineas, was paid by Dan MacLennan, for H. J. C. Toler-Aylward's roan yearling champion bull, Ashgrove Carnival, for export. The same buyer took Captain Ogilby's (Londonderry) first-prize yearling bull, at 800 guineas, and Mr. Black's second-prize two-year-old Augusta's Champion, at 600 guineas. These are record prices for Shorthorns sold in Ireland. The perpetual challenge cup for the best group of three Shorthorn bulls, was won by Miss K. A. Staples, Dunmore, Queen's County, with three roan yearlings. The Shorthorn Society's champion prize for the best yearling, bred in Ireland, was won by Mr. Ogilby's Pellipar Dandy, got by his 1,800-guinea bull calf, Count Crystal, bought from Captain A. T. Gordon, at the Loanhead joint sale in 1910.

HAVE SOLID COMFORT- AND SAVE ON YOUR COAL BILL

PEASE
"ECONOMY"
FURNACE



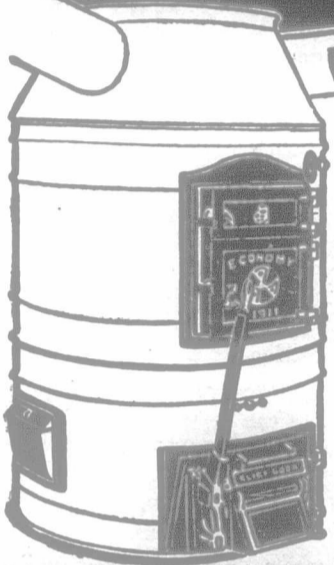
PAYS FOR ITSELF BY THE COAL IT SAVES AND IT'S LONG LIFE

The Proof of the Furnace is in the Heating

They were both young, very much in love with each other and were to be married shortly. At present they were considering the plans of their new home. "Well dear," said the man, "what kind of a furnace shall we have?" Said the girl, "Oh, it doesn't matter much, I suppose, one is as good as another." "But they are not," said the man. "Look at Jack and Mary. They have been nearly frozen all winter—on the other hand, Bill and Mildred have a PEASE "ECONOMY" FURNACE, and their house is as warm as toast all winter and his coal bill is about one-half of Jack's."

The man continued "Bill showed me a number of exclusive, money-saving, heat-extracting features embodied in the PEASE FURNACES, such as a large combustion chamber that burns all gases and allows no wasted coal, an air blast device over the fire pot that actually burns air, with a vertical shaker that does away with the back-breaking stoop when shaking—and a lot of other devices that enable the PEASE to extract the last bit of heat out of the coal."

"Well dear," said the girl, "it looks as though we ought to get a PEASE FURNACE". So they did and the PEASE "ECONOMY" FURNACE "Pays for itself by the coal it saves." Write to-day for free booklet.



PEASE FOUNDRY COMPANY.
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FARMERS—You save time, labor and money when you buy STANDARD FENCE and POSTS

You don't have to employ labor to dig post holes. One man and a boy can set up more Standard Fence in one day than could three men and a boy working the old way.

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Don't order fence until you have seen it. It tells how to judge fence, how to measure up the amount you require and how best to order. Get it. Write for it to-day. Address

Standard Tube & Fence Co. Limited
Dept. A WOODSTOCK, Ont.

Live agents wanted for Standard Fence, Posts and Gates. Write for special terms to-day.



STANDARD FENCE



Lakeview Holsteins

Have only two bulls of the serviceable age left and are offering them at very reasonable prices. We are now in a position to offer a few young cows and heifers that are well worth the money asked to anyone looking for the best in breeding.

E. F. OSLER, BRONTE, ONTARIO.

SERVICE BULLS AND BULL CALVES FROM A. R. O. DAMS.
Sons of Johanna Concordia Champion, No. 60575, one of the richest bred and best individual bulls of the breed. His granddams, Colantha 4th's Johanna 35.22 lbs. butter in 7 days; fat 4.32 per cent., and Johanna Colantha 2nd 32.90 lbs. butter in 7 days; fat 5.02 per cent. Average butter in 7 days 30.06 lbs.; average fat 4.67 per cent. If you want to increase the butter-fat in your herd, let me sell you one of these bulls. I can spare a few good cows and heifers bred to the "Champion." Write me your wants and I will try and please you. **MAPLE AVENUE STOCK FARM, L. E. CONNELL, Prop., FAYETTE, FULTON CO., OHIO, U.S.A.**



Holsteins

One six year old cow due this month also fine 2 and 3-years heifers, bred; also a few Yorkshire pigs ready to wean.
A. WATSON & SONS, St Thomas, Ontario.
L. D. 'Phone Fingal via St. Thomas.

Evergreen Stock Farm High-class Registered Holsteins
For sale: A few choice young bull calves and females, all ages; good enough for foundation stock
A. E. HULET, Norwich, Ontario.

Show Stock for Sale

Owing to the protracted illness of M. H. Haley, we have decided not to exhibit at Toronto next fall. Offering stock of extra quality in all classes of young animals. Aged
M. L. HALEY, SPRINGFORD, ONT.

and two-year-old bull. Extra good. Anyone wishing show cattle write for prices.
Maple Hill Holstein - Friesians - Special offering: My junior herd bull, Choicest Canary, son of Nannet Topsy Clothilde, 30.23 lbs.; also choice bull calves.
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Glenwood Stock Farm 5 BULL CALVES fit for service, out of big milking strains, at low figure for quick sale. THOS. R. CARLAW & SON, WARKWORTH, ONT. Campbellford Sta.

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The Complete Milk Substitute
The result of over 100 years' experience with calf-culture. The only Calf Meal made in an exclusive Calf Meal Factory. As rich as raw milk at less than half the cost. Makes rapid growth. Stops scouring. Three calves can be raised on it at the cost of one. Get Bulletin, "How to Raise Calves Cheaply and Successfully Without Milk," by sending a post card to **STEELE, BRIGGS SEED COMPANY** Toronto, Ont.



PURE-BRED REGISTERED Holstein Cattle
The most profitable dairy breed, greatest in size, milk, butter-fat and in vitality. Send for **FREE** illustrated descriptive booklets. **HOLSTEIN - FRIESIAN ASSOCIATION, F. L. Houghton, Sec., Box 127, Battleboro, Vt.**


Herd Bull for Sale—Count of Lakeview (8009); calved March 28, 1910. Bred by Lakeview Stock Farm, Bronte, Ont. A splendid stock-getter. Over 60 per cent. of his get are females. Must sell him, as I have a number of heifers from him of breeding age. He is quiet and sure. Also two young bulls now ready for service, bred by Count of Lakeview, whose dams are granddaughters of Johanna Rhue 4th Lad. Straight and nicely marked. Will sell a few cows due to freshen this month. Bell 'phone, Fenwick Stn., C. V. ROBBINS, River Bend, Ont.

The Maples HOLSTEIN Herd

Headed by Prince Aggie Mechthilde. For sale a present: Choice bull calves, from Record of Merit dams with records up to 30 lbs. butter in 7 days; All sired by our own herd bull. Prices reasonable.
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Evergreen Stock Farm 4 bulls, 12 mos. old, from officially backed ancestors, running from 18 1/2 lbs. at 3 yrs. to 22 1-3 lbs. as matured cows, and on sire's side from 24 6-10 to 29 lbs. of butter in 7 days. Write, 'phone, or come to F. E. Pettit, Burgessville, Ont.

When writing mention Advocate



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ONE DIPPING KILLS ALL TICKS and keeps SHEEP free from fresh attacks. Used on 250 million sheep annually. Increases quantity and quality of wool. Improves appearance and condition of flock. If dealer can't supply you send \$1.75 for \$3 packet. Specially illustrated booklet on "Ticks" sent free for asking, a post card brings it. Address Dept. 17 Wm. COOPER & NEPHEWS, Toronto, Ont., 122 Wellington St., W.

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SOUTH DOWNS
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The best in their respective breeds. Write for information to:

ROBT. McEWEN, Byron, Ont.
R.R. Stn. and Tel. Office, London.

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs—Present offering: Lambs of either sex. For prices, etc., write to **John Cousins & Sons**, Bucca Vista Farm, Harriston, Ont.

Three Jersey Swine AND **JERSEY CATTLE**
Grand stock, either sex, constantly for sale. Price reasonable. **MAC CAMPBELL & SONS**, Northwood, Ontario.

SWINE OF ALL BREEDS FOR SALE
Yorkshires, Tamworths, Berkshires, Hampshires, Chester Whites, Poland-Chinas, and Duroc-Jerseys. I have constantly in hand both sexes of all ages. Show stock a speciality.
JOHN HARVEY, Freilighsburg, Que.

Cloverdale Berkshires—Present offering: Sows bred and others ready to breed; also younger stock of both sexes. Prices reasonable.
C. J. LANG, Hampton, Ont. Durham Co.

PINE GROVE YORKSHIRES
Bred from prize-winning stock of England and Canada. Have a choice lot of young pigs of both sexes, pairs not akin, to offer at reasonable price. Guaranteed satisfaction. **Joseph Featherston & Son**, Strathville, Ont.

HAMPSHIRE SWINE
Both sexes and all ages, from imported stock. Prices reasonable.
C. A. POWELL, ARVA, ONTARIO
Four miles north of London.

Poland-Chinas Poland-Chinas, Show horns and Seed Corn
An offering of a limited quantity of "Extra Choice" White Cap Seed Corn. Order now. Prices right.
Geo. G. Gould, Edgar's Mills, Ontario

FOR SALE
One Choice Yorkshire Boar; fit for service; bred from show stock.
GEO. D. FLETCHER,
Bria, R. R. No. 2, Ontario.

ENGLISH LAMBING SEASON.
The Live-stock Journal reports a very successful 1913 lambing season, notwithstanding very unfavorable weather conditions. Of Lincoln Longwools, R. Stanhope, Lincolnshire, reports the birth of 849 lambs from 800 ewes. John Evans, near Lincoln City, has 435 strong, healthy lambs, from 360 ewes. In a flock of Southdowns, at West Wittering, in a total of 683 lambs, there were 160 pairs of twins, and six instances of triplets. About one-third of the 800 Southdown lambs at Applisham, Shoreham, were twins. A flock of 100 half-bred ewes, owned by J. J. Keswick, Anna, have produced 200 lambs this spring. Ten of the ewes had triplets, mostly taken and mothered by ewes with single lambs, a wonderful crop of lambs, good and strong. To cap the climax, eighteen ewes in the flock of Sir James Rankin, Bart, Herefordshire, have produced 59 lambs, including four triplets and one quintet.



ASK YOUR DEALER FOR **SNAP**
THE HANDY HAND CLEANER
Keep a can at your office, workshop or home. Always use it and it will be good for your hands. All Dealers sell Snap.
SNAP COMPANY, LIMITED, Montreal.

Egg Circles.

An important part of the poultry work of the Live-stock Branch of the Department of Agriculture during the past year has been the organization of Co-operative Egg Circles. Ten circles in all have been organized under the auspices of the Branch, working in conjunction with the Provincial and Agricultural College authorities, and the Poultry Producers' Association of Canada. The preliminary work in connection with a number of others has been done, and from present indications it is apparent that this phase of co-operative work is likely to have a rapid growth in the near future. Being primarily concerned with the improvement of the Canadian egg trade, the Live-stock Branch has encouraged the formation of these circles because the movement affords a means whereby the quality of eggs can be improved as they leave the farm, and the pernicious practice of holding eggs, both on the farm and in the country store, largely eliminated. Co-operative effort of this kind also affords a medium whereby the eggs in any given community may be collected and marketed frequently and regularly, and insures to the consumer a new-laid egg of uniform quality, at no great increase in cost.

At the time of joining the association, the members agree to stamp each egg with a given number designated by the Board of Directors. This is done so that the eggs of each member may be identified when graded and payment made according to quality.

A manager is appointed by the Board of Directors, whose business it is to collect, grade, sell the eggs, and apportion the returns among the members according to the quantity and quality received. In most circles, the eggs from each farm are collected at stated intervals, but in others the members deliver the eggs to some central point, such as a creamery, cheese factory, store, or house, from which the manager makes the shipment.

It is well known that at certain seasons of the year there is a wide difference between the price received for eggs by the farmer in the country store and the price paid by the consumer in the city. This difference is not nearly so marked in the spring of the year as it is in the late summer, fall and winter. In other words, as the quality of ordinary farm eggs becomes more uncertain, the premium placed on new-laid circle eggs increases. While during the spring of the year prices received by circle members may not greatly exceed those paid in the local store, it is a fact that for the eggs produced in the month of December last year, the majority of circles in the Provinces of Ontario and Quebec received a price of from 45c to 50c. a dozen.

A limited number of circles will no doubt be able to take advantage of the rapidly-growing select trade in the larger Canadian cities, but from the fact that the wholesale egg dealers in Ontario and Quebec have recently adopted a new system of buying on a basis of quality, it is likely that the product of the majority of circles will find its way to the consumer through the more recently established channels of trade.

The Live-stock Branch stands ready and willing to help on the egg-circle movement in every possible way. Officers of this Branch are now in the field, and there is available a quantity of literature, including outlines of constitutions, by-laws, etc., dealing with the work, copies of which may be obtained upon request from the Live-stock Commissioner, Ottawa.

M. L. Haley, of Haley Bros., the well-known breeders of Holstein cattle, Springfield, Ont., writes, in ordering a change of advertisement, that owing to the protracted illness of M. H. Haley, they have decided not to exhibit at Toronto next autumn, and are offering all their extra choice show stock in all classes. Anyone desirous of purchasing some top-notchers in show-yard quality, should write Haley Bros., Springfield, Ont.

Sixty-nine head of Hereford cattle, the property of various owners, were sold by auction at South Omaha, Neb., April 16th, for an average of \$161. Bulls were in greatest demand, fifty-five head averaging \$168. The highest price for a female was \$110, and for a bull, \$355.



Roofing Wisdom

AFTER investigating the various roofing materials in use to-day, you will conclude that "GALT" Steel Shingles make not only the best, but also the cheapest roof you could put on your building.

Wood shingles will warp and curl under the action of rain and sun, crack open under the action of moisture and frost, and rot under the decaying chaff deposited in "threshing spots."

Slate is so brittle that a falling brick from the chimney, or a stone thrown on the roof by your boy, will crack it and start a leak as soon as the frost gets under it. Or extreme settling of your building will break the slate, and to repair a slate roof is nearly as difficult and expensive as to lay a new roof of metal shingles.

A roof of "GALT" Galvanized Steel Shingles will last a lifetime, or longer, and give you fire protection, lightning protection and weather protection as well.

"GALT" Shingles cost a little more than wood, but can be laid for one-half the cost of laying wood shingles, or one-sixth the cost of laying slate.

A post card request will bring full particulars by return mail. Write it TO-DAY.

THE GALT ART METAL CO., LIMITED
252 Stone Road, Galt, Ont.

Maple Villa Oxford Downs and Yorkshires

This fall I have the best lot of lambs I ever bred. I have plenty of show material, bred from the best stock procurable in England. Order early if you want the best. Ram lambs, shearlings and ewe lambs. Yorkshires of all ages.

J. A. CERSWELL, BOND HEAD P.O., ONTARIO
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FAIRFIELD Hampshires

Present Offering

Choice serviceable Boars including first prize hog, under six months, at Western Fair, 1912.

J. H. Patrick & Son,
Ilderton, Ont.

SUMMERHILL HERD OF Large English Yorkshire Hogs
ALL AGES FOR SALE.

Large White Yorkshires
prices. All breeding stock imported, or from imported stock from the best British herds. Write or call H. J. DAVIS, WOODSTOCK, ONT. Long-distance phone. G. P. R. and G. T. R.

Woodburn Berkshires
are founded on the famous old Sally tribe, noted for big size, length of body and strength of bone. We can supply pairs and trios not akin, at reasonable prices. Also high-class Cotswolds, ram and ewe lambs, shearlings.
E. BRIEN & SON,
RIDGETOWN, ONTARIO

ELMHURST LARGE ENGLISH BERKSHIRES
Present offering: Select sows. Choice boars ready for service; also younger stock, the get of Duke of Somerset, imp., and out of imported dams. Satisfaction and safe delivery guaranteed. **H. M. VANDERLIP**, Breeder and Importer, **CAINSVILLE, P. O.** Langford station. Brantford and Hamilton Radial.

Prize Chester White Swine—Winners and quality, bred from winners High-class in type Young stock, both sexes, any age; reasonable prices.
W. E. Wright & Son, Glanworth P.O., Ont.

Making High-priced Pork While Grinding Their Own Feed



Agents wanted in every town and district.

Shipments made from

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CANADIAN HOG MOTOR CO., LTD.
Winnipeg, Manitoba

We are crowded for room and are making a special offering of twenty boars ready for immediate service. Many of these are high-class show boars, and will sell fast. Our herd has won every medal and championship at Toronto Fair for ten years. Write to-day about them.
D.C. FLATT & SON, HAMILTON, ONT.
Telephone 2471 Hamilton. R. R. No. 52.

Have a choice lot of sows in pig. 4 Boars ready for service and young pigs of both sexes supplied not akin, at reasonable prices. Write or call H. J. DAVIS, WOODSTOCK, ONT. Long-distance phone. G. P. R. and G. T. R.

Woodburn Berkshires
are founded on the famous old Sally tribe, noted for big size, length of body and strength of bone. We can supply pairs and trios not akin, at reasonable prices. Also high-class Cotswolds, ram and ewe lambs, shearlings.
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Morrison Tamworths and Shorthorns—Bred from the prize-winning herds of England; have a choice lot of young pigs, both sexes, pairs not akin; and also the dual-purpose Shorthorns. Satisfaction guaranteed.
C. CURRIE, Morrison, Ont.



MAIL CONTRACT

SEALED TENDERS addressed to the Postmaster-General, will be received at Ottawa until noon, on Friday, the 6th June, 1913, for the conveyance of His Majesty's Mails on a proposed Contract for four years, six times per week, over Rural Mail Route No. 1, from Cromarty, Ont., from the Postmaster-General's Pleasure.

Printed notices containing further information as to conditions of proposed Contract may be seen, and blank forms of Tender may be obtained, at the Post Offices of Cromarty, Chiselhurst, and at the Office of the Post-office Inspector at London.

G. C. ANDERSON,
Superintendent.

Post-office Department,
Mail Service Branch,
Ottawa, 19th April, 1913.



MAIL CONTRACT

SEALED TENDERS addressed to the Postmaster-General, will be received at Ottawa until noon, on Friday, the 6th June, 1913, for the conveyance of His Majesty's Mails on a proposed Contract for four years, six times per week, over Rural Mail Route from Ailsa Craig (Ailsa Craig and Nairn), Ont., from the Postmaster-General's Pleasure.

Printed notices containing further information as to conditions of proposed Contract may be seen, and blank forms of Tender may be obtained, at the Post Offices of Ailsa Craig and Nairn, and at the Office of the Post-office Inspector at London.

G. C. ANDERSON,
Superintendent.

Post-office Department,
Mail Service Branch,
Ottawa, 19th April, 1913.

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Crampsey & Kelly

Dovercourt Road, Toronto, Ont.

**Bigger Crops
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May be raised by

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ALL IMMEDIATELY AVAILABLE

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Printer's ink won't make the car go. There's only one reason why 200,000 new Ford's can't possibly satisfy this season's demand. The car itself is right with a rightness that is unmatched anywhere at any reasonable price.

Our factories produce nearly a quarter of a million Model T's. Prices: Runabout, \$675, Touring car \$750, Town Car, \$1,000—f. o. b. Walkerville, Ont., with all equipment. For particulars get "Ford Times"—an interesting automobile magazine. It's free—from Walkerville factory. Ford Motor Company of Canada, Limited,

FRUIT FARMERS' ATTENTION!

"A Wonderful Result in Tree Planting which should interest every orchardist in the country was obtained last season on the Farm of Mr. C. A. Borden, Sheffield Mills, N. S., 1213 Young Trees were set out, the holes being dug by the use of 1/2 stick = 1/4 pound Stumping Powder. Every tree lived and grew, the truth of this statement can be vouched for by Mr. Borden, if anyone takes the trouble to make enquiry."

The Advertiser, Kentville, N. S. 15/4/13.

A TREE PLANTED IN A HOLE MADE WITH C.X.L. Stumping

will grow better than in a spade-dug hole. The ground is so pulverized that the roots can immediately expand in search of nourishment, retain moisture longer, and the surface is properly drained.

Also used for clearing land of stumps and boulders. If interested, write to-day for our illustrated booklet.

Canadian Explosives Limited
MONTREAL, P. QUE. VICTORIA, B.C.

Please Mention The Advocate

Killing Animal Lice.

The killing of lice on animals is too often neglected. It is a very common thing, for instance, for colts and calves and sheep to be lousy. They rub and scratch and bite and itch and suffer, wasting much of their energy which should be used for better purposes. It certainly might better go into growth and development than into fighting lice. Joe Wing, of the Breeders' Gazette, says: "You cannot afford to feed lice and live stock in the same pens." In other words, to make a profit in live stock you have got to keep your animals free from vermin. Unaided, they can't get rid of these pests. But with a little well-directed effort on your part you can free them. Perhaps the most approved method now in use by stockmen and farmers generally is to use Zenoleum. That famous little booklet, "Veterinary Advertiser," contains sixty-four pages, and is published by the manufacturers of Zenoleum, and we want every reader of this paper to have a copy of it. It won't cost you anything more than a postage stamp to send for it, and if you mention this paper, it will bring the book all the quicker. It is a good little book for animal owners to consult on many other matters besides ridding their stock of lice. All you have to do to get the book is to let the publishers know you want it. Write quickly to the Zenner Disinfectant Company, 312 Sandwich street, Windsor, Ont., and they will do the rest, and you won't be sorry.

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GUARANTEED ANALYSIS:

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Two Hours of Your Spare Time

and 25c. will get you the best \$4.00 pair of shoes for man or women ever made. Write for particulars to

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Brantford, Ontario

Compare the "BISSELL" with other disks

Thousands of Farmers have tested the "Bissell" Disk Harrow in the same field with other makes and found that the "Bissell" HAS THE GREATEST CAPACITY.

The plates are the correct shape. They cut, turn and pulverize the soil where others

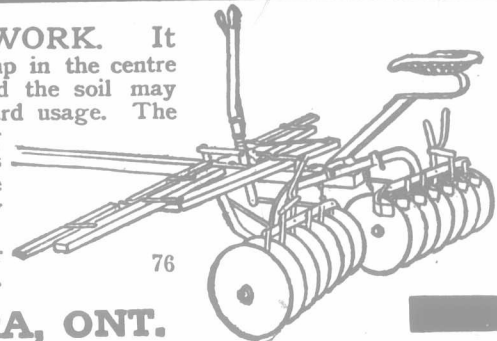
only scrape the ground and set it on edge.

The "Bissell" Scrapers meet the plates chisel fashion and keep the plates clean. Movable Clod Irons—an exclusive feature—keep the space between the plates clear.

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DOWN TO ITS WORK. It won't bind, buckle or hump in the centre no matter how stiff or hard the soil may be. It is built to stand hard usage. The simple method of balancing the driver's weight removes neck weight. It is the Harrow you should know more about.

Write to Dept. W for catalogue with description.



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G. A. Pedlar

I KNOW, when I talk to the women of Canada about making their homes safer against fire, and better as dwelling places, that these women will listen to me. And they will listen to me and act as well, when they learn that Pedlar products are moderate in cost, compared with the service they give and the labor and work they save."

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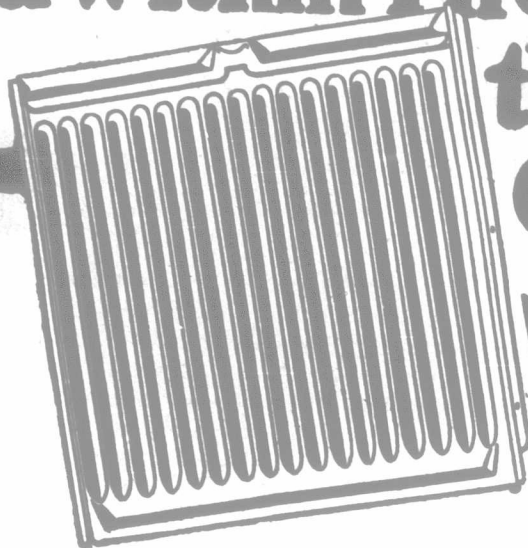
"One of these is my metal lath. Use it in your homes when you are building with cement plaster. This makes each wall a fire barrier, and makes each ceiling a fire barrier, too. It is much safer than wood lath and lime plaster."

"But, if your house is already built, and especially if you live in a wooden house, either use my metal lath with cement stucco on the outside walls or use my metal siding in various patterns. This makes your house 'fire-retardant.' It cannot catch fire from sparks."

"In the same way, use my beautiful 'Oshawa' or 'George' Metal Shingle or my metal tile on your roof, instead of cedar shingle. It makes a clean, smooth roof."

"Talk to your husband about these things. I will be glad to answer any letters you send, but I would prefer that you write my nearest branch. Suppose you plan to fire-proof your home. Write, and tell about your house and its size and building material."

G. A. Pedlar



"Here is My New 'George' Shingle for Barns"

"I AM very proud of this 'George' Shingle. It is, like my 'Oshawa' Shingle, now sold all over the world, but is much bigger. My son, the late Geo. H. Pedlar, Jr., planned it to save labor time in laying roofs, for he foresaw how labor prices were going upward. They did rise, and the price of cedar shingles also. The result is that, to-day, this metal 'George' Shingle makes a less costly but far better barn roof than cedar. See your husband uses it. It fire-proofs his barn roof."

"Save Barn Cost, and Fire-proof It with My Galvanized Corrugated Iron"

"My Pedlar Galvanized Corrugated Iron saves the cost of barn walls, compared with wood. It makes a warmer, stronger barn, lightning-proof as well, and needs no paint like wood. It saves so much in high-priced labor during building that it pays to use it, without considering how much better it builds a barn."



"My Art Sidewalls and Ceilings Make Your Home Fire-proof"

"I spoke of using my metal lath and cement plaster to make a new house fire-retardant. For an old house, I have beautiful patterns in sheet metal sidewalls. Put these on wall and ceiling, right over the plaster. This little picture shows how such a wall looks. Get my catalogue 17CC for details."

"I make my Metal Art Sidewalls and Ceilings in various architectural styles. Remember you can get them for your school, church, local hall, etc., where there is fire danger."

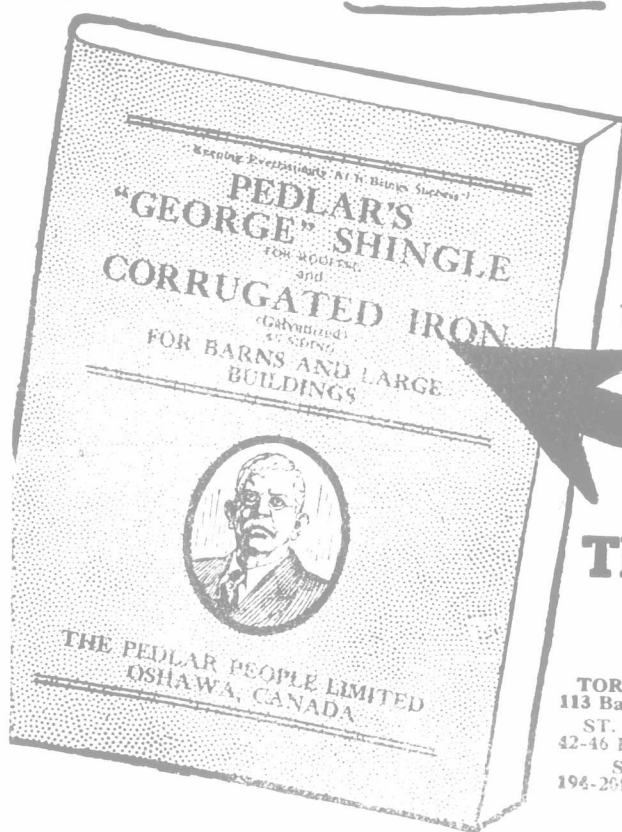
"Put My Metal Sidewalls on Your House to Stop Fire Danger"

"This shows my Pedlar Siding to go outside the weatherboarding on your house. It is metal, in patterns for stone, brick, etc. Paint it or leave it in the gray zinc color. It costs little and stops fire danger. Anybody can apply it. Ask for my catalogue on 'Siding.'"



"Get My Fire-proof Book for Your House"

For making your home fire-proof with my shingle, metal tile, metal lath, metal siding, and my other metal specialties, write the nearest branch, and say that you want them to send you my "Fire-proof" Catalogue No. 150



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"This is a book for your husband. It tells how he can build his barn with Pedlar metal walls and roof, instead of burnable wood. Have him write, or write yourself. I will send it free."



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