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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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LONDON, ONTARIO. APRIL 8, 1909.

No. 863

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You will make no mistake in buying a Tubular. The manufacture of Tubulars is one of Canada's leading industries. 1908 sales way ahead of 1907—out of sight of most, if not all, competitors combined. The fine features of Tubulars are making 1909 better yet. Write for catalog No. 193.



Tubular supply cans are low, steady, easy to fill and need not be removed to take the machine apart. The driving gears, and the ball bearing from which the bowl hangs, are enclosed, dust proof, self oiling.

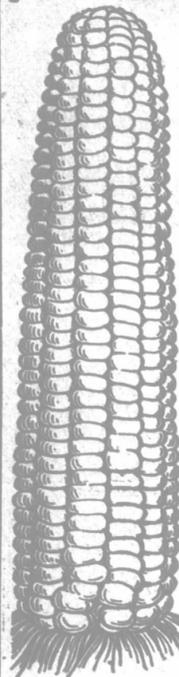


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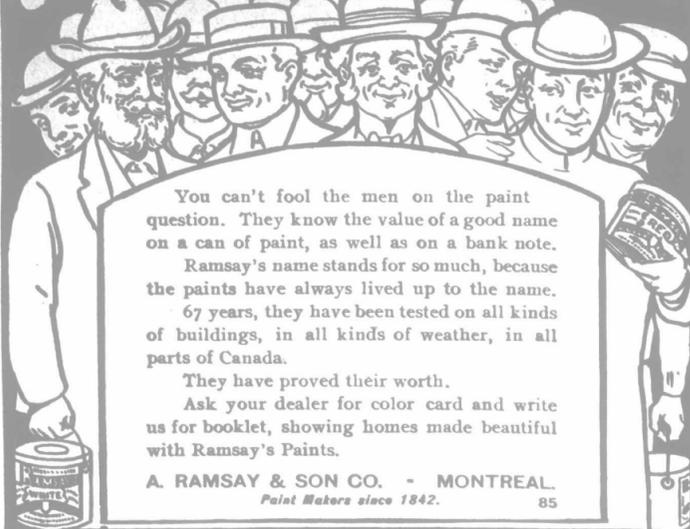
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KINDLY ANSWER THE ABOVE.

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Advocate Advertisers Reap Results.

# Every Safe Lock Shingle is made to meet the rigid requirements of the British Government for Admiralty and other Public Service



to proper size for Safe Lock Shingles. —The only shingle with galvanized edges.

—The only shingle sold with a positive protective guaranty against lightning, backed up by a free insurance policy signed and sealed by the manufacturers, the Metal Shingle & Siding Company, a \$200,000.00 Canadian corporation.

Every Canadian farmer who expects to put up a new barn or house or to re-roof old buildings is directly interested in this extraordinary free offer.

Think of it! A straight-out lightning insurance policy free from conditions of any kind. It is the most liberal roofing offer ever made to Canadian farmers.

Insurance records show that one-half the fire losses on barns in Canada result from lightning. The property loss in these cases amounts to many thousands of dollars every year.

**T**HE British Government requires all galvanized steel roofing for Admiralty or other public work to be of specific grade and to be capable of withstanding a certain acid test.

The acids used for this purpose are strong enough to burn the skin off a man's hand, and yet the galvanizing must be heavy enough to withstand their action for a definite period.

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Yet every Safe Lock shingle is guaranteed to meet the Government requirement in this and all other respects.

No wonder that those who have used Safe Lock Shingles declare that they will last as long as the buildings they protect.

Safe Lock Shingles are the only shingles that actually lock on all four sides so that they cannot pull apart.

Shingles which do not lock on four sides are not Safe Lock Shingles.

Again: Safe Lock Shingles are the only shingles that completely protect the roofing nails from weather.

—The only shingles that have three thicknesses of steel along the upper edge of lock, thereby doubling the strength along the line of greatest strain.

—The only shingle galvanized after the sheets have been accurately cut

Safe Lock Shingles have been on the market for more than ten years, and in all that time no building covered with them has ever been harmed by lightning.

This proves to us that Safe Lock roofing is a positive guaranty against lightning.

Anyway, we are willing to show our faith in Safe Lock Shingles and will protect you from lightning without one cent additional cost to you, directly or indirectly.

Safe Lock Shingles are sold at the same price as shingles known to be inferior in quality of steel, galvanizing and construction.

Safe Lock Shingles lock positively and securely on all four sides. They cannot be blown off, nor can they be pulled apart through the warping of the sheeting, or in any other way.

And remember this— No other shingle is a Safe Lock Shingle.

Safe Lock Shingles can be found in every part of the Dominion of Canada where they have been subject to storms of all degrees of severity.

No building covered with Safe Lock Shingles has ever been unroofed.

We want you to know what some of the users of Safe Lock Shingles say of them.

R. T. McLAUGHLIN, Fair View Farm, Alba, Ont.—“The ‘Safe Lock’ makes your shingles absolutely wind and water proof. They are the best shingles on the market to-day.”

F. B. DOUD, Branchton, Ont.—“The Galvanized Steel roof is apparently as good as when put on in 1898. The ‘Safe Lock’ Shingles make a lasting, storm-tight roof, and give clean cistern water. “I am satisfied that I put on a good roof.”

W. J. McPHERSON, Berryton, Ont.—“The ‘Safe Lock’ Shingles that I purchased from you ten years ago have given splendid satisfaction. The roof has never leaked a drop, and they seem to be just as good as the day they were put on.”

J. C. PAYNE, Cayuga, Ont.—“It must be ten years now since I bought the metal ‘Safe Lock’ Shingles, and up to this time I have no reason to regret their purchase. We have had wooden roofs put on since which are open in spots from the splitting and shrinkage of shingles. No difficulty, so far as I have noticed at least, has arisen with your Metal Shingles, and the roof seems compact and durable. So far as I have been able to see, I have seen no wear or injury to the shingles during the ten years’ use, and cannot see but that the roof is just as good as when it went on.”

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Send to-day for our book, “The Truth about Roofing” and full details of our Fire Insurance Policy payable in cash if your Safe Lock Roof is damaged by lightning.

The Metal Shingle and Siding Co. Ltd.  
“Roofers to the Farmers of Canada”  
Queen Street Factory, Preston, Ontario  
Branch Factory, Montreal

CUT OFF THIS COUPON AND MAIL TO US

My Roof measures.....ft.....in. long.

**The Metal Shingle and Siding Company, Limited**  
Queen Street Factory, Preston, Ontario

Please send me your booklet “Truth about Roofing,” with full particulars of your Free Safe Lock Lightning Insurance Policy.

I expect to build..... Kind of Building.....

Size of Roof.....  
If interested in any other Metal Building Goods please state such fact here.....

Name..... P.O..... Province.....

Give length of roof along ridge; also distance from ridge to eaves, and we will send approximate cost of a Safe Lock Roof. Name..... P.O..... Province.....

My roof measures.....ft.....in.

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If you want to sell property which you own in the U.S. or Canada, such as a **FARM** or a business, write us at once for our new successful plan of selling direct, without commission. Give full description of property and state lowest price. If you want to buy property of any kind in any locality, write us, stating what and where you wish to buy, and we will send you **FREE** our magazine of choice bargains for sale direct by the owner with no commission added.

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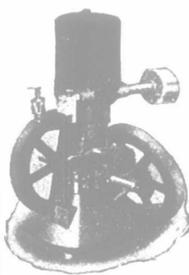
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Gas or Gasoline  
**London ENGINES**

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30 DAY FREE TRIAL

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"You can come pretty near trusting the average farmer to get the most for his money. He doesn't earn it easy; and he has to get full value.

"That's why any roofing buyer gets a strong hint here:

"My shingles cover more square feet of barn roofs all over Canada than any other kind of roofing, two to one—excepting wood shingles.

"And we are overhauling the wood shingles fast, because the farmer is learning just how much wood shingles really cost, and how little mine cost.

"Time you learned, too,— isn't it?"

*G. A. Pedlar*

Pedlar products include every kind of sheet metal building materials—too many items to even mention here. You can have a catalogue—estimate, prices, advice—just for the asking. We'd like especially to interest you in our Art Steel Ceilings and Side Walls—they are a revelation to many people. More than 2,000 designs. May we send you booklet and pictures of some of them?

## You can rest easy nights when you Oshawa-shingle—and save money, as well.

Any roof covered with Oshawa Steel Shingles (Guaranteed) is proof against lightning. Not even the best lightning-rod system insulates a building so safely.

That particularly matters to you, if you own barns, for during 1907, from the most accurate and complete figures it is at present possible to compile, this is what the electric blast cost the farmers of this continent:

Lightning struck 6,700 farm buildings in Canada and the United States.

Fires, caused by lightning, destroyed property valued at \$4,123,000.

Lightning killed 4,457 head of live stock.

Lightning killed 623 human beings, and injured 889, nearly all dwellers on farms.

Insurance men declare that more than forty per cent. of all barn fires are caused by lightning. Barns are peculiarly subject to the lightning stroke, because they contain hay and straw that constantly gives off moisture by evaporation. The moist exhalations from horses and cattle also attract the bolt.

### OSHAWA GALVANIZED STEEL SHINGLES

A new roof for nothing if they leak by 1934

Yet for a cost of less than five cents a year per 100 square feet you can safeguard your barns—and your house, for that matter—against lightning. That is the real cost of Oshawa Steel Shingles (Guaranteed).

More than that: When you Oshawa-shingle any building you have a roof that is absolutely wet-proof; absolutely wind tight; absolutely fire-proof; and that is GUARANTEED to be a good roof for twenty-five years without painting, patching, repairing, or bother or fuss of any kind.

Anybody who never saw steel shingles before can lay an Oshawa-shingled roof perfectly with no tools but a hammer and tinners' shears, and no guide but the simple, easily-followed directions that come with the shingles.

Anybody who has a building worth roofing right can afford the ONLY roofing that will roof it right—and the only roofing that is guaranteed.

That is the story in brief: Send for the free book that tells it all length, and proves every statement as it goes along. With the book comes a sample shingle, to show you what we mean by saying that the Oshawa Steel Shingles (Guaranteed) are made of 28-gauge heavy sheet steel, heavily galvanized on both sides and all edges, and fitted with the Pedlar four-way lock that makes the whole roof one seamless, unbroken sheet of tough steel—a roof that is not only guaranteed for twenty-five years, but good for a century.

Get the book, and learn about "Roofing Right." Send for it now—to-day. Ask for Roofing Right Booklet No. 16. Address our nearest place.

The PEDLAR PEOPLE of Oshawa ESTABLISHED 1861.

ADDRESS OUR NEAREST WAREHOUSE

MONTREAL 321-3 Craig St. W. OTTAWA 423 Sussex St. TORONTO 11 Colborne St. LONDON 86 King St. CHATHAM 200 King St. W. WINNIPEG 76 Lombard St. VANCOUVER 821 Powell St. QUEBEC 127 Rue du Port. ST. JOHN, N. B. 42-46 Prince William St. HALIFAX 16 Prince St.

WE WANT AGENTS IN SOME SECTIONS. WRITE FOR DETAILS. MENTION THIS PAPER.

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# The Farmer's Advocate

## and Home Magazine

"Persevere and Succeed."

Established 1866.

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1876.

Vol. XLIV.

LONDON, ONTARIO, APRIL 8, 1909

No. 863

### EDITORIAL.

#### Waste Land Changed to Forest.

The forestry problem, like every other problem in which agriculturists are interested, must be considered from an economic standpoint. In most cases a demand is made for immediate returns. Forestry enthusiasts have not been able to convince the public that the returns accruing the first, or second, or third season after planting young trees assumes large proportions, but in a report just issued by the Ontario Department of Agriculture, Professor E. J. Zavitz, of Ontario Agricultural College, combines figures with logical arguments to show wherein Ontario farmers can benefit by judicious reforestation of waste lands.

True, trees do not develop into salable timber in a few years. But there are other considerations besides direct cash from the lumber or cordwood sold. What of the influence on field-crop yields, because of increased moisture supply due to snow being held during winter, and the conservation of moisture during the growing season by bush-land checking the free sweep of the winds? It is necessary to consider more than the area that is devoted to tree production. There are few localities in Ontario in which one farmer, or more, cannot be found who will testify to the benefits of forest-growth, by stating that the yield on a certain field, protected from the sweep of the prevailing winds, was one to five bushels greater than that of another area of similar soil, but not so protected. On a hundred-acre farm, with sixty acres in crop, an increase equal to two bushels of wheat per acre, at the average market price of wheat—say, 75 cents—would mean \$1.50 per acre, or a total of \$90 increased returns from practically the same labor and general expenses. On exposed tracts, these figures would be much greater. Particularly in dry, windy seasons is this the case. And this benefit is observable not only on acres immediately contiguous. Bush-lands have an influence for good on a wide district.

In all parts of the Province areas have been cleared that never should have been a lure to agriculturists. Why should man or beast be called upon to labor on hilly tracts, while areas that are more level, and just as fertile, remain untouched? Spring freshets and summer floods result in washouts that never would have been possible had nature's trees remained.

From the æsthetic side, too, there are many factors worth considering. The natural beauty of the country is enhanced; birds are provided with shelter and nesting places; wild game is supplied with a desirable breeding-ground; recreation grounds for the people are preserved; and streams are sustained and made more attractive to fishermen.

Man's inherent tendency to satisfy a selfish interest, without regard to the future, has resulted in a sad neglect of wooded lands and a gradual denudation of acres that never should have been used for agricultural purposes, and which, as bush land, were of benefit to the surrounding district. When forest trees are available, a call to meet payments usually brings disaster to the bush land. Evidently, no thought is given for the smaller growth that rapidly is developing into a valuable asset. In some cases few young saplings or seedling are to be found, because of the annual inroads of the live stock of the farm. These are problems that can be solved by the individual. Keep stock out of the woodland, at least until the saplings have grown up thick and tall. The most scattering bush will soon resist itself if unpastured.

Development in manufacturing, and a consequent lavish consumption of all kinds of wood, have brought about a scarcity that is becoming alarming. Gradually-increasing prices point to abnormal profits from all wooded land. The United States, recognizing the rapid decrease in home supply, evinces alarm by a proposal to reduce the United States tariff on lumber from \$2 to \$1 per thousand. This is an augury of still further increases in lumber prices, and the Americans wish to preserve their home supply by making conditions for import easier. Canadians should exercise the strictest care in cutting down trees, and also take precautions to induce continuous cropping on areas on which trees now stand.

But that is not all. The non-agricultural lands already bared of trees can be made to give profitable crops by skilled methods of reforestation. Already, some Ontario townships comprise as low as five per cent. wooded land. In 1904, the average for all settled townships was fifteen per cent. A deplorable feature is the scarcity of valuable hardwood. On almost every farm there are at least a few acres that can best be left in bush. Then, there are large tracts of land not suited for agricultural purposes. Private owners must arrange to manage properly the former; for the latter, the only solution seems to be permanent management as Provincial, or possibly municipal, forests.

The problem of reforestation, as considered by Prof. Zavitz, does not advise expenditures in replanting, except where reasonable fire protection is provided, or where there is no chance of natural reproduction of desirable species. As a financial investment, figures are given, taking into account rate of interest, cost of land, cost of plant material, cost of planting, cost of management, and protection and taxation. A thorough investigation in Southern Ontario furnished a basis for expenditures. Taking one acre of white pine as a unit, the total expense, at the end of 40 years, is calculated to be \$71.92, and at the end of 60 years, \$160.34. Past experience on soil similar to that of Southern Ontario non-agricultural tracts, indicates that an acre of 60-year white pine, artificially planted, will contain about 200 trees, ranging from 12 inches to 24 inches in diameter. At a stumpage value of \$10 per thousand feet, this one acre would be worth \$800, giving a net profit of \$639.66 in 60 years. This is equivalent to a yearly rental of \$3.25, capitalized at 3½ per cent., in addition to 3½ per cent. interest on all money invested.

Abandoned farms are to be found. In other instances families are trying hard to eke out a living on lands that are not in condition for field-crop production. Rye is most commonly grown. Figuring labor at \$2.50 per day for man and team, the cost of production is placed at \$3.72 per acre. The average yield is about ten bushels per acre, which, at 75c., gives a return of \$7.50, or the discouraging balance of \$3.78.

The dearth of timber, and the prospect for present high prices being augmented, demands that farmers study the forestry question. For the year ending March 31st, 1908, Canada imported \$9,953,164 worth of forest products, including oak, southern pine, cherry, chestnut, hickory, fence posts and railroad ties. Judicious cutting of trees, careful management of bush lands, and systematic planting of non-agricultural areas, are worth considering.

Funny that "no," one of the easiest words in the English language to pronounce, is often the hardest to say.

#### Grain-and-hay Rut.

One great trouble with farming in Eastern Canada is that too much land is devoted to oats and grass, and not half enough to corn, roots and clover. The grain-and-hay rut still holds down many a farmer and impoverishes many a farm. An idea prevails that cultivated crops require too much work, and that seeding to clover is too expensive to be indulged in more than once in five or six years. So they go on mowing their sod-bound timothy and June-grass meadows, till they will no longer yield a ton to the acre, and sowing nearly all their plowed acreage to grain, chiefly oats, harvesting thirty or thirty-five bushels to the acre, and complaining because profits are meagre, and their fields become weed-infested and poor. Of course, they cannot afford to hire much, because the aggregate annual returns scarcely yield decent wages to themselves, let alone interest on capital invested; and, of course, they hesitate to invest money in clover seed, because, when they do sow it, they are so uncertain of a return, owing to the land having become depleted of humus and plant food. It is an awful rut, this grain-and-hay habit, from which so many find it hard to break away—an uninteresting, uninviting annual round. No wonder the young men long to get away from it.

Happily, here and there are progressive-spirited farmers, who have stepped out of the beaten path up on to the highway of a broader outlook. They have resolved to solve the labor and fertility problems, by growing more productive crops, by adopting rational rotation methods, and at the same time introducing variety into their work. They have begun, perhaps, if in the corn belt, by building a silo and planting corn after sod, following with grain, and seeding to clover, feeding both silage and clover hay to stock. The corn cleans the land and produces incredible quantities of good cattle feed. The fine state of tilth in which it leaves the land is well adapted to a crop of grain, and clover being sown frequently in short rotation builds up the soil and renders it easier to get future stands of clover. Corn and clover are a wonderful pair for soil renovation, as well as for the feeding of stock. Combined in the ration, one supplies what the other lacks, while the growing of both, and feeding them upon the farm, both cleans and enriches the land.

The new crops and the new system of management add interest to the farm work. What more refreshing than the verdant clover-seeding and the fragrant clover bloom? What more stimulating or more uplifting than the springing field of corn, rich-green in its vegetative luxuriance. A well-attended corn crop is a wonderful educator in plant physiology, as well as in principles of soil cultivation. There should be ten to twenty-five acres of it on every farm in Eastern Canada, where corn matures either for husking or ensilage purposes, or, better still, for both.

With waste lands reforested; rough, watered areas seeded to permanent pastures; rolling, clay hillsides in alfalfa, and the rest of the land worked under a short rotation of corn and roots, followed by grain seeded to clover, and the bulk of all the produce fed to good stock, with the manure carefully saved and applied, returns from our farms could be easily doubled in ten years; fertility increased, average crop yields raised, and more labor employed, at a much higher wage, with a fair profit still to the good. Too many acres are producing ten or fifteen dollar crops of oats and hay, instead of thirty-dollar crops of ensilage corn.

## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

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### Registration of Factories—Certificates for Makers.

Registration, or, in other words, licensing of cheese factories, creameries, and other establishments for the manufacture of dairy products, and certification of the butter and cheese makers employed therein, are the two essential features of a bill styled "The Dairy Products Act," introduced into the Ontario Legislature by the Minister of Agriculture, Hon. Jas. S. Duff. An outline of the provisions appeared in our news-columns last week. Briefly, it requires that on or before January 1st, 1910, all creameries, cheese factories, milk condensories, milk-powder factories, or other such establishments, shall be registered with the Minister of Agriculture on forms supplied, nature of business, location, and other information required by him, being given. After the date named, no such business may be carried on in a place not so registered, without application first being made to the Minister, and permission granted, following a report signed by an inspector. Refusal to grant permission may be based upon lack of proper equipment or unsanitary conditions. Appeal from the Minister's decision may be made to the Lieutenant-Governor-in-Council. Section 6 provides for the closing of a factory upon adverse report by an inspector as to sanitary conditions or equipment.

The seventh section requires chief makers in factories or creameries, after 1911, to hold certificates of qualification from the Dairy Schools at Guelph or Kingston, a sub-section providing, however, that, in place of such certificate, a permit may be issued at any time upon the report of an inspector upon the general grounds of experience and competency.

Registration of factories, although ostensibly designed to insure against the establishment or running of co-operative plants upon unsatisfactory sites, or with inadequate equipment, is presumably aimed at regulation of the small-factory evil. In parts of Eastern Ontario the large number of small, poorly-equipped, ill-situated and poorly-manned factories have long been an obstacle

to progress, and the location of new ones works injustice to men or companies who already have money invested in existing plants. By requiring a certain standard of equipment and sanitation, the Department of Agriculture, through its inspectors, will be given authority to minify this evil, although it seems to us that unnecessary interference with existing enterprises might well have been specified as an additional ground for withholding a permit to new factories. Also, it would seem well to require annual registration, and to devise some more certain means of bringing prospective builders of new factories into direct touch with the dairy inspectors before they might have gone the length of erecting their building.

On the other hand, the bill contains one very commendable section, which provides for withdrawing of a permit upon report of an inspector. The effect of this will be to strengthen the hands of the Department's staff of instructors.

The section providing for certification of makers has been included on the recommendation of dairy leaders in the Eastern part of the Province. It is calculated to insure the more general training in dairy schools of head makers, and to raise the standard of this important profession. Criticism from the patron's standpoint has been that it might tend to the formation of a makers' union to raise wages by combination. Whether it does or not, will depend upon the wisdom of the makers. Other objections have been urged, but we can only hope that, if enacted (which it has not been at date of writing), a feasible basis of estimation of uncertified makers may be arrived at, and the whole business kept free of any vestige of political influence. On the whole, this bill is a hopeful step in advance; at any rate, that portion providing for registration of factories.

### For Absolute Free Trade.

Editor "The Farmer's Advocate":

May I again venture to offer a few remarks of kindly criticism on your position re tariff. The tone and spirit of your editorial of October 1st, 1908, are simply splendid, but it appears to me there are one or two weak points in your line of reasoning, to which, in the interests of agriculture, I wish to draw attention.

You say, "The way to make the manufacturer prosperous is to make the farmer prosperous, and the way to do that is to reduce the tariff to a minimum. The way to build a house is to lay the foundation first." It is this minimum I wish to speak of. You would not think to lay the foundation of a house, and wilfully include even a minimum of decay, or that which would produce decay or weakness.

Your whole preceding line of argument goes to show—and, I think, rightly—that it is the present maximum tariff that is sapping the vitals of agriculture.

If the maximum is doing so, so, also, will the minimum, in a lesser degree.

Further, who is to determine the specific meaning, or amount, of the word, as applied to the tariff.

Now, carry this line of reasoning to a little further on in the same article, where you say that, "Your own view, admirably expressed by a farmer, was that the tariff should be so adjusted as to produce a maximum of customs revenue."

Why should the tariff, which, as you show, bears aggressively on the farmer, be so adjusted as to wring from him a maximum of customs revenue?

Is it any wonder, in the face of such a giving-away, by an influential agricultural journal, of the position under which agriculture is carried on, that the quick-witted youth leaves the farm for the city, where, as you put it in your issue of October 15th, "Opportunities are found to realize on the labor of others." The "others," if searchingly looked for, will be found to be none other than the farmers.

In conclusion, why should not "the exceptionally clever boy," or, for that matter, the exceptionally dull boy, either, be able to produce more wealth for himself at farming—the primary industry—than anywhere else, with an equal effort?"  
Victoria, Australia. J. BREWSTER.

By leaving a fifth of the farm in protected woodland, and properly working the rest under a system of short rotation, thousands of us would make more money than we do.

### Principles of Tariff Protection.

Editor "The Farmer's Advocate":

The wisdom or unwisdom of the present system of tariff protection in Canada, is a point which has been much debated, and, I suppose, will continue to be debated for years to come. Adopted originally as a temporary measure, intended to establish urban industries more rapidly in our young country, and to be withdrawn when these were once established, it has apparently become a settled system. There is practically no political division on the question, and politicians have apparently made up their minds that the system is here to stay. Perhaps it is fortunate that this question does not figure prominently in party politics to-day, for it allows us to consider the question on its own merits, and free from party bias. It is the duty of every citizen to consider the question carefully, and to decide whether or not it is wise to have this system fastened upon us permanently. To the farmer, particularly, as the one who has everything to lose, and nothing to gain, through the system, the question is one of very great importance.

It is my intention to deal with the subject specifically—to speak not of theories, but of facts. But, in order to thoroughly understand the subject, it is necessary to first consider the theory, leaving the facts to be dealt with later.

"Protection" is afforded to home industries by means of a customs tax, more or less heavy, levied on the products of similar industries entering from other countries. This increases the price at which they can be sold by just the amount of the tax. Without the tax, the selling price is made up of three items: cost of manufacture, freight charges and profits. With the tax, these items remain the same as before, but have the amount of the tax added to them. Thus, the selling price to the consumer is raised by the full amount of the tax. But, not only is the price of the imported article raised, but the price of the homemade one is raised to the same level. There cannot be two prices for the same articles, even if one is homemade and the other imported. In this way, regardless of cost of production, the selling price of the homemade article is artificially enhanced by the full amount of the customs tax. The protected industries are aided by being enabled to charge a higher price for their product than they otherwise could. They are given a bonus equal to the amount of customs tax, and are allowed to collect it from the public in the form of increased prices.

But it is worth noting that this only applies to those industries whose products do not fully supply the needs of the home market. Where the products of any industry more than supply the home market, so that a surplus must seek a market abroad, the advantage of the protective duty cannot be taken advantage of, unless there be a combine to fix prices, so that there shall be two prices, one designed for the home market, and the other for competition with the world. In the absence of such a combine, prices will be uniform for the whole of that commodity, and must be fixed by the price received for the exported surplus. In Canada, the one great industry that is not, and cannot be—at least for many years to come—benefited in the slightest degree by a system of protection, is agriculture. Our greatest natural resource is our soil, and, as that resource is just developed, it is now, has always been, and will be for a very long time, true that our agricultural products will be more than we need, we shall have to depend on a foreign market for the selling of our surplus. This, of course, carries with it the truth that agriculture in Canada cannot benefit to any extent by protection.

It has always been urged by the opponents of protection that it can only benefit the protected industries by hampering the other industries of the country. This is true. The higher price of the protected commodity is paid, not by the foreigner who sends his goods here, but by the people who buy and use that commodity. The full effect of the tax, as a moment's reflection will show, falls ultimately on those industries which either are not protected, or cannot, from the nature of their production, reap the benefits of protection. These are the strongest industries, and those best suited to the country. Thus, there is always the danger that those industries naturally adapted to the country will be held back for those not adapted.

This is the reasoning advanced by those who oppose protection in any form. Yet, there may be protection wisely applied to the benefit of the nation. Where it is given only to those industries which are likely to flourish, and is given as a temporary help, the effect may be to establish many industries that otherwise, exposed to full competition from similar industries already established, could never be started. It is, however, a dangerous system in an case, on account of the difficulty of applying it wisely. It at once creates a class of beneficiaries, whose interest it is to perpetuate the system. Such a class, under our form of government, may gain great power, and use it to the harm of the whole community.

Two things are to be feared from a permanent system of protection. The first is that industries will be maintained that are not suited to the country, and that will be a perpetual burden upon it, just because the tax protection enables them to levy on other industries; and, second, by their diversion of men and money from other and more profitable channels. The second is the formation of combines to enhance prices, either by restricting production to less than the needs of the home market, or by fixing a price for the home market higher than that of the export trade. There is reason to believe that all these things exist in Canada at the present time, and that the whole burden of the system falls on agriculture, and so heavily that this industry cannot hold its own. A tax higher than all other taxes combined, paid for the benefit of other industries, may have a good deal to do with our decreasing farm population, with the low profits of farming, with the problem of farm labor, and with many of our other difficulties. It is my hope to explain this more fully in future.

E. C. DRURY.

### Renaissance of Maritime Agriculture.

The renaissance of Maritime agriculture is reflected, even as it is promoted and encouraged, by the annual reports of the Secretary of Agriculture for Nova Scotia, which come to us year after year, promptly issued, brim-full of information, and breathing the spirit of progress and hopefulness which animates the agricultural community of Nova Scotia since the inauguration of the Agricultural College at Truro. All things considered, it is about the most refreshing official document which finds its way to our desk.

Following up the idea instituted last year, when a feature of the annual report was a symposium of articles on the sheep industry, dairying is similarly treated in the 1908 report just to hand. The subject is discussed in all important phases, from breeding, selection and feeding, to manufacture and marketing of the product. The importance of the subject lies not alone in the present extent of the dairy business, but in its possibilities, as well. Prof. Cumming, the Secretary of Agriculture, and Principal of the Agricultural College, estimates that, out of a total of 14,433,000 acres in Nova Scotia, about 5,000,000 are occupied by farmers, on which were kept, in 1901, 313,174 horned cattle—i. e., one to every 16 acres, while Denmark boasts one to every 3 or 4 acres. Of the total horned stock in the Province, 138,817 were cows, producing an estimated total of 416,451,000 pounds of milk, valued at \$4,164,510. With the average production of 3,000 pounds per cow doubled, as might well be attained, and the number quadrupled, the value of the dairy products of the Province could be raised to \$30,000,000; or, counting the hogs that could be raised on the by-products, a total well up to \$50,000,000. Denmark, with only two-thirds the area, and similar climatic and soil conditions, is yearly exporting upwards of \$100,000,000 worth of dairy products and pork.

The value of dairying as a means of maintaining soil fertility is impressed by a calculation that, while it would cost a farmer \$6.68 to buy in the form of commercial fertilizer the equivalent of the fertility in a ton of timothy hay, on the other hand, when this is fed to dairy cows, and the skim milk, in turn, to calves, the amount of fertilizing elements sold off the farm would not exceed ten per cent. of the above amount. Of course, this does not take account of wastage in manure, or cost of handling.

So much for economics and possibilities. According to the Secretary's report, a considerable advance in private dairying was made in the Province last year, though the output of the factories did not materially change, there being manufactured in these about 13,600 pounds more butter and 16,037 pounds less cheese than during 1907. Condensories at Truro and Antigonish reported an increased business. Altogether, there were manufactured into butter, cheese and condensed milk about 2,000,000 pounds more milk than in 1907.

Among the 167 Agricultural Societies, Superintendent Fuller reports a demand for first-class dairy sires, notably Ayrshires, and a tendency to substitute Shorthorn bulls with special-purpose dairy sires. With an awakening interest in dairying, with more systematic use of pure-bred dairy sires of authenticated producing ancestry, with good markets, excellent climatic conditions, and with an increasing realization of the economic advantage of the dairy business, there would seem to be prospects for steady and extended growth.

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Of other features, a word in passing. A year of exceptionally bounteous crops was blessed with a high range of prices for all products except hay, which thus offered less temptation to sell it off the farm. Many evidences of stock improvement have been noticed as a result of previous importations by the Government of pure-bred horses, sheep and cattle. Experiments indicated marked

benefit from inoculation of alfalfa in about 50 per cent. of cases where tested. The thirty-two model orchards established in various counties, under the Act of 1901, are for the most part doing well.

Intention is announced, in the report of the Principal of the Agricultural College, to develop nursery plantations, especially for the more important classes of forest trees. It is purposed to set aside some two or three acres on which to grow commercial varieties of trees for study and demonstration. It has also been decided to undertake agricultural experiments, which hitherto have rather been left to the Dominion Experimental Branch Farm, at Nappan.

The Agricultural College is proving of large service in both its regular and short courses, a feature of the work in January, 1909, being a short course for ladies in horticulture, dairying, seed selection, poultry-raising, and domestic science, with a few demonstrations in judging horses and cattle. Eighteen ladies were regularly enrolled, while at some classes as many as thirty were present.

That the work of the agricultural College can never prove as effective and far-reaching as it ought, unless directly related to the common school work of the country, has been recognized by arranging, in affiliation with the staff of the Normal School, a summer course especially intended for teachers, so that after three, two, or in some cases one vacation season a teacher may qualify himself or herself for a rural-science diploma which carries with it the right to a special Government grant.

realized by farmers. Great interest has been taken in field-crop competitions. This feature has been recognized as a valuable means of locating good seed both for seedsman and farmer. The benefit of the Seed Control Act in assisting the agriculturist to procure only good clean seed is appreciated. The net result has been increased yields and superior quality.

The output of cheese factories and creameries also showed a decline. This is credited to the introduction of cream separators increasing home dairying; to increased supplies of milk required in cities and towns, and to a scarcity of succulent food for the cows, owing to the severe drouth. Farmers are advised to supplement their pasturage with vetches, corn, or peas and oats. This practice is reported as growing in favor in the leading dairy sections. Root crops were an excellent crop, but mangels are said to be too scarce in dairy districts.

Horse-raising seems to be increasing in popularity. Pure-bred sires, Clydesdale and Percheron, are common. The Government, also, has purchased 18 Thoroughbred stallions in Kentucky. Cattle are not receiving the attention they should. Undue faith is placed in commercial fertilizers, as compared with manure from stock-raising. A few agricultural societies are doing a laudable work in introducing pure-bred stock.

Experiments conducted at Sussex show that alfalfa can be grown with encouraging results. The report advises nitro-culture treatment of the seed. Prospective growers are warned against sowing it on poor land. In order, first of all, to inoculate the soil, it is recommended that a

thin sowing of thoroughly-treated alfalfa be used, with general seeding of grass and clover.

No additional illustration orchards were set out during 1908. Dead trees were replaced in all except the orchard of Madawaska County, where the loss was so great each year that it has been considered unfit for orchard purposes.

Thirty students took advantage of the Government's offer to pay transportation charges to and from the Agricultural Colleges at Truro, N. S.; Guelph, Ontario, and Ste. Anne de Bellevue, P. Q.

An agricultural commission, comprising Hon. D. V. Landry, of Fredericton; Geo. E. Fisher, of Chatham, and W. W. Hubbard, of Burton, is investigating agriculture, immigration and colonization conditions and possibilities. A complete form of inquiry has been sent to a correspondent in each school district.

Full reports are given of work done by Agricultural Societies and Farmers' Institutes. The proceedings of the Fruit-growers' Association convention and the Maritime Winter Fair also embody valuable information for agriculturists in Eastern Canada.



Merry Matchmaker.

Thoroughbred stallion. Winner of Premium, Hunter Show, London, Eng., 1909.

Space forbids more extended reference in this article to the splendid work being carried on in the interest, not only of Nova Scotia, but of Maritime, agriculture. Suffice to say that the report under consideration registers another milestone in the record of Maritime agricultural progress, and what has been done is but an index of what we may expect.

### N. B. Agriculture Report.

The annual report on agriculture in the Province of New Brunswick, for 1908, states that conditions in general have been about normal, and that increased attention to educational work is having a marked effect on methods adopted. Unusual weather conditions resulted in late-sown grains being superior to early sowing. This is explained by the fact that the spring was late and cold. In early June, when most of the crop was nicely above ground, a drouth set in that lasted until near the middle of July. The consequence was short straw and small heads. In wheat, the average yield for the last 11 years has been 18.4 bushels. Last year it was 16.6. Oats averaged, for 11 years, 29.1 bushels, but in 1908 only 28.1. Barley stood 23.1 bushels for 11 years' average, and 22.2 for last year. Buckwheat averaged 21.7 bushels during the last 11 years, and 23.4 in 1908. Potatoes showed an average of 130 bushels for 11 years, and 167.8 last year. Turnips yielded 420.7 bushels average for 11 years, and 513.9 in 1908.

The importance of seed selection is being

### HORSES.

#### Getting the Harness Ready.

Harness should be cleaned once a year, at least, and the spring, before heavy work begins, is as good a time as any for putting it into shape. It needs to be cleaned, oiled and repaired, broken traces mended, torn parts sewn up, last year's deposit of dirt washed out, and the leather oiled, to maintain its softness, elasticity and wearing qualities.

To properly clean and oil harness, proceed as follows: Take the harness apart, and place the parts in a tub of lukewarm water, with a handful of washing soda in it. Let it soak about 20 minutes, and then scrub each piece with an ordinary scrubbing brush on a board. When the leather is nearly dry, apply neat's-foot oil. Allow to hang in a moderate temperature until again dry, and then give a second dressing with oil. When dry, put together, and then, if thought advisable, for appearance sake, apply some of the harness dressings to give gloss and blackness.

### Indigestion in Horses.

#### IMPORTANCE OF ATTENTION TO TEETH.

Digestive trouble in horses may be chronic or acute. Chronic indigestion is by no means rare. The usual cause is inability to masticate the food properly, on account of irregularities of the teeth. The animal will probably consume a reasonable amount of food, but will not look or feel well. His hair will be dry-looking and staring; he will be low in flesh, dull in spirits, and will tire easily. He is sometimes subject to more or less severe attacks of colic, due to trouble in digesting the imperfectly-masticated food. His appetite is often capricious, and digestion irregular. Periodical attacks of a semi-diarrhea, often followed by a semi-constipated condition of the bowels, are frequently noticed. An examination of the mouth will usually reveal irregularities of the teeth. The outer margin of the upper molars and the inner margin of the lower molars will present numerous little sharp projections, which irritate the cheeks and the tongue, which often present abrasions. In many cases, especially in old horses, one or more teeth are quite long, the bearing surface being from  $\frac{1}{2}$  to 1 inch above or below their fellows. In such cases, from some cause, the opposing tooth or teeth are either absent, or worn down until the long tooth or teeth press upon and lacerate the gums during mastication. It is surprising how many horses suffer more or less inconvenience—often more—on account of the condition of the teeth. When we, for a moment, consider the anatomy of the mouth, we can readily understand why this is. The upper jaw is wider than the lower, hence the rows of teeth are further apart. Both the inner and outer surface of the molar teeth are uneven, presenting grooves running the whole length of the teeth. The motion during mastication being lateral, we can appreciate the fact that the table or bearing surfaces of the upper molars become beveled from within outwards and downwards, and those of the lower molars from without upwards and inwards. This leaves the sharp points as stated, viz., on the outer margin of the upper, and the inner margin of the lower, molars. Those who are not accustomed to examining horses' mouths will be surprised to notice how many horses, even quite young ones, will present this condition sufficiently marked to interfere to a greater or less extent with mastication. A horse has a full mouth of molars at four years of age, and, on general principles, we may say that his teeth should be dressed once every year after that, and it is not uncommon for them to need dressing at an earlier age. Of course, there are exceptions; some young horses do not require this attention, but there are few that would not be improved by it. It would not do for the practicing veterinarian to tell his patrons that all their horses should have their teeth dressed. He would soon be classed as a faker. At the same time, there are few that have reached five years or over, upon whom a dollar each spent for dressing their teeth once every year would not be money well spent. Slight irregularities of the teeth are not usually sufficient to cause chronic indigestion, but they interfere to a greater or less extent with mastication, and, as imperfectly-masticated food, while not necessarily causing disease, does not digest thoroughly, hence the animal does not get all the good he should from what he eats. The trouble may not be sufficient to cause visible symptoms during or following mastication, but an examination of the mouth will reveal many sharp points already referred to, the removal of which, a little consideration will convince us, will enable the animal to masticate more comfortably and more thoroughly. There are many so-called "veterinary dentists" who do not understand the operation, and there are many who think that any person who has a tooth rasp can dress teeth properly. This is a mistake. It is not necessary for a man to be a veterinarian in order that he may be able to dress horses' teeth properly, but the two usually go together. Many of the so-called dentists apparently think that, in order to earn their fees, it is necessary to rasp a good deal off the teeth, and often rasp the bearing surfaces, which, of course, is radically wrong. The bearing surfaces of the molars are quite rough, in order that, when pressing upon each other with a lateral motion, the food between them may be reduced to fine particles. If these surfaces are made smooth, this grinding cannot be done, and the horse is in a worse state than before. Some farmers and horse-owners, without any instructions or special knowledge of the subject, think that all that is necessary is to rasp the edges a little, and they do their own dental work. An examination of the mouth so dressed will usually reveal the first two or three molars in each row fairly well dressed, but the molars further back not touched. The competent veterinary dentist always uses a mouth speculum (an instrument by which the horse's mouth is kept open at whatever width desired). This enables the operator to insert his hand with safety, and feel all the teeth—the only way he can tell just what should be removed. If

any of the teeth are very much too long, he uses a shears to cut off the projecting portion; then, with rasps of different shapes and designs, he carefully rasps off just such portions as should be removed, and no more. The ordinary horse-owner can, with some study and practice, become proficient in the art, but he must spend some money in purchasing the necessary instruments, and gradually acquire skill by practice, and it requires considerable practice to give proficiency. On the whole, we think it better to employ a veterinarian, but the work should not be entrusted to any faker who travels the country as a veterinary dentist, as these are out simply for the money they can make. They have no reputation to maintain, as they seldom visit the same locality the second time, and, so long as they can get a job, they do not care whether or not the horse requires the operation, nor yet whether it is properly performed. "WHIPP."

(To be continued.)

Buyers have been scouring the country for horses, and shipping out weekly many carloads to Manitoba and other Western Provinces this season. Good blocky pairs of the draft type sell readily for \$100 and upwards.

## LIVE STOCK.

### Investigating the Bacon Industry.

The bacon industry of Canada is in anything but a satisfactory condition. Whether the sending of a commission of farmers to Denmark, to investigate conditions there, is what is wanted, is a matter of opinion. It strikes us that the first thing to be done is to investigate conditions at home. The two parties necessary to the success of this industry are as far apart as the two poles. Adversity has not softened the bitterness that exists between them. The producer still blames the packer, and the packer still complains of the producer. Such has been the condition of things for several years past, and in the meantime the bacon trade has dwindled to very small proportions, and an industry that brought in many millions of dollars not many years ago is being allowed to go by default.

Might not something be done to clear the atmosphere, and to bring about a better condition of affairs, if an independent tribunal were delegated to make a thorough investigation of the whole situation? Packers claim that they are losing money on the export end of their business, and that the prices they are compelled to pay for hogs to keep their establishments running, at even half their capacity, are higher than the market demand will warrant. In fact, it is reported that one large packing concern is going out of the export trade altogether, so disastrous has that end of the business been the past few years, and will in future confine its operations entirely to the home market. These and other questions affecting the export end of the business might well be looked into and reported upon by competent parties who have no axes to grind.

Then comes the producer's side of it. He claims that the high cost of feed prevents him from producing hogs at a lower price than the average paid for several months back. This may be true, but some accurate data bearing on this question just now would have considerable weight. The comprehensive, painstaking feeding experiments of Prof. Day and others, conducted a year or two ago, showed that bacon hogs could be produced at a much lower cost than the producer claims can be done at the present time. Have conditions governing production changed materially since then? These and other matters connected with the producing end of the business might bear some further investigation, all tending to clear the atmosphere a bit, and to find out just where we stand.

The hog-buying end might be the better of a little looking into, as well. Is this f.o.b. plan of buying at country points by the packer, in the best interests of the trade? Does it give the producer a correct idea of market values? Would the shipping of hogs to large market centers, where they would be sold as to their quality, and the condition of the market generally the same as cattle and sheep are sold, afford the producer a better idea of what values are? Answers to these questions, obtained by an independent party, might help to solve some of the difficulties that handicap the business at present.

The bringing in of Spanish hog products might also be looked into. Are these products brought into Canada in any large quantities? Do they influence price of hog products in home market? Is duty charged on such products coming into this country sufficient? There are other phases bearing on the whole situation that might be mentioned, but we have indicated enough to show that a commission of inquiry, if the appointment of one were deemed advisable in the interest of the trade, would have a pretty wide field for investigation at home, without making trips abroad.

### Notes from Ireland.

#### SOME PHASES OF AN EXPORT TRADE IN PEDIGREE STOCK.

Few factors have so consistently contributed to the profitableness of Shorthorn breeding in the United Kingdom in recent years as the extensive and well-sustained demand from abroad, especially the Argentine. The go-ahead South American Republic wants the best of our herds, and lets no consideration of expense deter. The export trade, from the home breeder's point of view is, therefore, while it lasts, a most desirable matter, but reflection shows it to be associated with certain drawbacks. Outstanding in this connection is the undoubted tendency towards the depletion of the home land of large numbers of the best sires raised, and the retention for service of inferior bulls that should never be allowed to propagate their species. The temptation to sell to the enterprising foreigner all the best young bulls is, of course, a keen one, and the immediate prospect of a high price, and the advertisement which it affords, makes a very powerful appeal to the breeder. Still, it is obvious that this policy can be carried too far, because it is quite possible to be so taken up with catering for the needs of the passing foreign customer that serious harm may be done to home nurseries of the breed. The inevitable result must be that, if any lowering of our British and Irish pedigree stock occurs, the foreign demand will no longer be at our command, and, with pure-bred herds springing up in many countries throughout the globe, the United Kingdom may find its boasted pre-eminence as the fountain-head of all live-stock improvement becoming somewhat unstable. The suggestion may be scouted as impossible, but time will tell.

Another important aspect of the export trade which merits attention, as it is a source of frequent disappointment to exporters, is the variable results that follow the administration of the tuberculin test to the same animal before shipment, and after landing. The Argentine purchasers are rightly insistent upon banning tuberculous stock, and a very large number of cases yearly occur in which high-priced bulls of different breeds are brought to South America, only to react on being tested, and partake of an untimely fate. A notable example was that beautiful young sire, Bapton Viceroy, the champion of the English Royal Show, at Derby, in 1906—a bull which in the flesh displayed scarcely a single flaw. After the show he was sold at the long figure of £3,000, but he had only been landed at Buenos Ayres when the tuberculin test condemned him to the pole-axe.

Scotch bulls seem to be especially notorious in this respect, as a very extensive Argentine breeder, Mr. Martinez de Hoz, recently stated that over 60 per cent. of the Scottish animals imported into the Argentine react. On the other hand, Irish bulls seem to enjoy a good reputation in this matter, no doubt owing to the fact that our genial climate enables stock to be kept in more healthy conditions out in the open air. For instance, that noted exporter, F. Miller, of Birkenhead, a couple of years ago expressed the belief, as one who had bought more Irish stock for shipment than any other exporter, that he always found that the animals from Ireland stood the test as well as, if not better than cattle in any other part of the United Kingdom.

Be this as it may, disheartening must be the experience of any exporter whose selection fails to the test in the Argentine. So acute has the matter become that, while no direct insinuations are implied as to the care with which, or conditions under which the Buenos Ayres authorities administer the test, the parties interested are seeking to arrive at a satisfactory arrangement that will rid the trade for all time of the risk of such bitter disappointments as at present occur. Accordingly, the Shorthorn Society of Great Britain and Ireland have approached the Foreign Office, and asked that body to confer with the Argentine Government, with a view to the establishment in Great Britain of a tuberculin station, in which the Argentine shall share control, for the testing of animals prior to export. It is proposed that a mutual understanding shall be come to, under which all animals that successfully pass the test here will be admitted without the further application of it when South America is reached. There should be no difficulty in the way of such a sensible and feasible scheme being worked, and the results are sure to be satisfactory.

In Ireland, it is gratifying to notice that breeders are taking special pains to exclude tuberculous from their herds. A most notable sign of this is afforded at public sales throughout the country, at which the offer of a bull, concerning the soundness of which there is any doubt, invariably elicits a chorus of inquiries from bidders, "Has he passed the test?" The answer vastly affects the nature of the bidding and the price paid. Some of the county committees stipulate specifically that none but bulls that have passed the test may hold premiums for service

under their scheme, and thus the good work goes on. At all reasonable costs, the confidence of purchasers must be secured.

"EMERALD ISLE."

### Deplorable State of Bacon Business

Editor "The Farmer's Advocate":

Replying to your inquiry as to my opinion of the condition of the swine industry in Canada at the present time, I believe that the supply of hogs is very much less than any of the reports that are gathered by the packers or the Governments would indicate.

From information that I am able to gather through doing business with swine-breeders in all parts of the Dominion, I am forced to the conclusion that there are now fewer hogs in the hands of farmers than at any time during the last ten or fifteen years, and the shortage is likely to be still greater, as the average farmer has not been making any effort to increase his breeding stock, but, on the other hand, he has been disposing of his brood sows. To say the least, our swine industry is at present in a most deplorable condition. I am quite aware that feeding hogs has not been very profitable during the last two years, owing to the high prices of feed grains, but we must not lose sight of the fact that hog products are extensively used, and appear to be taking the place of other classes of meats. With the conditions of farming in Canada, and particularly in Ontario, the raising of pigs seems to fit in well. A lot of inferior grains and vegetables can be converted into a good profit by being fed to pigs, and, when dairying is carried on, pigs are an absolute necessity. After all, it is the law of averages that governs the business man's profits, and the farmer who has maintained his herd of breeding hogs through the period of low prices, as well as the high, is the one that will be able to show a profit. Our exports of bacon to Great Britain have fallen off to a great extent, and we seem to be losing that trade which we have been resting so much hope upon. The time has arrived when we should consider the best means of retaining this valuable trade. I am forced to the conclusion that there must be something wrong with our system of feeding or marketing our hogs, when we allow the Danes to so outstrip us in the British market. Our Government would certainly be doing a wise act in sending a commission of practical men to study out the problems that are handicapping our swine industry. If the Danish farmer has a better system of feeding or breeding his hogs than we, we should know it, and a commission of this kind would be the best means of locating the fault. We ought to produce pork cheaper than the Danish farmer, as our coarse grains are cheaper, and other conditions ought to be just as favorable.

J. E. BRETHOUR.

Brant Co., Ont.

### Sheep as a Side Line.

Editor "The Farmer's Advocate":

To induce a few more farmers to take up sheep as a side line, I give my experience with a small flock. In December, 1906, I bought three old ewes and one small lamb from a good flock of cross-bred Blackfaces. I bought the ewes for \$21, and \$4 for the lamb. These had been bred to a good Southdown ram. The lamb was very poor, as its mother had not enough milk, so I made a pen and fed it by itself, and it came on well, and has made a good ewe, worth \$14. The three ewes lambed late in April; one ewe was hurt by a sow, and had two dead lambs. I sold this ewe to a drover in June for \$10. The other two had three lambs. In January following I bought at a sale two ewes for \$18. These two lambed in February, three lambs, one of which sold, at six weeks old, to a drover for \$4.75, and the mother was sold in June for \$8.50. In April I bought two Leicesters, one ewe and one lamb, for \$16. These lambed in May, three lambs. My trouble began from the start, as I only had an old barn, half full of hay, and two sows running loose on barn floor, so I sold some hay, and gave the sheep half of a mow. I had a good supply of turnips, which they were fed, and a few oats and timothy hay, as I had no clover hay. In spring they were turned on the orchard, and also changed to a rough piece of land, no good for anything much. In the fall they had the liberty to roam at will.

Outlay.—Six ewes and two lambs, \$59.00.

Returns.—Two lambs kept for stock, value \$12; sold two ewes, \$18.50; sold six lambs, \$28.25; 8 fleeces, 27c. per lb., \$9.75; total, \$68.50. Deduct for ewes sold, \$16, which leaves \$52.50.

You will see I had six ewes left for following year, and two lambs raised; thus they were growing into money and better stock. Now, I think

this is a good per cent. for the capital invested; and seeing that sheep will live on rough land, and little care, and also enrich the soil, they are one of our best investments. We also turn our weeds into money; this seems their peculiar dish.

In the winter of 1908 I bought three more ewes. I raised 11 lambs. The returns for lambs sold, and the wool, brought me \$71. The wool was sold at 14 cents per lb.; lambs were also down in price.

OLD COUNTRY JOE.

## THE FARM.

### Growing More and Better Corn.

By means of improved seed and better cultural methods, immense possibilities await the Canadian corn crop. The ideal which the progressive grower has before him is to produce the largest possible crop of well-matured stalks and ears, whether for dry fodder and husking, or for the silo. Time was when one grower kept his eye solely on the corn crib, and another on the silo; one planning for ears, the other for stalks. The modern corn-grower aims, not just at a crib filled with big ears, or a silo packed with a watery compound, the product of a jungle of verdant stalks and leaves. There must be a

#### BALANCE OF STALK AND EAR

to develop and sustain the latter, and of cob and kernel in order to produce the maximum feeding value. Again and again, at the Essex (Ont.) Corn-growers' Conference, Prof. L. S. Klinck called attention to the wisdom of seeking the happy medium, in which lies the secret of continued productiveness with safety. Nor is it enough, in the selection of seed corn, to know that this or that variety or type matured in the "banana belt." Has it matured in my township, or in one where the conditions are similar? Am I reasonably sure that it will? Are the ears uniform in type? Do they possess the outward and visible signs of inward life and growth? Will the kernels germinate? Have I tested them? This is a perfect ear, but is it from a field or seed-plot where the great bulk of the ears are like it? Has it been bred long enough so that the desirable characteristics I desire will reproduce themselves?

#### A STRIKING VARIATION.

Hugh Coatsworth, of Kingsville, reported a test of planting equally good-looking ears of the same variety (Reid's Yellow Dent), but from different seed-plot rows in the same field. One gave

a yield of 94 bushels of shelled corn per acre, and the other but 58 bushels, possibly due to the seed in one case coming from ears which had been fertilized by pollen from barren stalks in the row, or grown on imperfectly-developed stalks.

The scoop-shovel system of seed selection should be relegated to the scrap-heap of discarded methods. Men who have a seed-corn plot, or in the autumn have chosen from the field crop the best and most uniform of the well-ripened ears, which they have kept aired and dry, are on the right track. If this is not done, then secure supplies from growers who make a specialty of seed production, or from dealers who can be relied upon for good corn of the varieties wanted. Preferably, buy on the cob, and do not shell till near planting time. Discard the tip and butt kernels. Avoid starchy kernels, blistered germs and backs, kernels with the tip cap gone so that the germ shows black. Choose a clean, well-developed kernel, because from it the little plant gets its first start in life before the rootlets begin to feed upon the soil. Do not expect too great a percentage of grain to cob, or the kernels will not dry out, and will lose in vitality; 85 to 86 per cent. grain to cob is sufficient.

#### KEEPING VARIETIES SEPARATE.

The point was repeatedly emphasized at the Essex Convention that if varieties are to be kept from "mixing," by cross-fertilization, the plots should not be under a quarter of a mile apart. Indeed, with high winds, the dry pollen grains, which fall in such clouds for eight or ten days from the tassels, have been known to carry half a mile, and even a mile. Falling upon the silks of the embryo ear, fertilization takes place. Though there be a thousand kernels on the cob, every one has a silk, which must be touched with a pollen grain if the kernel is to develop. So prodigal is nature in supplying the means of reproduction, that it is estimated there are 50,000 chances for every kernel being fertilized. The pollen of another plant than the one on which the ear grows is said to be preferred; and the silks, almost by an instinct, reach out for the pollen. Late and early varieties, planted near each other on the same farm, or on neighboring farms, will mix, resulting in defective kernels and ears, irregular rows, and immature grain. In locating a seed-plot, consider the prevailing winds, and avoid a multiplicity of varieties in a neighborhood. Settle upon a good sort and stick to it. Improve within the variety.

#### POINTS IN CORN TILLAGE.

Much of the best corn in South-western Ontario is grown on clover sod. "Red clover is



Duke of Malton (imp.) [7768] (12947).

Clydesdale stallion; foaled 1903. Imported and owned by Smith & Richardson, Columbus, Ont. Third at Ontario Horse-breeders' Exhibition, Toronto, and second at Eastern Ontario Live-stock Show, Ottawa, 1909. Sire Sir Everest.

one of your most valuable crops for enriching and mellowing the soil," observed Prof. C. A. Zavitz at the Corn-growers' Meeting, in Essex County.

"We don't grow half enough of it," concurred one of the auditors.

Tests were quoted showing 50 per cent. greater crops of oats, barley and mixed grains from a clover compared with a timothy sod. It can be worked much earlier in spring. A good many apply the heavy coat of manure for the fall wheat and then seed down with clover and timothy. After taking off a crop or two, corn follows on the sod, plowed in spring, without further manuring, unless on light ridges, if there are such in the field. Some manure grain-stubble land, and plow in fall, using the disk harrow in spring. The practice of applying manure in winter appears to be on the increase. R. A. Bigger, of Walkerville, advised plowing shallower in spring than in fall. J. O. Duke, of Ruthven, put tile drainage first for the corn land; planting from 10th to 24th of May, and, at the last cultivation, in August, seeded between the rows with red clover. He had tried that successfully for three years, and believed it could be done for twenty years, and obtain as good a crop at last as at the first. All agreed as to the need of a mellow tilth. Some sow the clover with the small broadcast seeder that turns with a crank, covering three rows at a time by walking in the middle row. Use plenty of seed. Others scatter the seed riding on horse-back, after the last cultivation, and say there is nearly always sufficient moisture below to insure a catch which makes 5 or 6 inches growth that fall, and more again in spring before the land has to be plowed for the next corn crop. Some use the marker and hand-planter, but larger growers prefer the check row, two-horse planter (costing about \$45), which drops 3 to 4 kernels in hills 3 ft. 8 in. apart each way, or would drill in, if desired. But the best practice is the hill method, and Prof. Zavitz's tests showed one ton more crop per acre from hills than drills, both stalks and grain being better, and the land cleaner. The harrow is used, giving a light sweep as the corn comes up. Mr. Bigger favored deeper cultivation at first, and shallower as the season went on, not to disturb root-growth. He advised throwing away the old shovel-plow cultivator. The two-horse cultivator is the proper implement, and keep it going till the corn is as high as the horses' backs, if possible. For the strengthening of the brace-roots, Prof. Klinck suggested a trial, at last cultivation, of throwing up soil against hills or rows of corn, as it was important to get a corn that would stand.

#### Plan of Monolithic Concrete Silo.

[Note.—The plan of silo herein illustrated and described was prepared for "The Farmer's Advocate" by Henry Pocock, whose article on "Sealed Air-tight Cement-block Siloes," published in our 1908 Christmas Number, aroused much interest. Mr. Pocock is an expert on concrete and concrete machinery, and is in personal touch with cement silo-building throughout Canada, the firm with which he is connected being the sole manufacturers of the adjustable steel silo curbs for building battered round monolithic concrete siloes. Over one hundred and fifty sets of these curbs are now in operation, being used for the building of many thousands of round concrete siloes.]

The plan of silo illustrated herewith is that of a size which is much in demand. It is 35 x 14 feet, inside dimensions. The design and form meet all ordinary requirements. The size may be added or reduced, as required, but the system of construction will meet every requirement, and the information herein given will, no doubt, serve to answer many inquiries.

This silo is built with the adjustable silo curbs, which build a circular silo any size, from 5 feet up to 30 feet, according to the number of sheets which are in the curb.

One very important feature about this silo is that the walls are perfectly vertical on the inside, allowing the free settlement of the silage; but the outside walls of the silo are tapered; any desired taper can be given.

The walls shown in this plan are one foot thick at the base, and gradually reduce in thickness toward the top. At the highest point the walls are only 6 inches thick. The plan represents a silo with a portion cut away so as to show a section of the walls, a part of the inside of the silo, position of doors, thickness of floors, size of foundation, depth below ground, distance the doors should be set apart.

The doors in the silo are 2 feet by 3 feet, and 4 feet apart. No casing is required to support the door, the concrete being bevelled around the edges of door opening. The doors have the same bevel around the edge, and of size to fit the opening, the doors being placed in position from the inside.

In order to get access to one of these doors,

it is necessary to move the silage from the inside of door, and shove the door inward.

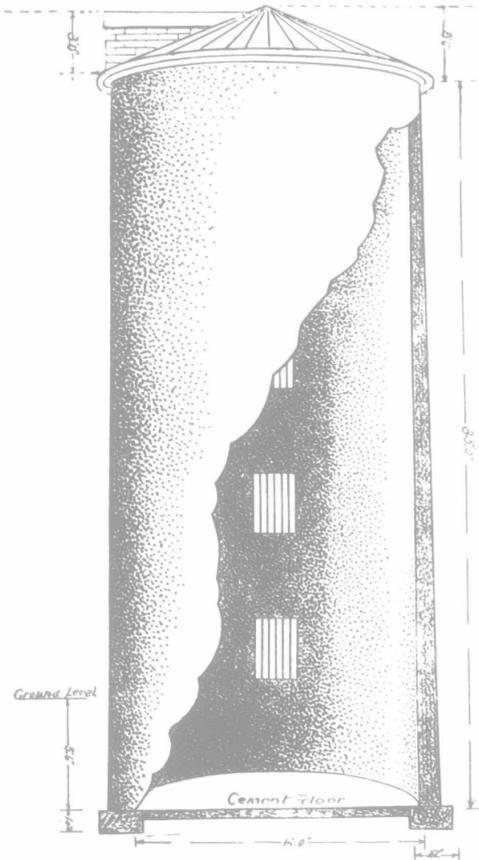
On the left side of the roof of this silo will be noticed a small pediment. On the front of this is a door, which is made to open inward. This door is used in filling the silo. When the feeder desires to enter the silo the first time after filling, he does so by entering this door. He then opens one of the trapdoors on the inside at the top, making a direct passage to the feed-room adjoining, the silo afterwards being entered from the feed-room.

A silo built of the size shown on this plan, which is 14 feet in diameter, and 35 feet high, will hold one hundred and fifty tons of silage.

A silo 12 feet in diameter, and 30 feet high, will hold seventy-five tons of silage.

#### AMOUNT OF MATERIAL AND LABOR REQUIRED TO BUILD A CONCRETE SILO.

The silo shown in this plan, complete, with foundation and floor, will require 52 yards of gravel, and 49 barrels of cement, and can be erected in nine days by four men, if material is mixed by hand, one day being allowed for laying out and putting in foundations. With the adjustable curbs, 5 feet in height of wall is built each day, or a course of 5 feet completely around the silo each day, no matter what the size of silo may be. This silo will also require 1,000 pounds of iron for reinforcing.



Sectional Diagram of Monolithic Silo.

A silo 12 feet in diameter and 30 feet high, will require 37 yards of gravel and 36 barrels of cement, and will require for reinforcing 500 pounds iron. It can be erected in seven days by three men. A silo 12 feet by 30 feet will hold seventy-five tons of silage.

It will be noted this small size of silo, while only having half the capacity of the 14-foot, takes over two-thirds the material to build, but some farmers would rather have two small siloes than one large one, preferring to use one silo for summer, and the other for winter.

Another popular style of concrete silo is that built from concrete blocks, under what is known as the sealed, air-tight system, illustrated in the Christmas Number of "The Farmer's Advocate." It will be noted that the article on concrete-block siloes shows a continuous door from top to bottom. The same style of door may be used with the solid concrete siloes, or the door described in this plan may be used in the sealed, air-tight, concrete-block silo. The concrete-block silo, as mentioned, will cost a little more to build, on account of skilled labor being required to erect the masonry.

H. POCOCK.

The man who understands the corn plant from germ to a perfect stalk and ear that will perpetuate themselves, has gone a long way towards solving the mystery of all life.

#### Save the Pastures.

As the season approaches when farmers who are short of feed for their stock will think of turning them out to grass, a word of counsel on this question may not be out of place. The mistake is commonly made of letting animals on pasture fields before the grass has had a good start, with the result that the grass is short the whole summer; while, if given time to make considerable growth before being stocked, the meadows would be in a much better condition to supply a full bite throughout the season, and to withstand a period of drouth, should such occur at any time. The early growth of grass is soft and washy, and, while stimulating milk secretion, is of only moderate nutritive quality, unless supplemented by some hay or other fodder, and there may be economy in more ways than one in conserving the pastures until they have had a good start, even though one has to pay out cash for purchased feed to give the grass time to get a good start. As a rule, in most sections of our country, cattle and horses should be kept off the pastures until about the 24th of May, in order to do the fields justice. And even then a feed of hay or grain, or both, in the mornings, for a week, before being turned on the young grass, will serve a good purpose in saving the pastures and preventing scours. Sheep and pigs may generally, a month earlier, be allowed the run of lanes and of fields that are to be spring-plowed, but should be housed at night for some time, and given dry feed and roots, if on hand. This question is worthy of more careful consideration than is generally given it by farmers, and we are confident that observance of the admonition here given will prove profitable alike in the ultimate condition of the animals and the pecuniary interest of the owner.

#### Farmers Selling Low-grade Seed.

Practices tending to defeat the purpose of the "Seed Control Act," in protecting the farmer, are reported as being prevalent in some sections of Canada, even among farmers themselves. Not only this, but also the regulations in the Act, are being violated. Seedsmen justly protest against farmers who produce grass and clover seeds, selling them to neighbors, when the standard is lower than the law allows them to handle.

Farmers seem to forget that they are liable under the Seed Control Act. The only exemption is that the farmer is not obliged to have "each and every receptacle, package, sack or bag containing such seeds, or a label securely attached thereto, marked in a plain and indelible manner," showing name and address of seller, kind of seed contained, and common names of weed seeds present. Instances are known where those who deal in seeds refused to purchase lots of seeds from growers because of the presence of foul seeds, and where the farmer then sold the same seed to his neighbors. Seed represented as being number one, must not contain more than one of the following weed seeds per 1,500 of the seed represented: Wild Mustard, Tumbling Mustard, Hare's-ear Mustard, Ball Mustard, Field Pennycress (Stinkweed or French Weed), Wild Oats, Bindweed, Perennial Sow Thistle, Ragweed, Purple Cockle, Cow Cockle, Orange Hawkweed (Paint Brush), Ergot of Rye (Sclerotia), White Cockle, Night-flowering Catchfly, False Flax, Canada Thistle, Ox-eye Daisy, Curled Dock, Blue Weed, Ribgrass (English Plantain or Buckhorn). In addition, seed of first quality, offered for sale, must "contain, out of every one hundred seeds, not less than ninety-nine seeds of the kind or kinds represented, or seeds of other useful and harmless grasses and clovers, of which ninety-nine seeds ninety must be germinable.

For the general trade in seeds, the following section applies to all: "No person shall sell or offer, expose or have in his possession for sale, for the purpose of seeding in Canada, any seeds of timothy, alsike or red clover, or any mixture containing the said seeds, if the seeds of the weeds named in this Act are present in a greater proportion than five to one thousand of the seed sold or offered, exposed, or held in possession for sale."

Every intelligent farmer realizes that only clean farming pays, and that, in order to keep down weeds, strict care must be taken to avoid introducing the pests through grain, grass or clover seeds. Protection is afforded against all vendors, whether seedsman, general storekeeper or farmer.

In order to be fair to those who handle seeds, the Act stipulates that complaint must be made within seven days. The section relating to this reads: "Any sample of seeds taken from any seed found or suspected to be sold in violation of the provisions of this Act, shall be taken and

APRIL 8, 1909

**Benefits of Seed Fairs.**

First-prize Essay in competition for premium offered by "The Farmer's Advocate," at Farmers' Institute Convention, held at Summerside, P. E. I., March 10-12.

That the inauguration of seed fairs has been of great value to the farmers of Prince Edward Island, and to the Provinces in general, is a fact that the future alone can fully prove. That they are more instructive and far-reaching than our exhibitions, will be generally admitted, and that they are to be made more so this year by the addition of lectures, and the judges giving their reasons for placing their awards, is a step in the right direction, and one that will be improved of by everyone that attends the fair. In the first place, it brings together a large body of farmers at a time of the year when they can afford to spend a day or two from the farm to talk over farming in all its phases, exchange ideas, derive something new from the lectures, get new life and vim in them, and then go home determined to improve along some lines that they have been neglecting.

In the second place, our fair is held at a time of the year when seed for the coming seed time is beginning to be seriously thought about, and when we have an opportunity of seeing what others are producing. We can compare what we have in certain lines with what others are producing, and ask ourselves the question, "Is our seed up to the standard?" If it is not, the progressive farmer is led to procure the best, and thus increase his profits the next harvest.

Then, there is the benefit of competition. The interest it awakens in those who take part is great, especially to the boys and girls on the farm. Always allow them to engage in the competition, and the result cannot be measured in dollars and cents. Some make a great effort to win so much in cash. This is all right, but benefit received in other ways counts most.

Last year I competed in many classes, and in some I won, and in others failed. To illustrate, I would say that I graded some White Life wheat, and finally picked it; still, I did not get a prize. But I got what is far better—the best crop of clean, plump wheat that we ever harvested. If farmers would grade their grain, and pick it, if necessary, they would not need to import wheat at \$1.50 to \$2.00 per bushel.

Then, there is the benefit of seed selection. What has been done along those lines is being vividly pointed out, and it is marvelous what has been accomplished. When we see and handle the grain grown from careful selection year after year, the lesson comes home to us with greater force than pen can give. The farmer begins to

think. If someone else can accomplish this, why not I? There was a time when we farmers thought any kind of seed was good enough, but now the best is none too good. One seed-grower has said that his oats used to weigh 38 pounds to the bushel when re-cleaned, but now they weigh 42 pounds from the machine. All this was brought about by selection, and instruction at seed fairs, etc.

Again, there is the advantage of bringing our seed grain to the notice of the public, and at the first fair held in our little Island I heard the judges (Messrs. Fuller and Moore) say that they were pleased to be able to say that, in point of quality, the seed shown was the best that they had yet examined, and this is something we might not have known yet, were it not for our seed fair. It must be admitted that this knowledge is worth a lot to us. Since that fair, our seed has been more and more sought after. If we keep the quality up, it will be in still greater demand. It also brings the buyer and seller together. The men with the good seed are brought out in the light, where we all can see them.

So far, we have been talking about good seed, etc. How would it do to say something about the bad weed seeds that we get some pointers on at the fair? The revelations that have been made in the weed-seed family are startling. Last year, the weed seeds taken from one bushel of grain were placed on exhibition; also, from one pound of clover seed, and timothy seed, secured at different points. I think the object-lesson

forwarded to an official seed analyst: (a) From seeds that are sold in sealed packages, sacks, bags, or receptacles, at the time of breaking the seal thereon; and (b) from seeds that are not sold in sealed packages, sacks, bags or receptacles, within seven days from the date on which the seeds entered into the personal possession and became the property of the purchaser." Samples for official analysis are to be drawn in the presence of the vendor or two disinterested witnesses, and forwarded with a certified statement, accompanied by name and address of the vendor, and particulars relating to the seed.

Those making purchases of seed would do well to examine it carefully at the time of purchase. If there is ground for complaint, write at once to the Seed Commissioner, Ottawa, Ont. It is his duty to make investigation, and do everything possible to protect the purchaser from anything that would contaminate his fields with foul seeds, and, if circumstances warrant, to prosecute the vendor of such seed.

Four conditions form exceptions to the Act, viz.: (a) Any person growing or selling seeds for the purpose of food; (b) any person selling seeds direct to merchants, to be cleaned or graded before being offered for sale for seeding purposes; (c) seed held in storage, to be re-cleaned before being sold for seeding purposes; (d) seed marked "not absolutely clean," and held or sold for export only. All seed held for sale in Canada for seeding purposes, comes under the Act, and offenders are liable to prosecution. During the past few weeks samples have been collected from stock sold by farmers, and if there is proof of violation of the act, the offenders are liable to prosecution. In the interests of Canadian agriculture, those farmers who are guilty of selling low-grade seed should be dealt with just as promptly as they would have other vendors treated.

**Information Given and Asked.**

Editor "The Farmer's Advocate":

I am glad that so many have taken part in the discussion on the manufacture of the products of the maple tree, as intimated to us through "The Farmer's Advocate," by Frontenac Subscriber, a few weeks ago. I am also pleased that it is being discussed in such a valuable and widely-circulated paper as "The Farmer's Advocate." I have made syrup and sugar from the maple for over forty years, first with coolers and sheet-iron boilers, and later with the flat pans, which was quite an improvement over the first method. But in 1892 I purchased a Grimm evaporator, 3 x 10 feet. I tapped 500 trees, and used this for five years. But as I had a large sugar bush, and as the demand for maple syrup increased, I changed it for a larger one, 5 x 14, and tapped 1,100 trees; and in an ordinary year we make from 300 to 350 gallons, besides quite a quantity of sugar. We get \$1.00 per gallon for our syrup (the purchaser pays for the cans), and 10 cents per pound for sugar.

The evaporator takes in the cold sap at one end, and sends out the finished product at the other—no second handling, as with other machines. I have a galvanized tank for gathering, which holds 40 pails, with a rubber hose, which we empty into a 240-pail-capacity galvanized tank inside boiling-house, from an elevated driveway outside. Some of our neighbors have discarded their galvanized tanks, and replaced them with tin ones. I have used the galvanized tanks for eight years, and have found no bad results. I clean them and dry them thoroughly when the season is over, and turn them on their edge in my sugar-house. I do all the work about the camp myself, and two boys gather the sap with a team. The sap is strained twice before it goes into the evaporator, and strained again when we draw it off in syrup.

Now, it is with a view to learning more about this important and money-making industry that I am writing this to "The Farmer's Advocate." In the first place, I would like to hear from your Dundas Co. correspondent. He says that an evaporator that you cannot draw the syrup off every five minutes is not what it should be. Would like to know how much he draws off every five minutes. I draw off about every three-quarters of an hour, from a gallon and a half to two gallons each time. Last spring I made, in fourteen hours, thirty-eight gallons of syrup, weighing 13 pounds 2 ounces to the gallon. I use a thermometer for testing when it is thick enough. Also, would like to hear from your Perth County man, as to where he sells his syrup at such a high price, as Lanark County is noted for its excellent maple syrup, and we never get over a dollar per gallon for it. I dispose of about 100 gallons each season in the near-by towns. I ship to Kenora; Okanagan Lake, B. C.; Vancouver; Toronto; Reston, Man., and several other places in the West. I have a diploma, which I received from the Canadian Government, being one of the many from our county who contributed to the collective exhibit of maple sugar and syrup displayed in the Canadian section of the Agricultural Palace, at the St. Louis World's Fair, 1904.

There is one very important thing in connection with the business that has not been brought before us by any of the previous writers, and that is the sediment, or hard substance which gathers in the bottom of the finishing pan, which accumulates more near the end of the season. I know that changing the pans often prevents it to quite an extent. Perhaps some of the readers of "The Farmer's Advocate" can throw some light on this point.

WM. DUNLOP.  
Lanark Co., Ont.

**The Man Behind the Plow.**

The following verses, though probably familiar to a considerable proportion of our readers, express a worthy sentiment, and, in compliance with the request of an old subscriber, are republished in "The Farmer's Advocate":

I'm not so much at singin' as those hifalutin' chaps;  
My voice it may be husky, and a little loud, perhaps.  
For I have been a-plowin' with a lazy team, you see—  
They keep me pretty busy with my "Git up!"  
"Whoa!" "Haw!" "Gee!"  
But if you pay attention, I have just a word to say  
About a great mistake you make, and do it every day;  
In dealing out your praises, I want to tell you now,  
For often you forget the man that walks behind the plow.

You talk about your learned men, your wit and wisdom rare;  
Your poets and your painters, they get praises everywhere.  
They're well enough to make a show, but will you tell me how  
The world would ever do without the man behind the plow.



**The Man Behind the Plow.**

(From a drawing by E. A. McBain)

'Tis very nice to go to school to learn to read and write,  
'Tis nicer still to dress up fine and sport around at night.  
Your music, painting, poetry, may all be hard to beat,  
But tell me what you're going to do for something good to eat?  
You may say my boots are muddy, and my clothing is too coarse,  
I make a good companion for the oxen or the horse;  
My face is red, my hand is hard, 'tis true I will allow,  
But don't you be too quick to spurn the man behind the plow.

I like your great inventions, I'm glad you're getting smart;  
I like to hear your music, for it kind of stirs my heart,  
But 'twill never touch the stomach of a real hungry man,  
And so I call attention to a kind of thing that can.  
Then, boys, don't be too anxious to leave the good old farm,  
Your father's strength is failing, soon he'll need your faithful arm;  
If you're honest in your purpose, at your feet the world must bow,  
For the greatest of the great men is the man behind the plow.

was a good one. It showed us the danger that is threatening us; that our Island, once free from noxious weeds, will soon be in the grasp of these our worst enemies, unless we give heed to every note of warning and keep our seedsmen to the letter of the law.

Last, but not least, is the Household-science Department of the fair. That appeals to our "appetite"—oh, no! I was going to say "our finer senses." It shows the gentle sex at their best in the culinary art! Here competition also counts, and the object-lesson furnished must be helpful. It also gives our lady friends an opportunity of hearing talks on the different subjects laid down in the programme—things that are very essential in every home.

These are a few of the many benefits derived from the seed fair, which are growing in popularity and in benefits to all concerned since their inauguration, a few years ago. I hope that your valuable paper may long continue to be the farmer's true Advocate, and also to encourage our seed fairs.

A. E. MacLEAN.  
Prince Co., P. E. I.

### Value of Seed Fairs.

Second-prize Essay for premium offered by "The Farmer's Advocate," at Farmers' Institute Convention, Summerside, P. E. I., March 10-12.

Seed fairs for the exhibition of the cereals and the smaller seeds are of recent growth. They have been instituted for the purpose of encouraging and promoting the production of a superior quality of grain for seed purposes only. As an educator for the farmer, these fairs have been a factor of immense importance, especially to those who have helped to make the fairs a success, by showing samples of grain, and in this way causing a friendly rivalry. Also, by observing closely, the farmer soon becomes aware to any deficiency in his own exhibit, or in that of his neighbor.

When we consider that, at the Fair of 1908, held in Summerside, P. E. I., several hundreds of entries were made in seeds, it is evident that these exhibitors would receive an object-lesson not soon to be forgotten. Then, again, large numbers of our farmers make it a point to visit these fairs, receiving valuable information in the production and selection of grain for seed purposes; also, by coming in contact with one another, and exchanging views thereon. Then we have addresses given by members of the Local Legislature, prominent farmers, and others, dealing with agricultural topics of importance to the people. The fairs held in recent years have been continued for two days, and the present year, three days, giving ample time for the people to attend. Large numbers of farmers have taken advantage of these meetings, thereby making for the success of the fair.

Another very important feature of these fairs is the advantage given to visitors of buying seed grain from exhibitors, as each exhibitor is required to have in reserve a quantity of seed for sale equal in quality to that which he has on exhibition. I am of the opinion that this privilege of buying high-class seed grain is, pre-eminently, the grandest feature of the fair, for, as "like begets like," so the man who sows pure seed of known excellence will also reap a superior article, and also an increased number of bushels per acre. But this is not the only benefit he will receive. If he is a careful farmer, painstaking in sowing, harvesting, threshing and cleaning, he will have produced grain suitable for seed purposes.

Then there is, in connection with the Fair, a Household-science Department, in which prizes are given for cookery, preserved fruits, etc. Of course, the ladies are particularly interested. Now, from the standpoint of a Prince Edward Island farmer who has attended each of these annual fairs (the first held in Charlottetown, in 1903), and having noticed closely the progress made in the quality and number of exhibits, also the increased number of farmers in attendance year after year, the fair has certainly been an unqualified success.

G. H. Clark, Seed Commissioner, at Ottawa, speaking at the Amherst Winter Fair, said: "The seed fair held last year at Summerside was, I believe, the best of its kind ever held in America." Mr. Clark is an authority on seeds and seed fairs, and knows what he is talking about. More than that, he came from Ottawa to attend the first and second fairs held in Charlottetown, and did the judging, also giving addresses on the importance of producing high-class seed, making the statement that our Province was well adapted for the raising of grain for seed purposes, and that we should be supplying Nova Scotia and New Brunswick with seed grain, instead of importing their supplies from Ontario. Within the past two years we have sold large quantities of oats for seed purposes in the Maritime Provinces, also in the far West—and we, the smallest Province in the Dominion of Canada—the "Garden of the Gulf"—feel justly proud of the reputation we have gained for our seeds, and can attribute a large share of success to the organization of the seed fairs.

THOMAS S. WAUGH.  
Prince Co., P. E. I.

### Cost of Concrete Silo.

Editor "The Farmer's Advocate":

Enclosed find photo and description of silo built for me last summer; also short article on same.

Contract price of building .....	\$ 70.00
28½ Barrels cement, at \$1.93.....	52.15
40 Yards gravel, at 15c.....	6.00
12 Yards stone, at 15c.....	1.80
150 Lbs. steel, at \$2.50 per cwt.....	3.75
<b>Total .....</b>	<b>\$133.70</b>

In building this silo, which is 30 feet high, and 12 ft. 8 in. in diameter, with walls 11 inches thick, a window frame was placed in wall level with ground, and concrete material was thrown through this into buckets inside silo, and was hoisted by horse and rope, same as earth is hoisted out of well, thus doing away with dan-



Mr. McKenzie's Silo.

gerous and unnecessary scaffolding, all the scaffolding used being two planks thrown across rings and hoisted with them.

After silo was finished, this frame was removed, and hole filled up same as wall. Silage is keeping perfectly, and is as good at wall as at the inside, and I must say that I am well satisfied with it, as this is my first experience with silage.

ALEX. MacKENZIE.  
Bruce Co., Ont.

### How Deep to Bore Maples.

Editor "The Farmer's Advocate":

We can read articles by the dozen every year, about this time, on how deep to bore the maple trees for the best flow of sap. We have always used the Eureka sap spout, and never bore deeper than one and one-half inches in the largest trees, and smaller trees something less. I am trying some Grimm spouts (No. 2) this year, and used a 7-16-inch bit for boring the holes, but that leaves the wire that the buckets hang on too far from the tree, allowing the buckets to wobble too much. It seems to me that ½-inch bit would be better for boring the holes. I think "Euphemia Wanderer" must have a very poor lot of trees for making syrup from, and I also think A. Mountain must have an exceptionally good bush for sap, for there are more people who make less than one gallon for every two trees than there are who make more. We have never made more than one-half gallon per tree, and we have an extra large lot of buckets, 170 of them being the usual size, 100 hold three imperial gallons each, and one dozen four gallons, for extra good trees. We always gather twice a day in a good run, and boil nights when necessary, and never let the sap run to waste longer than necessary. We read a good deal in the papers of the day about forestry and preservation of our forests. I have never seen anything, however, on how to stop making syrup. We began about fifteen years ago, by getting ordinary corks at the druggist's, at twenty cents per hundred, and driving them in even with the wood, and it is surprising how quickly they will heal over. Another benefit to be derived is, if it should happen to freeze, and then, after you have quit the bush, your trees will not be running. I am sending you a sample piece of maple with the grown-over cork, and you will see how little damage was done the wood by the very small streak of dark wood around the old bore. We sell our syrup at \$1.25 per gallon.

A. W. DeLONG.  
Oxford Co., Ont.

[Note.—The billet of wood sent us by Mr. De Long shows a small hole, with the edges still fresh and bright, neatly capped with a sound growth of wood, and presenting an almost smooth external appearance. Splitting reveals only a moderate discoloration about an inch and a half long, and about twice the width of the hole in breadth. Evidently, the tree had sustained a minimum of injury from tapping. Editor.]

There are more things in corn growing than are dreamt of in the philosophy of the corner grocery.

### Unlimited Market for First-class Syrup.

Editor "The Farmer's Advocate":

In the issue of February 25th, of your valuable paper, I notice Frontenac Subscriber writes, inviting some opinions and experiences from others engaged in making maple syrup. We have been at this work for eleven seasons. We purchased an 800-tree evaporator, and started with 600 buckets. We tap as soon as we think the sap is likely to run freely. It is best to be on the early side, as the frost seems to preserve the tapping fresh. We tap only once; never use a reamer or anything of that sort, as we never got enough good syrup to pay for the extra labor.

We use Grimm spouts (No. 1), without hooks, as our buckets were punched below the rim for the record spout, the first we used. The holes were scarcely large enough to let the buckets on the new spouts, but, by turning the bucket bottom-end-up, and forcing it onto the spout, after the tree was tapped, it dropped down, and was secure until turned to take it off at end of season. We use a cover made of a sheet of tin a little larger than the top of the bucket, with a piece of lath on each side just long enough to fit inside of the bucket tight, to keep the lid in place; a little thicker stick, I think, would be better; fasten with lath nails. These tin plates cost us 1 cent each, I think, and we put the wood on and painted them ourselves. They are red on one side, and white on the other; and reversible, so that they are turned as they are emptied, and serve as a guide to those gathering. These covers do not lie too close to the bucket to shut out the air, as they are generally more or less warped, but answer the purpose well, and are easily stored, and cheap. They stay in place pretty well; sometimes a high wind will blow off a few on outside of the bush.

We use a three-barrel tank on a sleigh or wagon, on a good strong platform. The wagon is coupled very short for convenience, and has very low, broad wheels. The sap is stored in a 10-barrel tank at the camp, placed a little higher than the top of the evaporator, and is conducted to the evaporator by a pipe and hose, and attached to a float, which regulates the depth in the pans as desired.

The sap flows so freely for a day or two each season that we cannot make it into syrup fast enough; then we run it off light, at about 190 degrees through the day, and at night add it into the evaporator and finish it off. By this means we save a lot of waste. We burn soft coal with the wood, and find it keeps up a more regular heat and does faster and better work than all wood. We use a few drops of sweet cream occasionally to keep the sap from rolling too high. Cleanse the syrup by straining through felt strainers. We have our syrup weigh 13 lbs. 2 ozs., as nearly as possible. Only offer the best for sale. Sell for \$1.25, cans extra. Never put it in the stores for sale or take trade, and cannot supply the demand. Ship sometimes when ordered, at the buyer's expense and risk.

We use imperial cans of 1 gal., 2 gal. and 5 gal. capacity. Use a label guaranteeing it "Pure Maple Syrup," with name and address. Last year we got 140 gallons of syrup from about 575 buckets. This is not as much as Frontenac Subscriber claims he gets, but compares very well with some of the others, unless he uses the wine measure. Many of our neighbors still use the old sugar kettles; some have got pans. They put out a varied quality of syrup. The most common fault, I think, is that it is too light in weight. I heard a merchant in our town recently express the wish that there would not be so much made this year. Another said that the syrup that came in was very unsatisfactory; much of it was too thin, but they expected him to take it or lose their trade, while, at the same time, he had a place for hundreds of pounds of good syrup, if he could only depend on getting it good. I think, if those merchants would prepare to test the syrup brought in, and reject what they did not consider right, it would improve the trade. There are some makers who, when they can't sell by private sale, just trade it out at the store, and are pretty sure of a market there. Their goods are not labelled, and there is no warranty as to strength or purity with it.

The imperial should be the only measure handled, but we find some selling by the old or wine measure, and are getting as much, and sometimes more, for their goods than those selling the imperial gallon. Those things all injure the trade, and are only a temporary benefit to those who do them.

We hear of new pans going out from our tin-shops every day, and this country is yearly producing more syrup. If a good article is made, and placed on the market in proper shape, I don't fear but there are lots of markets, at a good price.

A bulletin published by the Department of Agriculture, Ottawa, on maple sugar and syrup, the importance of the industry, and manufacture of pure maple sugar and syrup, No. 1 B., Jan.,

1907, would furnish much valuable information to those making these articles, as well as those handling the goods in the trade.

Huron Co., Ont. R. C. MCGOWAN.

### Farming in Ontario a Profitable Business.

Editor "The Farmer's Advocate":

Uneasiness prevails among Ontario farmers. Their eyes are still looking wistfully over our Western fields, and, no doubt, they are justified in doing so, as they are not getting justice, financially, where they are, although seemingly they are "well fixed," and on fine properties; but because, in a few cases, they have a small mortgage against the place, and are not able to meet it, they are anxious to sell out and start afresh in the great West. But who is to blame for this? Nobody but themselves, in most cases. There are cases where ill-health forces them to do so, but when a man has his health, and is able to make a start in Ontario, he would not be doing himself justice by going West, although he will make riches faster there; but he has not the same comfort he has in Ontario, and what is the use of riches without a little comfort along with it? Farmers of Ontario are not fuming and fretting over their crops to the same extent as our Western friends, who are kept in a state of anxiety, especially as harvest approaches, on account of frost and hail. Our Western farmers, as a rule, have got to wait until the second year for a crop, the first year being occupied in breaking and backsetting; whereas, in Ontario, in old pasture fields, never plowed or cropped, a crop can be taken off after the first plowing. After taking into consideration, also, the water supply, and fruit, and other things, as well as railway accommodation; besides bringing in their grain, in some cases, a long distance, it is not all real sunshine. Another thing we must not forget to mention is the fact that, in our older Western Provinces, mixed farming is becoming more general, for the simple reason that the land is playing out, and is getting foul with weeds in places.

#### METHODS OF TILLAGE.

In the first place, a good rotation on every farm that is to become profitable, is really necessary. A rotation we would call good is the three or four year rotation, which includes clover, followed by roots, corn, etc., and the following year grain, seeded down again with clover. It is hardly necessary to mention this rotation, as it has so often been brought before the public. A good rotation, a silo, and alfalfa (where it can be grown), must go hand in hand in order to make farming a really paying investment. How many farmers in Bruce and other counties are practicing a good rotation at present? Not many, I presume. Where a rotation is not practiced, as is the case on nearly every farm in this vicinity, grain crops are grown year after year, until the soil is practically useless for another crop and foul with weeds; and it is not till then that the farmer considers putting in a root crop and seeding down, to leave in grass until the timothy begins to "run out," when it is again broken. The result of this management is dirty, worn-out land, difficulty in getting a good catch of clover or grass, and sometimes wireworms. I know, from observation, of cases where a worn-out stubble is plowed in the spring and sown with grain, and I don't believe the resulting crop pays for the plowing, not taking into consideration the other work. Contrast this with a clean, rich field, previously corn and roots, which was either ribbed or plowed in the fall for grain crop. This is where the silo fits in well, as corn, as well as roots, are a good cleaning crop; and where corn is grown on a large scale, for silage purposes, grain does not need to be grown to the same extent.

In a good rotation it is not necessary to have quarter of the farm in roots and corn, as 20 per cent. of the acreage at least, in the front, where possible, is occupied as soiling and pasture land. The rest of the farm can be modified, in order that more grain can be grown, and corn and roots can occupy one-eighth, if necessary, of the acreage left. This can be done by growing peas or a mixed crop for cutting green on the cleanest half, for the root and corn crop. When this rotation is practiced for a number of years, the corn and root crop can be grown on alternate sides of the field every four years, if necessary, making an eight-year rotation within a four-year one.

Land that is ribbed or fall-plowed will be found to work up to better advantage if it is run over with heavy drag-harrows several days before it is ready for cultivating or diskings; and, as has been our experience, the ground, instead of breaking off in chunks, mellowed far more readily, and does not dry out too readily before one gets it all cultivated. I believe the cultivator is a better implement, and a better investment, although dearer to buy than a disk harrow, as the disk runs the upper soil together to such an

extent that it is quite noticeable afterwards, even on the following grass crops, unless gone over twice, which involves extra time and labor. The cultivator does equally as well on sod, providing the plowing is well done.

#### CORN AND ROOT LAND.

For corn and potatoes, I have heard that it is a better plan to leave the sod until spring, and manure it either in winter or early spring, leaving the clover and grass to grow up through, and plowing down a short time before planting. I believe this is all right, but where is the clover for turning under going to come in, unless a three-year rotation is practiced? For a root crop, let me ask, which is the better plan: to plow a good second growth of clover early in the fall, afterwards spreading on the manure, either in fall, winter, or early spring, and giving the portion not done in the fall previous a very light turn-under as early as possible in spring, and later thoroughly incorporating with the surface soil by deep cultivation with the cultivator previous to sowing; or to adopt the plan generally practiced in this part, which I shall explain. I think a trial of the former will commend itself. In this vicinity, the root ground, which I have already told you, is practically unfit for further grain crops, which is sometimes not even fall-plowed, is given a fair coat of manure, almost the first thing, about the time of sowing, and is then plowed and re-plowed so deeply that the manure is hardly perceptible any more. The resulting crop is not the best.

I have read your editorial, of February 4th issue, about the manure question. This is a rather hard problem to solve, and a very important one, as waste of manure means waste of profits. My idea is to keep it in a shed or manure cellar in the basement until spring, care being taken to keep out all the dry straw possible, and inducing the stock to thoroughly tramp it, to avoid fire-fanging, putting it on the land early in the spring, at such times when the frost interferes with seeding operations, and plowing in very shallow, say, when the land is too wet for other work connected with seeding, or as early as possible, along with that portion spread on in winter, on account of lack of shed room. Horse manure, and any other that is very strawy, can be spread on a strip of sod, left for potatoes or corn. All manure made in the fall months can be ribbed or plowed in during that period, until the frost interferes; otherwise, I favor your ideas, as I think it is better to spread in winter than to leave it in an open yard where the wind whirled the snow around the annex or other buildings, and piles it up on manure heap, to melt in spring, and, with the aid of the spring rains, the farmer's profits are running down from the barnyard in one big black stream to land already too rich. This loss is far greater than the average farmer imagines.

#### HAYING AND HARVESTING.

Hay, as a rule, is too well cured, and cut too late. If weather conditions are watched more closely, a good deal more hay can be cured properly. I have often seen a rather big field of hay cut on Saturday, and left until Monday, and sometimes not touched until near the end of the week. Hay can be taken into the barn in a much greener and more palatable state, if more care is exercised to avoid it getting rained on or dewed after it is cut. This has been done, and can be done again.

As to alfalfa, I believe it will receive as much attention in this county, and perhaps more, a few years hence than it is now getting in other counties. In harvesting, and especially with the oat crop, a great saving can be made if a large portion of the crop were cut in the green state, say any time after the grain is in the firm dough until nearly ripe. This can be fed, either cut or uncut; and by the time a man figures on the waste incurred after ripening, by shelling, extra risk of lodging, toll at mills for grinding, and the hauling, as well as the cost of threshing, etc., he will be money in pocket. The feeding matter is strictly all there, only in a more palatable form. Of course, it depends a great deal on the weather as to which course to follow. About the worst objection is the mice in barn, but where a quantity is mowed, and a few cats are kept, the nuisance will be greatly lessened.

Plowing a second crop of clover is the worst objection to this rotation. The land is often dry, and the busy time is not over. But what is the difference between plowing on this occasion and plowing a stiffer timothy sod for wheat, as is practiced more and more, and, I must admit, with good results? A good rotation like this, along with careful selection of grain, will give still better results in every instance. The corn and root crop will no doubt be a big one with this rotation, providing it is well attended to, the cultivating being not merely for weed extermination, but for moisture conservation as well.

Great care should be exercised in storing roots, to avoid freezing and rotting. In the case of silage, it is filling the silo that involves most work. It means much labor, but it pays, and

pays well, for corn planted in check rows almost does away with hand-hoeing. After the crop is off, the land can be shallow plowed, by running one furrow as close to stubble as possible, and turning the next one as wide as it will turn over, the stubble then being at the bottom of furrow. It can afterwards be ribbed up, if necessary, the same as root land, or it can be ribbed without plowing.

I have now gone over this subject, as far as crops are concerned, which is the most important part, for, without a crop, stock-raising would be out of the question. As regards implements, I would have only those that are necessary, and the best obtainable.

#### STOCK ON THE FARM.

For a beginner with small means, stock-raising is best started by buying very young individuals, both in cattle and horses, as, by their rapid development, through good care, his money invested is rapidly increasing. By careful selection, the offspring of a few good cows, or a good brood mare, soon make for him an independence, as far as stock is concerned. In the meantime, hog-raising, poultry, and other early-profit branches of farming, should be indulged in. At the mention of hogs, I may be criticised, as grain is still high, but a person must realize that nearly all food consumed is grown on farm, and the price of hogs is high. Alfalfa, clovers, etc., can be successfully utilized in their development, by soiling or pasturing in summer, and by being cut fine and scalded in a barrel in winter, thereby saving considerable grain, if fed in conjunction with roots. I believe that alfalfa and hog-raising should go hand in hand, in much the same way as the silo and the cow, for profit. If the Danes import 60 per cent. of their grain, and make hog-raising pay, why cannot we, who raise all our grain?

I need not explain further how to feed our stock, as getting a large quantity of the best material for feeding such into the barn, silo and root-house is the more important; and if the reader will refer to the pages of "The Farmer's Advocate," our best agricultural adviser, from time to time, he will find that part of the problem solved.

In conclusion, I invite successful farmers who have had experience lifting mortgages off their property to fall in line and give it for the benefit of others, as well as myself. Such a discussion was most successfully carried on for some time in an American journal, several years ago, and was found to be very interesting as well as profitable reading matter. We want their ideas. No farmer should hold to any hard-and-fast rule. What I have said will hold good in most cases. I will look for a return of others' opinion and advice.

Bruce Co., Ont.

FARMER'S SON.

#### Spring Cultivation.

As a rule, the early-sown grain crops thrive best, and yield the best returns, provided the land is in suitable condition for being worked, and the tillage is such as to provide a good seed-bed. In order that the cultivation may be thorough, it is necessary that the tools or implements used be well suited for the purpose, and that they be in the best condition for doing the work for which they are designed. An implement that is worn and dull may do fairly satisfactory work in soil that is loose and friable, but may be a failure in clay land that has become hard from the influence of the sun and wind. It is, perhaps, scarcely necessary that the farmer be reminded of the importance of examining the implements some time before the arrival of the season for seeding, and having them sharpened, if necessary, and put into the best condition for doing their work well. Yet, we have known cases where the cultivator failed to take a grip on the hard places on hill-tops, where thorough work was most needed, but slid over the top of the ground, moving only an inch or two of the surface soil, while the same implement, when its hoes were sharpened by the blacksmith, took hold satisfactorily, breaking the ground up to more than twice the depth it had previously been doing. One of the best farmers of our acquaintance used to test the work of the cultivator by dragging the toe of his boot through the soil, especially on the clay hills, and if he could not stir it to the depth of three or four inches by that means, would order another stroke of the implement on such places. These clay hills or knolls, too, are worth watching and attention, when a heavy rain, soon after having been seeded, has caused the particles of soil to run together, compacting it so that, when dried by wind and sun, a crust will form, so hard as to exclude the air and prevent the plants from coming through. In such a case, we have known excellent results from a couple of strokes of the harrows or weeder as soon as the surface has dried partially, and before it has become hardened again. This relieves the pressure on the plants, admits the air, and leaves a mulch of loose earth which conserves the moisture in the land, preventing loss by evaporation. The question may arise, in a case where clover and grass seed has

been sown, "What about its fate?" to which we reply, it will be just as hard for the clover plants to live and thrive in a compacted and crusted soil as for the grain plants; and if a few of each are put out of business by the harrowing, the remainder will more than make up for such loss by their more vigorous growth.

### Auld Statute Labor System.

About a week or mair back, a neebor frien' o' mine, Angus Cattanach, frae west the way o' Skye, cam' east to see me aboot gettin' his supply o' seed aits, that he would be needin' for the comin' spring, an' at the same time tae hae a chat aboot the days o' lang syne, an' the bonnie times we had thegither in auld Scotland, lang before we kenned onything aboot the care an' responsibility o' makin' a leevin' for oorselves or others. Angus was no' to say in ony too gude a humor when he drove up tae the hoose an' tauld his auld wumman tae jump oot o' the buggy an' tak' the bairns. "Mon, mon, Sandy," he says tae me, "it's awfu' roads ye hae here the noo. It's enuch tae tak' the neeborly visitin' spirit oot o' a mon a' thegither to hae to come through slush like yon." "I believe ye're mair than half richt, Angus," says I, "judgin' frae the tune ye seem tae be in. But come awa' in," says I, "an' I'll be giein' ye a drap o' something tae mak' ye mair lenient in yer judgment o' us an' oor roads." Angus has a great gift o' speech when a' the conditions are richt, and he wasna' in the hoose lang before he was giein' me his opinion o' things in general, an' things in particular, too. He hadna' forgotten aboot the roads, and he started oot wi', "I tell ye, Sandy, ye an' the farmers roond here dinna' ken hoo much ye are losin' every year by no makin' an effort to hae better roads to dae ye're haulin' an' drivin' on, than ye hae. I was here, ye min', last simmer, when ye were pittin' in the statute labor, an' I was thinkin' then that the auld system has just ane thing to recommend it, an' that is that it gies tae the farmer what he wouldna' likely get in ony ither way, or at any ither time, an' that is a holiday. I hae seen a pathmaster an' a gang o' men in a gravel pit, an' the pathmaster was the only mon in the lot who was using a shovel for onything mair than a prop."

"Weel, Angus," says I, "I'm thinkin' that, in a case o' that kind, the pathmaster was mair to blame than the men."

"No," says Angus, "he wisna', he was tryin' tae set them a gude example, but it didna' wark. The hale system is rotten, an' it's time it wis buried," says he, "this appointin' one farmer in a neeborhood tae boss the rest o' the farmers an' mak' them dae a fair day's work, was bound tae bring aboot bad results frae the vera nature o' the men themselves. They willna' stand for muckle orderin' roond by a mon they think is na better than themselves (which sometimes he isna'), an' the pathmasters I ken, that will tak' chances o' makin' trouble, an' gettin' intae a fight wi' the men they hae to live amang, are no' found in every section o' the countrie. Yes, sir," says Angus, "I hae seen chaps leave the gravel pit wi' aboot twa wheelbarrows-full o' stanes an' dirt in their waggon-box, an' before they had gone half a mile, the hale thing would be shaken through the cracks an' holes in the bottom."

"Weel," says I, "I ken ye're richt aboot that, for I hae seen it mysel', an' mony the gude buggy I hae broken, jumpin' frae ane stane tae anither a' simmer, after the road-work was done; but," says I, "what can ye dae aboot it? Hoo can ye bring aboot a change that will gie' us roads tae travel on, instead o' the bogs an' mudholes that gied ye sae much trouble comin' here the day?"

"There's juist ane way that I ken," says Angus, "an' that is tae mak' the farmers pay for the buildin' o' roads in their taxes, like they pay for ony ither o' the township expenses; an' tae get a road commissioner wha kens his business (which is to build roads an' get a gude day's wark oot o' a gang o' men), to look after the job. When the farmers pay oot their siller for gude roads, they'll tak' interest enuch in the matter tae see that they get them."

"Na doot, ye're richt again," says I, "but there's mony o' us wha thinks oor taxes is unco' high as it is, wi'oot pittin' a heap on them in sic a way as that."

"Sandy," says Angus, "I tell ye, ye never pit siller in the savings bank that brocht ye half as gude interest as would what ye would be call upon tae pit intae the 'Good Roads' bank. An' the interest wad be paid ye ilka day o' the year, in the shape o' the bigger loads ye could haul intae the toon, an' the savin' o' wear an' tear on horses, wagon, buggies, an' so on, to say naething o' yer ain temper being improved, an' yer auld wumman an' the bairns receiving the benefit. An' gin ye ever want to sell oot an' retire frae business, ye can pit a price on yer property that wad frighten awa' ony buyer that wad come around, gin he didna' ken that a hun-

dred acres on a gude road is weel worth a hundred and feety on a bad one."

"Weel, Angus," I said, "I juist wish yer executive abeility was as gude as yer powers o' conversation. I wad be gettin' ye nominated for road commissioner, then, an' the problem we hae on oor hands, o' what tae dae wi' the King's property, wad be solved."

"O, aye," says Angus, "but it canna' be expectit of a mon that he can baith tell what should be done, an' dae it, too."

"Na, na," says I, "that couldna' be expectit."

SANDY FRASER.

### Tribute to Canadian Wheat Grading.

Editor "The Farmer's Advocate":

Few people are so miraculously modest as not to like their accomplishments and possessions thought well of, and held in high esteem by other folk, and it is with this idea prompting me that I venture to inform readers of "The Farmer's Advocate," especially those engaged in the cultivation of grain, about a very graceful compliment to the admirable arrangements in force for controlling the grading of wheat in Canada, passed by Mr. Humphreys, one of the foremost authorities on the subject of wheat and flour, in the course of a paper which he recently read before the Royal Society of Arts. He pointed out that the Canadian method compared most favorably with the system prevailing in the United States, and that, in consequence of the reliable grading, which enable the certificates upon which operators purchased to be above suspicion, the reputation of Canadian wheat was deservedly high, the best grades of Manitoba wheat commanding the highest prices, as a rule. He concluded by saying that the confidence which such honest action inspires in buyers is reflected in the relatively high prices of Canadian grain.

EMERALD ISLE.

### Stable Arrangements.

Editor "The Farmer's Advocate":

Harvey Gampp asks for hints re stable driveway. I would suggest backing the manure spreader down grade, below the stables, so that no lifting or hoisting will need to be done in loading. Also arrange the stables so that litter-carrier track can be installed a little down grade. Also try to arrange so that the horse and cow manure can be mixed every load. In placing spreader below stable, there may be some difficulty in draining; but, anyway, put it below, even if a water-tight pit has to be made. It will pay well.

G. A. ANNETT.

Lambton Co., Ont.

## THE DAIRY.

### Scrub Sires Spoil Profits.

Editor "The Farmer's Advocate":

If the foundation of any structure or any business venture be well and carefully laid, it augurs well for the future success of the enterprise. This is just as applicable to our live-stock breeding as anything else, if not more so, and any discrepancies allowed to creep into the formation of our nucleus for future development in stock-breeding often require years of patient work before entirely eliminated.

At this season of the year, more particularly, the dairy farmer is afforded an opportunity for foundation-laying or building of his dairy herd by the opportunity afforded for selection of the sires and dams. At this time of the year the vast majority of the dairy cows of the Province freshen, and, accordingly, another generation, so to speak, of dairy animals are got under way of development, and the selection of these offers a grand opportunity to effect improvement.

The slogan of the progressive dairy farmer, viz., Breed, Feed and Weed, just here offers first application. The fundamental steps towards the improvement of our dairy stock rests in the exercise of intelligent breeding. Granted we have an animal bred along producing lines, the likelihood is that we will have a producer; and, this being true, we have an opportunity for the second application of our motto. This time it is Feed. So far, this course of procedure constitutes two great steps towards success, and now to round off the good work we make the third application of our rule, viz., Weed; for, if the animal embodies intelligent breeding, and has been afforded intelligent and liberal feeding, and still fails to make good, then let us weed rigorously.

But in how many cases will discrimination be observed in the selection of the young calves that are to be reserved for rearing? The truth of this is best exemplified by observing, about six months hence, the motley throng of youngsters that are found in dairy sections. They will be noticed seeking the shade of a wire fence from the burn-

ing sun, or endeavoring to eliminate the noxious weeds that infest our roadsides by pasturing there. A few farmers, in selecting their calves, will be influenced by a particular fancy for color; others will consider it prudent to start the earliest calves, in order that they may get a good start before the cheese factory opens, irrespective of the merits of their dams; and I have seen others who acknowledged that they raised this particular calf, although its dam was an unprofitable cow, because "little Willie found the calf first, and wanted it reared." And so, nothing short of indifference prevails with many, where keen judgment and intelligence should be the predominating influence.

True, there is no infallible rule that may be followed in selecting our calves for dairy purposes, that will insure best results. We must be guided by our observance, previous experience, and that knowledge which each owner of dairy cows has acquired respecting the several individuals of his herd, through constant caring for and association with the animals. There is, however, a means that can be employed that renders our knowledge of the individuals of the herd much more accurate, i. e., the individual testing of each by means of the scale, Babcock test, and milk records. For the farmer who has adopted such a system in the management of his herd, the selection of the best calves, or at least those that are most likely to prove good, is a comparatively easy matter. Through the medium of his records he has been able to ascertain pretty accurately the worth of each individual, and perchance of her dam also; and if a superior sire has been used, this man is well on the way towards success in at least this one phase of his farm management.

If this aid of the individual records in the task of selection is not to be had, we should select from what we think are our best; but when we come to apply the rule of thinking or guessing to the work of a dairy cow, it is often very indefinite. However, every herd has its superior individuals, and from these we should endeavor to perpetuate our herd. In our selection, we should adhere to certain evidences of dairy type, as well as ancestry. In the first place, the calf should combine size and quality. With size, we would have, accordingly, capacity for consuming large quantities of food, to be converted into milk in later life, and a large or well-filled middle, denoting a large heart-girth and constitution. Particular attention should also be paid to udder development, the teats being evenly placed, indicating length, and a well-balanced udder. Desirable characteristics are length of rump and width of hind quarters, combined with quality or a certain mark of fineness that is clearly discernible when you first look at the calf; by length and fineness of neck, sloping gracefully into the shoulder; an open expression, or large, full, placid eyes, decidedly feminine in appearance, being wide between the eyes, and graceful outlines of head, with rather large muzzle, but clean-cut face; gently-sloping withers, and a prominent and level, rather than flat, vertebrae, the whole contour of the calf denoting nervous energy and intelligence, are most essential in a dairy female. Calves that are to be reared should outwardly indicate these qualities. It is rather difficult to judge the handling qualities of a calf. While she may be somewhat thick, and not elastic or pliable, as a calf or yearling, with maturity she often becomes all that could be desired.

In selecting the future sire, we are selecting the future half of our herd, and so we cannot attach too much care and intelligence to this selection. While it is very imperative that we exercise the keenest of judgment in the selection of the females for rearing, the selection of a calf to be later used as the head of the herd is of paramount importance. Nothing but a pure-bred sire of one of the dairy breeds should be used. Away with the use of the scrub or grade sire, and a great forward stride will be made in the successful breeding of our dairy stock. Not only may we expect to get in a sire a line of pure breeding containing many large yields of milk and butter, denoting very superior breeding, and, accordingly, the likelihood that such characteristics will be transmitted to his offspring, but we are also enabled to plan our work of future breeding along something like definite lines. By the continual use of a pure-bred sire of one particular breed, we may expect the progeny to more nearly approach, through each succeeding cross, in quality and appearance, pure-bred individuals of this particular breed. If all dairy farmers in Canada would decide to use nothing but pure-bred sires of whichever breed of dairy cattle they prefer, how soon the dairy cattle of different vicinities would approach uniformity in size, color and production. Dairying would soon become our national industry; and, as the Black-and-White cattle characterize Holland, and the great Red cattle characterize Denmark, so would Canadian cattle be known the world over as a distinct breed of dairy cattle, as well as their produce, rather than the conglomeration of breeds such as we have today.

Many have failed to relegate the scrub or grade sire to the background, and continue to use such in their herds, thinking it economy to do so, rather than pay the price asked by the breeder for a pure-bred sire. Such economy is very misleading. Perhaps someone who has written a breeder for prices, says he cannot afford to pay for a sire of merit to use on his dairy herd. But it seems to me the question is, how can he afford not to buy, and to go on in the same old way?

Let him look at the matter in the light of a business proposition, in the light of an investment. Suppose a grade cow, sired by a pure-bred sire, gives but one pound per milking more than her dam—an amount so small that the milk-er could not notice he had it without the scales—in the three hundred days of the milking season, or six hundred milkings, she will give six hundred pounds of milk extra, worth, at the very lowest, \$1.00 per hundred pounds, or \$6.00 for the season. But a good dairy cow is milked eight seasons, and that would be \$48.00 for the one cow; and if this sire got but ten such, it would have earned its owner \$480. But a good sire will do three times as well as this, and make three times the money for its owner. The conclusion must be obvious. How can we longer tolerate inferior sires at the head of our herds, from which we must propagate all our dairy cows and sires? Nothing has tended more seriously against the development of our dairy industry than the nondescript sire that wanders at will through the fields of his owner, and also into neighboring fields.

In selecting a pure-bred sire, breeding is of vital importance, but other points should not be overlooked because of special attention to the pedigree. Individual excellence should also be sought. Dairy type and masculinity combine to give strength of character or prepotency, that his offspring may inherit the good qualities of his ancestry. That there is great room for intelligent selection in the young animals that are to be reared, is proven conclusively by the large percentage of failures in the young animals to-day on coming into usefulness. Let us discriminate vigorously against the scrub sire being reared, and put forth every effort to secure only the heifers from our very best cows, providing they be good individuals as calves, seeking quality, rather than quantity, so that we can afford to raise our selections well, rather than being overrun with a number of undesirable and improperly-fed calves.

Dundas Co., Ont. CLARK HAMILTON.

### Money in Good Stock Well Handled

That our readers are anxious to know some of the details regarding George Rice's start with dairy stock, the methods adopted, and the profits derived, before he reached the climax with the monster sale of recent date, is shown by the following letter, from an Ontario County enthusiast:

"We are all pleased to hear of George Rice's success with dairy cattle, and look upon him as we would upon a great general. His name will live for ages, and well it may. I, for one, and I am sure there are many more, would like very much to know, through your valuable paper, what Mr. Rice was worth twenty years ago, when he started dairying, and what his average yearly profits have been since, apart from the \$20,000 netted at the sale. You may also assure Mr. Rice that we will be only too pleased to hear that his yearly profits were greater, accordingly, than his recent sale."

At the death of his father, about 25 years ago, George Rice's share of the estate totalled something less than \$4,000. His father had kept beef cattle and sheep. He continued in that line for a time, but beef was very low just then, exporters being about 4½ cents, so he changed completely, selling all the high-grade beef cattle.

Grade dairy cows were purchased, then a Holstein bull and a couple of females. He kept the pure-bred and grade Holstein heifers, and sold the pure-bred Holstein bulls, so that he might buy more Holstein females from time to time, as finances permitted. When he had enough pure-bred Holsteins for a hundred-acre farm, he sold all the grades, and kept only registered stock. A period of general depression made progress slow for the first ten years. In fact, Mr. Rice has made more cash in the last seven years than in fifteen years before that. In addition, the increased money invested made the earning power greater. For three years past, the annual returns have been between \$2,000 and \$3,000.

This has not been accomplished without hard work. It meant the application of muscle and brains. It entailed much close application. In order to keep in the van of the dairy-cattle order to keep in the van of the dairy-cattle breeders, a man has to continually test the cows. In many instances cows have been milked three or four times a day, in order to find out their individual milking propensities. It was such work that made it possible for Geo. Rice to sell his stock for \$20,000, which to him is "as good as a million."

### Dairy Examinations at Guelph.

The class of 1909 at the O. A. C. Dairy School was about an average class in numbers, but possibly above the average as students. All who wrote on the final examinations (31) passed the rather severe tests which were imposed on the theory and practice of dairying. Some who had expected to remain until the end of the term, were obliged to leave. As usual, the students were drawn from various parts, including Japan, Jamaica, New Zealand, Ireland, Scotland, England, British Columbia, Saskatchewan and Quebec. Most, however, were from Ontario. Among the former was the Superintendent of Dairying in Saskatchewan, and among the latter was a cheesemaker who has a testimonial as to his ability to make fine cheese, which was dated 1867. There were thus gathered together at the Dairy School the oldest, who had seen the dairy industry as an infant; and the youngest, full of hope for the future, and eager to make their mark on the halls of fame.

To indicate the mental calibre of the class, we may mention that, in connection with the Literary Society, they conducted a public-speaking contest, which was taken part in by four of the young men. The first prize was won by Mr. Craven, from New Zealand; the second by W. Brown, from Quebec (recently from Scotland), and the third by W. C. Owen, a graduate from the O. A. C. College, who is specializing in dairying. During the term, each instructor directed the class along certain lines of experimental work. This is done to train students in scientific method. Ex-President Elliott, of Harvard University, in a Canadian address, said: "The keen observation of fact, the accurate record of fact, and the inference from the fact: that is the method of science in all fields." A few phases of the experimental work taken up were: (1) Cream-testing—Three methods were followed, by which one sample was tested in the ordinary way; another had water added to the sample before the addition of sulphuric acid; and to another was added the hot water after mixing the cream and acid, and before whirling. The third plan gave the clearest readings when testing cream, and can be recommended to those having difficulty in securing clear readings.

It was also found that reading cream samples directly from a turbine tester gave results about one per cent. higher than similar or the same samples, when read at 140 degrees F., the standard temperature. Those testing milk and cream samples ought to adopt standard temperatures for all parts of the work.

2. Cream Separators—As a result of several tests, an increase or decrease of 20 turns of the handle of the separator above or below normal caused an increase or decrease of about 20 per cent. fat in the cream. An increase of the speed produces richer cream, and causes less loss of fat in the skim milk. A decrease of speed means the poorer cream, and a greater loss of fat in the skim milk. Speed is a very important factor in the centrifugal creaming of milk.

3. Churning—Raw cream with culture, compared with pasteurized cream with and without culture added by ripening, invariably produced poorer-flavored butter. There are some interesting lots of butter in this connection for scoring by the instructors and milk and cream testing classes during the week of April 5th, when Robt. Johnston, of Ingersoll, will conduct a scoring class for both butter and cheese on Wednesday, April 7th, in the forenoon. Dr. Thom, Mycologist of the U. S. Department of Agriculture, Washington, will deliver a lecture to these classes on Thursday morning, April 8th.

Cheesemaking—Double the usual quantity of rennet added to milk, produced cheese with about one-half per cent. less moisture in them, as compared with cheese made by using a normal amount of rennet. Rough, careless handling of curd during the cooking process reduced the yield of green cheese about 3 pounds per 1,000 pounds of milk. Milk testing 3.8 per cent. fat, and 2.8 per cent. casein, produced 1 pound of cheese from 10.12 pounds of milk, while milk testing 3.1 per cent. fat and 2.6 per cent. casein requires 11.45 pounds milk per pound of cheese. In another experiment, where the fat and casein tests were 3.9 and 2.8, respectively, the pounds milk per pound of cheese were 9.37. On the same day, and under similar conditions, as nearly as possible, milk testing 3.1 per cent. fat and 2.5 per cent. casein required 11.75 pounds milk per pound of cheese. In another case, lots of milk testing 3.7 per cent. fat and 2.5 per cent. casein, compared with milk testing 3.5 per cent. fat and 2.4 per cent. casein; the relative weights of milk required to make a pound of cheese were 9.88 and 10.81 pounds, a difference of one pound less of the milk to make a pound of cheese in favor of the richer milk, though there was not much difference in the tests of milk. Yet there are those who do not believe in "paying by test."

The proficiency lists, showing the standing at the examinations, are:

Factory Class.—A. L. Andrews, Indian River, Ont.; Geo. B. Craven, Helensville, New

Zealand; Wm. Brown, Ayer's Cliff, Que.; R. A. Pressey, Malahide, Ont.; J. R. Clubb, Bridgen, Ont.; M. A. Campbell, Zimmerman, Ont.; Wm. C. Owen, Thornton, Ont.; Jno. Koch, Shipley, Ont.; C. A. Brown, Woodstock, Ont.; H. A. Stewart, Carlingford, Ont.; L. Beninger, Riversdale, Ont.; A. H. D. Trench, Hazelymph, Cambridge, Jamaica; J. A. Marshall, Caledonia, Ont.; G. M. Herries, Lakeview, Ont.; J. E. Murray, Charterhouse, Kelso, Scotland; A. C. Wilson, London, Ont.

Specialists in Buttermaking.—Geo. Nicolsen, Copenhagen, Denmark; P. L. Doig, Molesworth, Ont.; H. W. Patrick, Molesworth, Ont.; J. B. T. Runnings, Owen Sound, Ont.; J. A. Waddell, Kerwood, Ont.; R. W. Farmer, Renfrew, Ont.; J. B. Adair, Galt, Ont.; W. J. Halward, Cannington, Ont.; G. A. Honey, Bowmanville, Ont.; W. J. Sisson, Orono, Ont.; H. E. Doupe, Kirkton, Ont.

Farm Dairy.—J. Patrick, Hastings, Ont.; Miss M. D. Bain, Hamilton, Ont.; Miss E. C. McKenzie, Toronto, Ont.; S. C. Stroud, Stayner, Ont. H. H. DEAN.

### Treating Scours in Calves.

This trouble with young calves is of such common occurrence among Wisconsin herds that the following question is frequently asked: "Will you send us a recipe for the treatment of scours in young calves, and the best method of feeding them to prevent this trouble?"

Calves at the University farm are specially treated for calf scours. First, special care is taken to avoid scours by keeping the calves in clean, bright, well-lighted and well-ventilated quarters. We feed them regularly until four weeks old on two to six pounds of their mothers' milk three times daily. Care is taken to have the temperature of the milk as near that of freshly-drawn milk as possible, and always to have the calf pails scrupulously clean.

In spite of all precaution, we now and then have cases of scours among our calves. For the past two years we have successfully treated such cases as follows: As soon as symptoms appear, two to four tablespoonfuls of castor oil are mixed with one-half pint of milk, and given to the calf. This is followed in four to six hours by one teaspoonful of a mixture of one part salol and two parts sub-nitrate of bismuth. It can also be given with one-half pint of new milk, or the powder placed on the tongue, and washed down by a small amount of milk.

The salol and sub-nitrate of bismuth can be secured from any druggist, mixed in the proper proportions at the time of purchase, and thus have the powder readily available for use at any time. As an additional precaution against contagious scours, it is advised that the navel of the newborn calf be wetted with a 1-to-500 solution of bichloride of mercury (corrosive sublimate).—[Prof. G. C. Humphrey, Madison, Wis.]

### Defects in Cheese Shipped.

In speaking of "short weights" and "green cheese," the Bristol firms do not mince their words, but, figuratively speaking, strike out from the shoulder every time. In reading letters from firms in Glasgow, Bristol and Liverpool, received by W. W. Moore, Chief, Markets Division, Ottawa, who has kindly favored us with copies of the correspondence, one is forced to the conclusion that such a unanimous complaint regarding short-weight cheese must have some foundation, and that there is a danger, if this grievance is not removed, that Canadian cheese may lose, and New Zealand cheese gain, in popularity with the dealers, simply because they get short weight on the one hand, and full weight on the other.

In some of the letters, reference is made to the stuffed-cheese fraud. Prior to the 20th of July last, there was no law which prevented the fraudulent practice of stuffing cheese with worthless curd or old cheese, but on that date the "Inspection and Sale Act" was amended by the insertion of the following section:

"No person shall (a) incorporate in a new cheese, during the process of its manufacture, any inferior curd or cheese; (b) knowingly sell, expose or have in his possession for sale, without giving due notice thereof, any cheese in which has been incorporated, during the process of its manufacture, any inferior curd or cheese; (c) place in a cheese during the process of its manufacture, or at any time thereafter, any foreign substance not necessary to the manufacture of cheese."

The penalties for violations of this section are not less than \$25, or not more than \$500, for each offence, and an officer of the Dairy and Cold-storage Commissioner's Branch is charged with the enforcement of the Act.

Letters direct from importers in Liverpool, Bristol, Manchester and Cardiff are unanimous in denouncing short weights and green shipping. In two or three cases reference is made to the arrival of "filled" cheese, in which was found inferior curd. Practically all agreed that there was a gradual improvement in the general quality

of the product. The practices complained of, however, were turning attention from Canadian dairy products to those from New Zealand. One importer noted a shrinkage of 15 pounds on five cheese; another said it was not unusual for a cheese to show a shrinkage of 6, 8 or 10 pounds, and it is suggested that "some swindling is going on on the other side." Against this is placed the record of New Zealand shipments, where differences in weights very seldom occur. One writer says Canada is the only place from which short-weight cheese come.

Most of the correspondents deplore the "green cheese" that arrive from Canada. A Bristol importer advocates that cheese should not be shipped from the factories until they are ten or fourteen days old.

One voice was raised against the Canadian cheese-box. It was pointed out that from some sections broken boxes were common. Small and frail boxes were referred to.

### Successful Dairy Students.

The final examinations at the Eastern Dairy School, Kingston, Ont., were concluded March 26th. The total registration for 1909 was 61, as compared with 59 in 1908. Nineteen took the final examinations, both written and practical, on cheesemaking, operating of cream separators, buttermaking, milk-testing, boilers and engines, as well as written examinations on Bacteriology and Chemistry. Seventeen students were successful in passing in all subjects. Following is the standing, in order of merit: H. L. Waters, Ashton, Ont.; F. G. Kendall, South Dummer; J. M. Scott, Balderson; W. Derby, Ettyville; S. Gibson, Scotch Line; A. J. O'Hara, Rupert, Que.; J. H. Dudgeon, Belleville, Ont.; Wm. Fox, Gananoque; L. Reddick, Wallbridge; W. Plumley, Beechmount; W. J. O'Brien, Hastings; F. Clark, Moscow; W. Horsey, Bethel; L. Doyle, Wolfe Island; D. A. O'Connor, West Osgoode; G. L. O'Hara, Rupert, Que.; H. Robinson, Kingston, Ont.

## POULTRY.

### Breeding of Turkeys.

Anyone holding the idea that turkeys are delicate, would be surprised if he paid a visit to W. J. Bell's farm, in Simcoe Co., Ont., some cold winter day, and saw there some of the most valuable turkeys in the world stalking about through the snow, and roosting in an open shed, with the temperature away below zero. It is a pity that this misapprehension about turkeys being delicate is so general among farmers. Otherwise, more would breed them, and their bank accounts at the end of the year would improve, correspondingly. It is quite true that a large number of turkeys die untimely deaths every year, but this is because reasonable care is not exercised. As soon as the youngsters are hatched, they should be placed with their mother in a field. The old hen should be confined in a slatted, A-shaped coop, with a boarded top, just the way you pen an old hen that is mothering a brood of ducks. The young turks will ramble about, but will not go very far from the hen, and, at the approach of any danger, when it begins to rain, or at nightfall, they will seek shelter under her wings. It is important that the coop, which, by the way, should have no bottom, should be moved its own breadth every day, so that the ground will not become soured from the birds' droppings. An exception is made by Mr. Bell on those rare occasions in the summer when the rain falls all day; then he would risk keeping them for two days in the same place, rather than take the other risk of putting the coop on thoroughly-saturated ground.

### FEEDING YOUNG TURKEYS.

The feeding of young turkeys is important. Mr. Bell feeds five times a day for the first month. His favorite feed is shorts, soaked in skim milk. The first day, only, he feeds bread, soaked in milk. In one of the daily feeds he mixes up some dandelion tops, and in another some onion tops. Otherwise, nothing but shorts and milk is eaten by his young turkeys until they are four weeks old. Then the old hen is released, and the youngsters are encouraged by their mother's example to so some rustling on their own account. She leads them about, and the whole brood picks up stray grain, seeds, and insects. From this out they are fed only twice daily, the morning feed, as before, being of shorts and milk, and the evening feed of sound wheat. Mr. Bell is a great believer in shorts. It is not only nourishing, but it has a regulating effect upon the bowels, and to its use he attributes the immunity his young turkeys enjoy from any epidemic disease. On another point he lays particular emphasis. He keeps his turkeys away from the hens, and likes them to roost by themselves. Of course, there should be a supply of water available at all times, and grit; but if there is any gravel in the

soil of the farm, the turkeys will find it out, and eat all they need.

### STICK TO ONE METHOD.

From the time the turkeys are led abroad by their mother, until they are cooped at the Ontario Winter Fair, the Bell birds have no change of diet. Shorts and milk in the morning, and wheat at night, plus what they can pick up, constitute their regimen. For drink, both skim milk and water are given at all times.

That is all they need to put them in condition. Corn they never eat. In the matter of feeding, it is worth while pointing out that there are several methods. One woman to whom Mr. Bell sold stock raised some magnificent birds, and never gave them any water to drink, except in the hottest days of summer, when she would put a pie-plate full of water before the flock. It is important, however, that the turkey-breeder, once choosing his method, should stick to it unswervingly. It sometimes happens that a bird takes sick. The inexperienced fancier fears that his treatment is wrong, and changes it. The result is that he loses not only the first bird, but perhaps two or three more, and then retires from the fancy in disgust, because "turkeys are delicate."

### THE TIME TO HATCH.

Another mistake against which turkey-breeders should be warned is getting the youngsters hatched too early. The last week in May is early enough for the central parts of Ontario, and the first week in June is best for farmers living a hundred miles north of Toronto. As a rule, it is better to buy your stock and breed your own. Mr. Bell thinks this method preferable to buying eggs, and he prefers to let the turkeys hatch their own eggs, instead of setting under hens. Some breeders, in haste to be rich, take the turkey's first setting of eggs and place them under a hen. Then the old bird will lay again. The trouble is, a common hen does not brood young turkeys in the best manner, nor take long enough rambles with them after a month old; and the second clutch, in Northern Ontario, at least, is too late-hatched to resist many diseases. So that, on the whole, it is better to let the turkey hatch out her own eggs.

Sometime in April or May the hen turkey will begin to lay, and it will take her about three weeks to finish this part of her duties. A nest should be provided her, or else she is apt to lay away in a fence-corner, where there is danger from marauders. The eggs should be removed as laid, and kept in a cool place, turning them over a couple of times a week.

### WHAT A TURKEY LAYS.

In her first year, the hen will probably lay about 13 eggs; next year, 15; the third year 12, though these figures are not invariably followed, turkeys being weak on arithmetic. It is altogether probable, however, that the first year will see the most eggs laid. It is a good plan to put a hen's egg in the nest when the other is removed, and care should be taken not to give the turkey her eggs until it is certain that she has begun to sit. Better wait a day, and make sure she is staying on the nest. The period of incubation is 28 days. One cock can be trusted to fertilize the eggs of a dozen hens, and it is worth noting here that the cock must be used once for every setting. The old idea was that the male bird could be run with the hens for a week or so in the spring, and that any eggs they would lay in the following summer would be fertile. This is true only as regards the first setting. If it is desired to break up the first nest, to give the eggs to a hen, for instance, the next series will not be fertile unless the cock is used again.

### MR. BELL'S BREEDING METHODS.

A male bird is good for three or four years, perhaps longer; and Mr. Bell has no fancy in the matter of mating, such as a yearling cock with older hens, or an old cock with pullets. On one point he is a stickler, and that is, when he wants any fresh blood, it is hens that he gets, not cocks. He has found out by experience what most of us have read, namely, that color and conformation are dominated by the male, and, as color is so important a feature in prizewinning turkeys, he keeps to his own males. Even the new females are not introduced directly. It is the grandchildren of the outsiders that he puts in his champion pens. The old formula, "twice in and once out," embodies his ideas of in-breeding. As in swine, turkeys are killed to best advantage at a certain age. Six months is the best time for the cockerels, and five months for the hens. At that age, the cocks should weigh about 25 pounds, and, though they will grow heavier—15 pounds being not uncommon for two-year-old birds—they do not grow much from six to nine months, and, from a purely commercial point of view, it may be doubted if the weight above 25 pounds is profitable. Nor, if one is breeding for the market alone, is it desirable to keep a hen over her second winter. The pullets, as remarked, will lay more than the older hens,

so it is best to use them as breeders next year. There is a possibility, however, if this practice were persisted in year after year, there might be some deterioration in size. Though it is proverbially unwise to count chickens before they are hatched, one may calculate on rearing one turkey for every two eggs that are laid; that is, of course, if the birds are properly cared for. This fact, and the fact that the birds are better if they never see the inside of a house or barn from the time they are hatched, should be sufficient answer to the charge that they are delicate. The fancy prices that turkeys fetched this winter should encourage more farmers to devote some attention to them as an additional source of revenue.

J. V. McAREE.

### Spring Suggestions in the Poultry Yard.

The progressive breeder of fine stock, as a general rule, keeps his fowl and their surrounding quarters in as clean and sanitary condition as it is in his power to do. Throughout the winter months he allows plenty of fresh air, removes the droppings frequently, keeps the litter fresh and clean, and doesn't allow his feed or water troughs to accumulate dirt; in other words, he looks after his fowl properly. To this class of poultry-raisers my article does not apply. They are successful. My aim is to point out in a brief and concise manner what should be done in the poultry-yard that the inexperienced farmer or beginner does not understand.

### CLEANING UP THE WINTER QUARTERS.

Cleaning up the winter quarters is my first step in April. First, I don a pair of the "navy blues," make my way to the poultry house, and turn out the fowl in the yard, as I desire to be alone while at my work. Then I go about it in good style, removing every removable thing in the house, putting them out in the fresh air. Then, with my big broom, I sweep all dust and dirt from the walls, ceilings and floors, which has accumulated since my last "cleaning up." When this is done, I then bring up my tub of white-wash, which is hot, and contains 2 per cent. of crude carbolic acid. With a spray pump, I put this on the ceilings and walls, not being particular about what drips on the floor, but always trying to fill every crack and crevice where lice might make their abode. I take out the window, washing and drying it; then place back the bottom sash, and put muslin or cheese-cloth in place of the upper sash. This allows plenty of pure, fresh air to enter the building at all times, without danger of drafts. I then sprinkle the floor with air-slaked lime, and I find always that it keeps the air purer in the building. This being done, I return to the articles left outside. First, the roosts, which I paint liberally with some good lice paint. Before I paint them, however, I use precaution in cleaning out any little crevices or knot holes, so as to make the liquid paint fill all those up, and thereby render it more effective. Then, in connection with the roosts, is the dropping-board. I disinfect this with lice paint, using the same precautions as with the roosts; and when I replace them in the house, I sprinkle the dropping-board with lime.

From the nests I clean out all the old straw or nest lining, and whitewash them inside and out. Then, when dry, and ready to put back in their proper places, I dust insect powder into every crack or crevice, and, as an additional preventive from lice, I place a large tobacco leaf in the bottom of each nest. Upon this I place fresh nest lining, generally short oat straw. When this is done, I am ready for the water fountains, which I scour vigorously with hot soapsuds. I dry them thoroughly, and they are prepared for their next supply of clean, fresh water. Water vessels should be scoured often, and the water should be changed at least twice a day. Then we have the grit box and dust bath to clean and re-prepare. The grit box is thoroughly scoured, same as water fountain, then refilled with fresh, clean grit; and dust bath is recleaned and refilled. I use no hoppers, therefore have none to clean. I believe in making the hen earn her keep by working for it. In some cases, where hoppers are used, there are always a few drones that stand by the hopper for their supply of food, and therefore they do not exercise sufficiently to stimulate their blood, let alone lay eggs. I only say in some cases, remember, for there are flocks that do not depend on the hopper. The laying hen is an active hen, and insists on earning her food, by scratching diligently while there is a kernel of grain to be found.

Now I am ready to return the roosts, nests, etc., to their respective places; and when it is done we must supply some kind of litter or scratching material. I prefer oat straw, but some use dry leaves, shavings, wheat straw, corn, husks, etc. That is left to your own desire, but I think you will find my choice a little the best. My house is now prepared, but my fowls are not. They must be all dusted with insect powder before they return to their clean quarters. If we

were to let them in, without any dusting, and they were infested with vermin, then all our former preparations and precautions would have been done to little avail. If we wish success to crown our efforts, we must use precaution on every hand. This work I have outlined is a long day's work for any man, and if your house is large, and your number of fowls likewise, it will demand the work of more hands.

I have outlined my methods of what people term "house-cleaning," or "cleaning up." This routine of work I go through twice a year, in the month of October and the month of April. Of course, between those months we must ever be on the watch to prevent disease, and keep the quarters in strict cleanliness. Cleanliness is said to be next to godliness, and it is a good motto for the poultry-raiser.

In addition to the above, I might say, raise pure-bred fowl, feed at regular intervals, and make your fowls scratch for their food. Do not lay it down in troughs in the form of mash, as they will gorge themselves, and you will not profit by such feeding. JOHN W. DORAN.  
Renfrew Co., Ont.

### Persistent Broodiness.

I have had much trouble last summer and this winter with broody hens in my flock of young Plymouth Rocks. They commenced laying the last week in December, and have done very well, except that nearly every hen, after laying for three or four weeks, is determined to sit, and takes so long in getting back to work again. They are fed oats, barley and a little wheat in litter, plenty of vegetables, and milk, and clover. Hoping you may be able to suggest a remedy, as it is no end of bother, besides lessening the number of eggs. SUBSCRIBER'S WIFE.

Ans.—Persistent broodiness in a flock kept mainly for egg production is a bad fault. Robinson, in Poultry Craft, claims that they can be most easily broken of broodiness and most quickly brought to laying again by confining them with a reserve male in a pen from which the nests have been removed, feeding well on egg-producing food. This accomplishes the two essential objects of causing the hens to forget about brooding, while keeping them in good condition. This is more effective, he says, than confining in coops, for in pens the hens may sometimes be got to laying again in four or five days, it rarely requiring more than ten days, unless the hens are badly out of condition. Starving to break up broodiness is a cruel remedy, no more effective than simple removal from nests, and certain to postpone laying longer. Sometimes it is not even necessary to remove the broody hen from the flock. The writer of this answer broke up one recently by the simple expedient of removing all the nests from the pen the first evening the hen undertook to remain on them over night. After expressing her temper emphatically by running around the yard a while, and pecking at other hens, she finally took to the roost, and did not go on the nests next morning. In eight days she commenced to lay.

### Sizeable Eggs.

Three eggs, one measuring 7 x 8 inches in circumference, one 6½ x 8, and one 6¼ x 8, were reported to "The Farmer's Advocate" recently by J. H. Wheaton, secretary of the East Middlesex Farmers' Institute. The eggs were laid by hens belonging to G. Van Horne, of Thorndale, Ont., who informs us, on inquiry, that the one which measured 6½ x 8 inches weighed four ounces, according to scales in the village store. The others he had not kept. The bird that accomplished the feat of laying this "goose egg" comes from a cross of Buff Orpington hen and White Leghorn rooster. With regard to his methods of breeding and care, Mr. Van Horne writes:

"I do not keep pure-bred hens, but always have a pure-bred rooster, and change rooster every year, never keeping hens more than three years old. My pullets, last year, were nearly all laying at 5 months of age. I always feed wheat in morning, and always as near 8 o'clock as possible; also give lukewarm water. I feed one quart of wheat to thirty-two hens. For noon feed, I generally boil a few potato peelings and scraps from house, and mix one quart of chop in same. For night feed, which I generally feed as near 4 o'clock as possible, I feed one quart of wheat to 32 hens, and give more lukewarm water. I have obtained from 14 to 20 eggs per day all winter. I keep henhouse just warm enough so that the water will slightly freeze, but not too hard. I have just completed another henhouse, to hold 30 more hens, as I do not believe in keeping more than 30 to 35 hens in one pen."

The proposed organization meeting of the Poultry Producers' Association will be held at the Poultry Department, Macdonald College, Que., on Friday, April 9th, at 1:30 p. m. All interested in the production of good poultry and eggs are invited to attend. F. C. ELFORD,  
Chairman of Organizing Com.

### Making Poultry Pay.

Editor "The Farmer's Advocate":

Would Wilbur Bennet, referred to in report of the Poultry Institute at Guelph, kindly give us some particulars of his success? Is the profit mentioned derived in the ordinary way of selling eggs and fowl for market, or does he make part of it by obtaining higher prices for "hatching eggs" of some particular breed? Has he allowed anything for rent of the five acres? Does he feel confident of being able to make that much by investing, say, \$500 and renting a small place, allowing for depreciation of stock, in the shape of plant, etc., or is he worth \$950 at the end of a year, less his household and personal expenses? FARMER'S SON.

In answer to the first question, I would say I do not sell many eggs for hatching; the profit is made from the meat and eggs for table use. Eggs are sold to a grocer in Montreal at from 20 to 50 cents per dozen; fowl and roosters to a Montreal dealer at from 12 to 14 cents per pound, live, f. o. b., Peterboro, and broilers at about 30 cents per pound, live. The rent does not amount to anything in my case; they are kept in an orchard, and they more than make up the rent by eating up the worms, slugs, etc., which injure the fruit. Also, they greatly increase the fertility of the soil, resulting in a far greater yield of fruit.

In answer to the last question, I would say I am decidedly not in favor of poultry-keeping in the way mentioned. A great deal depends on the man, whether he would succeed or not. In my case, poultry-raising was started as a side line to general farming, whereby one increased his experience as he increased his stock, and even yet it only takes up a part of my time. It is too small a business (300 or 400 fowl) to devote one's whole time to, and the same general expenses would have to come out of the small flock as if it were three or four times the size. One must also have something to fall back on in case of a bad year. You can figure out anything on paper, but in practice it is not all sunshine. If poultry are kept as a side line to other businesses, such as fruit-growing or farming, there is no reason why, even at the present high prices of grain, a man cannot clear, above feed, etc., from \$1.00 to \$1.25 per bird. Exclusive poultry-keeping, on a large scale, has failed more often than it has been a success. WILBUR BENNET.  
Peterboro Co., Ont.

### Geese.

MORE SHOULD BE RAISED BY FARMERS.  
HOW TO MATE, MANAGE AND FEED THEM

Geese-raising on the farm is, undoubtedly, profitable if properly conducted. The farmer may realize a neat sum of money by raising a flock of geese every year, and with hardly any cost for food, for they will wander about the fields picking up what would otherwise be wasted.

They are preferred in many cases to ducks, for the reason that ducks are so greedy that it is impossible to successfully rear them and chickens in the same yard. Again, ducks are likely to crowd the chickens and eat their food, unless a large amount is given, which is unprofitable. They are also apt to dirty the drinking water, or more frequently to spill it. Geese seek the fields, and do not stay close to the feeding yard of the chicks. Geese require less feed than ducks. As already said, geese live almost entirely on green foods, with the exception of a few weeks of fattening. They are also easier to raise, disease being very rare among them, and they have no lice.

#### HOW TO MATE.

Two geese are enough to mate with one gander, if the Toulouse or Embden variety are bred. The African geese may be mated three to one gander, with good results. During the winter months corn should be fed sparingly to the breeding stock, as it is very fattening. Oats should be the main food.

#### HOW TO MAKE NESTS AND SELECT AND SET EGGS FOR HATCHING.

As the spring approaches, make roomy nests in the place that they have been accustomed to staying in at night. When they become broody, if more eggs are desired, place the goose or geese in a small yard, and leave her or them for two or three days. Break up the nests or board them up, and let the goose out. By this time she will likely have forgotten her former nest.

If the goose is to be set, select as many eggs as she will cover without overcrowding. These eggs should have been gathered as soon after being laid as possible, for they chill easily. After gathering pack in bran, little end up. While sitting, the goose should be allowed access to a pond of sufficient size for swimming, if the weather is not too cold. Where water is not within reach, the eggs may be dampened twice a week with tepid water. The method of setting the geese eggs under hens, and breaking up the geese to obtain more eggs, is practiced by many throughout

the country, and is almost as successful as using geese as sitters, although the rearing of the goslings is apt to be more difficult. Set the hen in a nest with a sod in it. Grass is preferred by many to straw, as it contains more moisture. Dampen the eggs three times a week with tepid water. When the eggs are expected to hatch under the goose, have a close basket or box handy, and in it put a woollen cloth large enough to fold over it. In this basket or box place the goslings as soon as hatched, as the goose is liable to crush them to death.

#### TREATMENT OF THE GOSLINGS.

After the hatch is over, place the goose or hen and her brood in a yard where there is no pond, as swimming is harmful to the young goslings, often chilling them fatally. Give plenty of pure water for drinking, and feed hard-boiled eggs, bread, or bran. The former is the best. After the goslings are a week old heavier food, such as corn meal, may be given. Supply plenty of grit and green food, if grass is not near. After two or three weeks allow the goslings to run at large. If there is no water to swim in, the goslings may be let run from the first, being careful to keep them under cover at nights from dew or rain.

If pasturage is abundant the growing stock will require little food after the first month till late in the fall, when, if the geese are to be kept till Christmas, as is usual, we advise feeding heavily and disposing of them as quickly as possible. Prices are as good, often better, early than later.

#### SELECTING A BREED.

Much discussion has arisen on this question. Some breeders strongly advocate a variety because they breed it. It is a manner of advertising. Selection should be confined to either of the Toulouse, Embden or African breeds. We advise the African variety, not because we breed it, but because we believe it to be the most profitable goose to raise. We have had experience with other breeds, but succeeded best with the Africans. We are convinced that they are unequalled.

#### DESCRIPTION OF DIFFERENT BREEDS.

A brief description of different breeds are given as follows:

The Toulouse is the largest of the goose family, and is the most common variety in most localities, so a description of it is not necessary. The Embden is nearly as large as the Toulouse. Their plumage should be pure white, but the under color of some birds is mixed with black, which should be guarded against. This breed is also common, and can be seen at almost every fair.

The African variety is of the same Standard weight as the Toulouse, 20 lbs. for the gander and 18 lbs. for the goose, although they are seldom found as heavy, being generally below the Standard weight. On the other hand, Toulouse geese are above. The African mature more quickly, lay more eggs, and are harder than the Toulouse or Embden. They also make good sitters. The color is similar to that of the Brown China goose. BERT SMITH.  
Lambton Co., Ont.

### Inflammation of Oviduct.

Have had three hens die lately while in the act of laying. Hens were apparently healthy, and in first-class condition. Am giving them mixed grain, pulped roots, grit, etc. Upon opening dead fowl, found egg quite natural as to size, etc.

Ans.—There must have been symptoms previous to the demise of the hens. Without symptoms, it is difficult to arrive at the exact nature of the disease. In this case it was likely inflammation of the oviduct, which is not an unusual cause of death among poultry, particularly of birds in an overfat condition. The unexpelled egg, of full size, which was discovered in the egg passage after death, points to the disease named. The egg had to be expelled, or removed, or death would ensue, and the latter occurred. The symptoms are straining on the part of the hen to expel the egg from the oviduct; distressed appearance of the bird; drooped wings and puffed-out feathers. The vent is usually hot, showing a temperature of 105 to 107 degrees. An English authority says: "As the inflammation proceeds, the bird becomes more and more mopeish and exhausted, but does not strain so violently, owing to pain and exhaustion. Ultimately, the temperature becomes lower, the body cold, and, with a few convulsive gasps, the sufferer dies. The cause of the inflammation may be due to prolific laying or too large eggs; too stimulating food; the feeding of condiments in excess, or obstruction of the cloaca." Treatment recommended to prevent other fowls from the same trouble is the liberal feeding of green stuff. If hens are fat, reduce rations. Let them run out as soon as possible. A. G. G.

I read "The Farmer's Advocate" with pleasure each week. It is the most inspiring paper that ever came to my notice, and I trust that it is meeting with the success it so rightly deserves. Renfrew Co., Ont. JNO. W. DORAN.

## GARDEN ORCHARD

### Cabbage Growing.

A subscriber in Durham County, Ont., who purposes devoting ten acres to cabbages during the coming season, asks for information on growing, care, and storing, of that crop.

While this is a broad question, demanding changed methods to meet local conditions, there are general principles that can be applied to advantage. A mellow soil, rich in plant food, and a liberal supply of moisture, are the prime requisites. Late Cabbage, of course, should form the bulk of the crop, a few of the early varieties being grown to meet the demand and to lessen the rush of harvesting later in the season, as well as the labor connected with storing.

Ontario gardeners, as a rule, start cabbage plants in greenhouses or hotbeds, and harden them off in cold-frames, in order to have stout, strong plants for setting out as soon as weather conditions permit. For early sorts, particularly, this practice is necessary, because late-sown early varieties do not head up in time to catch the early market, and maximum prices are not obtained. In favored districts, late varieties are sometimes started from seed sown in the open, thus avoiding the check due to transplanting; while others plant a thick row, and then transplant as required. Planters can be procured from firms that handle garden implements.

Seeding in the greenhouse, in hotbeds, or in boxes in the window, to produce plants for early planting, usually is started in February. After about twenty days the young plants are ready to be pricked out, and set two inches apart in other boxes, so that they can develop great root systems, and become stout, healthy plants, instead of spindly, weak ones such as result from crowding. Gradually, then, they are hardened by subjection to lower temperatures. They can be set outside in the sun when the weather is not severe, and by the time the garden plot is in fit condition for planting, the hardy young plants will not suffer from the cool nights. Those who have not greenhouse or hotbed generally prefer to buy the necessary plants.

Special care is demanded in setting out the plants. If placed in the garden or field early there will be little development of leaf at first, but even though the weather is wet and cool root development goes on rapidly, and later in the season the growth is vigorous. Plants put out early should be set deep, and if severe frost threatens, they can be covered with loose earth, and left with this protection until the weather moderates. It always is advisable to set plants in the open during cloudy weather, and, if need be, to protect them for a short time from the sun. This treatment will be governed by conditions under which the stock have been made ready for garden planting.

The distance apart depends on the variety grown. Large-growing sorts, as a rule, are planted in rows three feet apart, and about two feet apart in the row. This allows of horse cultivation both ways, and reduces hand-hoeing to a minimum. A fine-tooth horse cultivator

should be set going as soon as the plants have established themselves, and used later after every heavy rain, or at least every week or ten days, until the crop is well grown.

The question of varieties was dealt with in our issue of last week. Before fall, details regarding harvesting and storing will appear in this department.

### Preparing Lime-Sulphur Wash by Steam.

Editor "The Farmer's Advocate":

In preparing lime-and-sulphur wash, we use fresh, unslaked lime, and flour sulphur. The boiling plant is placed on a platform about 7 feet high, over a running stream. Arrangements are made to have the mixture run from the boiling-vats into the spray wagons with the use of a short hose. Each vat holds 200 gallons. Two vats are used for boiling in, and one for heating the water. The latter is two feet higher than the boiling vats, with gas-pipe attached to each boiling-vat.

We use a steam engine to do the boiling, and pump water into the heating vat. First, each boiling-vat is filled one-third with hot water, then 115 pounds lime is thrown in, then 85 pounds sulphur, which is mixed up to a paste with hot water before thrown in the boiling tank. Then steam is turned on at a pressure of 100 pounds. Then we cover, and let it boil 45 to 50 minutes.

We like the steam, as we get the heat more direct. If the mixture is not boiled enough, it will clog in the strainer, as a pasty substance. The strainer we use is like an ordinary pail, with a cone-shaped strainer in the center. The mesh is 40 to the inch.

The cost of preparing a barrel of lime-and-sulphur wash is 75 cents, but it cannot be bought at spray plants around here for less than \$1.00 per barrel. J. W. SMITH & SONS.

Wentworth Co., Ont.

### Removing Winter Mulch.

Many Canadian strawberry-growers have learned to cover the patch with a mulch of strawy manure or swale hay. The protection afforded in holding the snows of winter, and in avoiding damage to the plants by alternate freezing and thawing early in spring, makes it well worth while. Judgment must be exercised in removing this covering as the growing season comes. Strong, healthy plants may be injured by being left covered too late in the season.

The accompanying illustration shows an excellent patch of strawberries, with an ideal mulch nicely pulled between the matted rows. Some make the mistake of removing the surplus straw. By doing so, they leave bare ground where berry plants are not growing, and consequently weeds are given a chance to develop, thus necessitating extra labor. The strawy part of the mulch should be made use of to cover all bare places. It keeps down weeds, conserves moisture, helps to keep the berries out of the sand, and makes picking much more satisfactory.



Taking the Mulch Off Healthy Strawberry Patch.

### Growing Canning Crops.

Editor "The Farmer's Advocate":

Since the great wheat belt of our Northwest is being cultivated, and wheat is being grown for export all over the world, and our Ontario farmers cannot raise wheat to compete with them, we naturally turn to something else to make the farm pay. After all, the great success in farming is, how to make the most dollars out of it. At the present, that can be accomplished only by what we call mixed farming. While our cheese industry is second to none, and hogs and cattle have paid well of late, still there must be a variety of crops on the farm to bring about those results, and the question is, What shall it be? Anything to make the most dollars, and, at the same time, keep up the land, is the answer.

Of late years, the Cannery Association has made wonderful strides, and their goods are in demand the world over. The farmer, ever keeping an eye open for business, is turning his attention in that direction, and, I think, wisely so, when he can get a ready sale, at good prices, for anything he has to sell in that line. For instance, sweet peas for canning pay well. If the land is fall-plowed, and well cultivated in the spring, and given a coat of fine manure for top-dressing, when not manured in the fall before plowing, it gives good returns in any kind of an ordinary season. I have seen \$75 taken from two bushels sown, but the average is from \$30 to \$40 per acre.

I find the best varieties to be the Alaska for early; Advance, Glory and Market Garden. They come in rotation, as named.

Sweet corn is also a paying crop. The fodder for cattle is worth the work and seed. Three to four tons per acre is a fair crop. The best variety to plant is Crosby, for early; Colony, Haycock, and Stole's Evergreen, which mature in rotation as named. The land should be fall-plowed (sod preferable), and well cultivated in the spring before planting. Never plant until the ground is warm and dry, to insure a quick growth, as sweet corn is more or less a dried seed, and requires warm ground to give quick germination and a good plant.

Beans are the best-paying crop per acre that can be raised for canning green. As they require a lot of labor to get them picked in proper shape, a person can put in only a small acreage, unless there is plenty of hands to pick them. I have seen beans turn \$100 per acre. In that there would be about \$30 for picking, which would still net \$70. The best variety of beans, I find, are the White Wax, Golden Wax, Butter, and Valentine, which is a green-pod.

Beans will not do well on low, wet ground, as they are sure to rust, and then they are no use for canning. In fact, it is a mistake to put peas or corn in the ground till there is a growth to bring them on quickly. More cultivating can be done for corn before it is planted than after.

These hints are given from my own personal experience. I have grown produce for canning for over thirty years. I have also raised small fruit in the same time, with good results, especially strawberries, which are again bringing a good price for canning. M. SMITH.

Norfolk Co., Ont.

### Crown Gall of the Apple.

Crown gall is a term applied to certain warty outgrowths or excrescences on the apple, pear, peach, raspberry, etc., forming chiefly on the parts below ground. On the apple these growths are more apt to occur on grafted trees at the union of the root and the scion, but they may form at any place where the roots have been injured in transplanting, etc.

Recently, Dr. Erwin F. Smith and his associates in the Bureau of Plant Industry, U. S. Department of Agriculture, have demonstrated quite conclusively that crown gall is caused by a specific bacterial parasite. Moreover, they have shown that it is very omnivorous in its tastes, being able to cause warty outgrowths or galls on a surprising number of different and unrelated species of plants when these plants are inoculated with pure cultures of the organism.

Not long ago the Maine Experiment Station purchased 60 apple trees from a leading New York nurseryman. The package in which they were shipped bore a tag stating that the orchard from which they came had been officially inspected and found free from disease. Three out of the 60 trees, or 5 per cent. of the shipment, had well-developed crown galls upon them. This experience indicates that every orchardist should very carefully inspect all stock which he purchases for setting this spring. All trees showing evidence of crown gall should be either returned to the shipper or burned, and future orders placed with nurserymen who can and will furnish trees free from disease. Under no condition should trees be planted which show growths of this kind upon the roots, for not only will it result in an unthrifty and unprofitable tree, but it will also infect the soil with the crown gall organism and endanger other plants. CHAS. D. WOODS,

Maine Experiment Station, Director.

APRIL 8, 1909

**Approved Methods with Asparagus**

Recent years have found a great increase in asparagus as a garden product for general table use. Being a perennial, with early spring growth, it is desirable as one of the earliest vegetable crops. In fact, the young shoots appear a few days after the frost is out of the ground.

A deep and rather sandy loam that has been in sod a few years furnishes an ideal asparagus bed. However, this plant will grow on almost any kind of soil. Land that is in fit condition to grow corn or roots suits for asparagus. It is well to enrich a poor soil with 40 or 50 loads of well-rotted manure to the acre, but this is not altogether essential, because the nature of the crop makes it possible to add manure every year. Those who grow it for commercial purposes advocate deep plowing and the use of subsoil plow if the subsoil is found to be hard. Then with disk and drag harrows the area is easily made ready for planting about the month of May.

To insure a vigorous growing stand that will continue to be productive for a great number of years, deep planting should be practiced. Good results are obtained from plowing furrows or digging trenches 10 or 12 inches deep and setting strong plants one year old, or perhaps two years, about 18 inches apart, spreading out the roots. At the time of planting, the roots should be covered only about two inches. In a couple of weeks the young shoots will be as high as the furrow top. Then the rest of the filling in can be done, the land being levelled and the plants covered to a depth of five or six inches. In a short time the shoots again appear. When the plants have ripened in the fall they should be cut off close to the ground and burned. Another coat of manure should be applied, and plowed in four or five inches deep, leaving the ground surface rough over winter.

The following spring a drag harrow levels the surface, and rapid development of the crop follows. No cutting should be practiced until the second season after planting. Then shoots can be cut when 6 to 8 inches high, starting when they first come and continuing until they become woody. As a rule, the sprouts are edible for about six weeks. Every autumn the old tops should be cut and burned and the patch plowed and worked to a depth of four or five inches.

Small areas in a farmer's garden can be given similar treatment with hoe and spade cultivation. Little trouble is found in keeping down weeds.

**Horticulture at Alaska-Yukon Pacific.**

Horticultural exhibits will be a feature of the Alaska-Yukon Pacific Exposition at Seattle this summer. Magnificent displays are being prepared for exhibition purposes by every county in the State of Washington. Several of the larger counties have erected their own buildings at the fair. The displays of fruit from Oregon, Washington and California are promised by the press agent to be the greatest ever assembled for an international exposition. In the Canadian building, horticultural products will also be featured, and the Grand Trunk Railway will make a display of the fruits and vegetables, as well as the grains and grasses of that section of the Dominion through which the line passes. British Columbia agricultural features will be given much prominence. In all, it is said the horticultural products to be displayed would require more than ten acres of exhibit space.

**Do Apples Pay?**

A number of Essex County orchards, and portions of others, have been chopped down and converted into fuel, the reason given being that "apples do not pay," because of the unsatisfactory methods in culling, and prices paid by buyers. There may be cases where the fire-wood remedy is the only one in sight, but, in view of the increasing multitudes who want apples, and are willing to pay for them, there is surely a better solution of the problem. Co-operation has solved it for several sections—co-operation in marketing bringing with it improved cultural methods, including cultivation, fertilizing, cover crops, pruning, spraying, and in some cases thinning. Ontario orchards can be made to pay handsomely if gone about in the right way. What man has done, man can do.

The Nova Scotia Department of Agriculture is still prosecuting a vigorous campaign, with a view to reducing the number of Brown-tailed moths to a minimum. For two years they have, as an emergency measure, been paying a bounty of at first, 3 cents, and later, 10 cents, for each nest of Brown-tailed moth caterpillars destroyed. By this means the number of nests has been greatly reduced, and this year several of the Agricultural College graduates will work carefully through the sections of country infested, and with the aid of local people will endeavor to destroy every nest in sight.

**Capacity of Boiling Outfit.**

The outfit for boiling lime and sulphur, described in last issue by R. H. Dewar, although entailing considerable initial expense, is not objectionable, when it is remembered that hundreds of barrels are used in a small fruit-growing area in one season. This plant has turned out over 60 barrels of mixture ready for use in one day, and it is claimed that more could be made in the same time, if necessary.

One man is capable of running the whole outfit—keeps the engine going, prepares the mixture, and delivers the prepared wash to the spraying tanks. Neighbors who are not members of the company owning the plant are supplied at a flat rate of \$1.00 per barrel.

**Money in Melons.**

A couple of young men from a general farm tackled gardening near a Western Ontario town, and were able, the first season, to secure a return of over \$300 from an acre of Hackensack musk melons, or some \$280 clear of commissions, express charges, etc. We would like to hear a statement of the returns per acre by growers of other garden crops. Give details.

**Getting Rid of Toadstools.**

Occasionally lawns are badly disfigured by the persistent growth of toadstools. One of our readers who experienced difficulty last season and was unable to keep them down, wishes to know if there is any way of doing away with them other than digging the spawn out. Can any of our readers suggest a remedy that will avoid disfigurement of the grass plot?

**THE FARM BULLETIN.****Power of Ideals.**

Editor "The Farmer's Advocate":

A number of interesting articles have appeared in recent issues of "The Farmer's Advocate," dealing with the tendency of farmers' sons to leave the farm. All of these articles are worthy of careful perusal, but as I think we have not yet got to the root of the matter, I will accept Mr. Burns' invitation to an expression of opinion, with the assurance that I am not a feminine critic. In discussing this question we are reminded of the saying of the American humorist, who, when asked how to keep the boy on the farm, replied: "If he really has to be kept there, the best way is to tie him up." While I believe that agriculture is a noble occupation, and worthy of the attention of the most intelligent minds, we should not assume that the majority of the boys born on the farm should remain there, and I would not like to believe, as one of your correspondents seems to, that the only safe place for a boy who has been raised on a farm is inside the limits of his father's line fence. The correspondent mentioned admits that many farmers' sons are leading clergymen, physicians, politicians, etc. Would he deprive the world of the services of those men in order that they might produce a few bushels of potatoes or wheat? I believe one of the foremost duties of parents to their children is to try to find out what calling in life they are naturally adapted to fill, and having done this, to endeavor to direct their ambition thereto, no matter whether it leads them to the farm, foundry, counting-house or pulpit. If the politicians are as anxious about this matter as they claim to be, our Government might do much by arranging the tariff, so as to evenly distribute the burden of taxation. They can do much by providing facilities for transportation and inter-communication, compelling reasonable rates on railroads, which are really built with public money; giving telephone and daily mail service, etc. As a class, farmers can do a great deal by organizing, not only for the purpose of discussion and education, but also to obtain the recognition which the importance of the industry deserves.

As individuals we can do much to recommend agriculture to our children, and one of the most important things is to give them the best available agricultural education we can afford. Another very important point has already been mentioned, namely, arranging for definite hours of work and recreation, and setting apart certain days as holidays. I would follow this thought still further, and say to any who have not been in the habit of keeping books, and who feel too old to learn, to take the boy into your confidence, let him keep accounts and have a certain share, large or small, in the profits. Another thing which I probably should have mentioned earlier: have some definite object in your farming operations. If you are a dairyman, stick to one of the well-known dairy breeds. Do the same with your horses, sheep, or whatever stock you have. In short, try to put certain ideals before your boy. Give him whatever of education and capi-

tal you can spare. Give him the opportunity to see what he is accomplishing, and you need not fear for the future of Canadian agriculture.  
Leeds Co., Ont. CULTIVATOR.

**Mr. Boyle Replies to Mr. Humphries.**

Editor "The Farmer's Advocate":

In your issue of February 25th, John Humphries, Frontenac County, deals with this question, and tells us that Mr. Newton, writing in favor of protection, puts his case very ably, effectively and plausibly, and that his arguments appeal with great force to those who are interested in labor, but that, perhaps, a better acquaintance with facts, and experience gained by living both in protected and free-trade countries, would tend to dissipate. Mr. Humphries admits that Germany and the United States have made greater comparative progress under protection than has Great Britain under free trade, but he assumes that protection has had little or nothing to do with it. Free trade was adopted in Britain some 60 years ago, and Mr. Humphries proceeds to inform us as to what it has done for the "Mistress of the Seas." First, she has, to a certain extent, been able to push her manufactures over the walls of foreign tariffs; second, it has enabled her to maintain her supremacy in the neutral markets of the world (upon this point Mr. H. is grossly mistaken); third, it has made Britain the cheapest area for the establishment of those new industries which the progress of science and civilization is constantly creating. (This is another mistake; where are automobiles being built? I answer, France and the United States, both protectionist countries. Fourth, it has thrown into her hand the carrying trade of the world. Why, sir, England had as great a percentage of that trade in 1848 as she has at present. Mr. Humphries goes on to tell us that free trade has enabled Britain to pay her work people higher wages, with shorter hours, than the nations of continental Europe. Well, what of that? Was not the same true in 1830 and in 1840, and even when Richard Cobden was in long clothes. Mr. Humphries thinks it great that Britain can force her manufactures over the walls of foreign tariffs, but what about England herself? Go into a store in Britain and you will find the counters and shelves filled with manufactures made in Germany and the United States; and you will find thousands of British artisans walking the streets in idleness, calling for work or bread. These shelf goods, if made in England, would give employment to thousands year in and year out, and would be manufactured in the local workshops, provided Britain had an adequate protective tariff.

I now proceed to deal with Mr. Humphries' assertion that England has maintained her supremacy in trade in the neutral markets of the world. Canada, up to 1896, might be called a neutral market for British merchandise. What about England holding her own here? In 1860, if you purchased a bottle of ink you would find it was made in London, Eng. Our ink is now made in New York City! If you bought a watch, why London or Birmingham would supply you with a timepiece. At present Waltham, Elgin and Ingersoll hold the fort. English scythes were used in New Brunswick forty years ago; there are none at present. The imports from the United States have gone up with leaps and bounds; the imports from Great Britain have fallen off.  
York Co., N.B. WILLIAM BOYLE.

**Some Show Dates.**

April 21st to 24th—Vancouver, B.C., Horse Show.  
May 12th to 15th—Montreal Horse Show.  
June 5th to 15th—International Horse Show, Olympia, London, England.  
June 22nd to 26th—Royal Show, Gloucester, England.  
July 5th to 10th—Alberta Provincial, Calgary, Alta.  
July 20th to 23rd—Highland Society's Show, Stirling, Scotland.  
July 10th to 17th—Winnipeg Industrial Exhibition.  
July 16th to 23rd—Brandon, Man.  
August 26th to September 10th—Canadian National, Toronto.  
September 10th to 18th—Western Fair, London, Ont.

In a letter recently received from Principal Cumming, of the N. S. Agricultural College, he notes a very encouraging tendency toward increased valuation of farm property. In trying to assist some friends to purchase farms, he found that in the past five years their best farm lands had increased in value anywhere from 25% to 50%. There are still plenty of run-out farms which may be purchased at a nominal cost, but no one, he added, who has a farm that has been kept in proper condition need have any difficulty in disposing of it under the present more flourishing conditions than have heretofore prevailed.

### Annapolis Valley West. SPRING NOTES.

With the increase of the dairy industry in the valley, its profitable co-partner, the hog, is making headway. In the western end of the valley, especially, the young pigs are shipped when four or five weeks of age to the fishing villages and towns around the south and west shores. These people thus raise their pork pretty cheaply during the summer on offal and waste from the house. This market demands a rapidly-growing white pig. The Berkshire is scarcely salable, and the Tamworth is hooted at. The choice lies between the Chester and Yorkshire and their grades. In the valley taste is about equally divided, though the Yorkshire is rapidly gaining in favor. Halifax and St. John packers and commission merchants take the surplus of the farms at current prices, giving the best prices for hogs which dress between one and two hundredweight; well fed but not too fat. Litters come from March 1st to May for spring, and fall litters in September and October.

Another sign of progress among our farmers is the increasing use of the telephone. This, as well as the installation of a water supply, whether by power or gravity; a promised rural-mail delivery, will, and is, tending to place the farmer on a par with his town friends in the item of conveniences. Unfortunately, the N. S. Telephone Co., having bought out some of the lesser lines, are inclined to run a monopoly, and are advancing rents and curtailing privileges, in a way that is arousing feeling all over the valley. Several Boards of Trade and Associations have appointed committees of protest, and a public utilities bill is now before the Local House, recommending a Government oversight and control of some of these utilities.

At a recent meeting of the Executive of the Nova Scotia Fruit-growers' Association, Professors Sears, of the Mass. College of Agriculture; W. T. Macoun, of Central Experimental Farm, and M. Cumming, of N. S. Agr. College, were appointed a committee to choose the site of the proposed Experimental Fruit Farm, to be established in the Annapolis Valley.

As a result of the mild winter and increasing good care of the past few years, fruit trees are showing up clean and healthy looking; buds are promising well. Last year several orchards, both in Annapolis and King's Counties, were defoliated by the canker worm, and many orchardists had to put up a pretty severe fight to keep the leaves on. As a result, it became popular last fall to paint bands of castor oil and resin on the tree trunks, and a general watchfulness and careful spraying will characterize this season's operations. It was contended by those who suffered worst that it was useless to try to combat this pest with arsenites or ordinary poisons, and if so, those who neglected to band their trees last fall may be sorry for their neglect this spring. The Brown-tail moth is being kept in check; very few nests are showing this spring.

The apple-shipment season is about done, and it has proved an eventful one; almost as much so as last year. In 1907-8 they began high and dropped, while this season they began low and rose. The farmers ran after the speculators until about the middle of December, then the race turned, with the speculator doing the chasing. Toward the close of the season matters quieted down and prices took on a normal aspect. One of the curious freaks of the year has been the prices for Baldwins. Generally this apple is very modest in price, below Nonpareil, Golden Russet and Spy, but in some cases they soared away above these, bringing as high as 25s.

In spite of the fact that our fruit was, taken as a whole, the cleanest, finest lot for years, there were about twice as many prosecutions for violation of the Fruit Marks Act as last year. This is, we hope, to be looked upon as a sign of progress, as evidencing a greater determination on the part of the Fruit Division to send only good apples over to England.

Annapolis Co., N.S. R. J. MESSENGER.

### Continue the Paper, of Course.

In ordering his advertisement discontinued, owing to the season for tanning hides and furs for robes being over, B. F. Bell, of the Delhi Tannery writes: "Of course, we wish you to continue sending us 'The Farmer's Advocate.' Although we are not farmers, we find so many good things in it that it is a very welcome weekly visitor now, and how any up-to-date farmer could do without a paper of this kind, is past finding out."

If the assurances of the press agent may be relied upon, the Executive of the Alaska-Yukon-Pacific Exposition will have accomplished the extraordinary feat of having the exhibition ready on its opening day. With two months still remaining in which to add the finishing touches, the exhibition as a whole is stated to be more than ninety per cent. complete, and could be opened if necessary one month earlier.

### Danger of Buying What We Want.

Editor "The Farmer's Advocate":

I notice in your widely-read and well-conducted journal that the tariff question seems to be a live one. This is a hopeful sign, and of great importance, as the weal or woe of Canada mainly depends on her trade policy, and in order to arrive at the best conclusions we should be aided and guided by the past and present examples of those great and wealthy nations of the world.

I notice, with regret, that quite a number of my fellow farmers are advocating lower duties than are now in force, and others seem to think free trade (whatever that means) would be an advantage. Of course, free trade is a nice sounding phrase, and if my farmer friends intend it merely to apply to trading horses, hats, jackknives, etc., with their neighbors, or at the fair, then it has some meaning, but if applied to international trade it is a misnomer; inasmuch as there is not a civilized nation in the world to-day but maintains a high protective tariff, except Great Britain, Canada, and possibly India, and it was protection continued for centuries that so developed the agricultural, manufacturing and mining industries of Great Britain that in 1845 two-thirds of the world's shipping was under the British flag; and up to the present time she is far from a free-trade country, as she exacts a high revenue tariff on a very considerable portion of her imports, and has a very effective law protecting her farmers and stock-breeders by the embargo on foreign live stock, which is far-reaching in its results; for instance, Canadian exporters of cattle figure that if the embargo was removed it would add from ten to fifteen dollars per head to their receipts. But the greatest benefit seems to go to the British breeders of pure-breds, they being absolutely protected from competition with foreign breeders. Now, it is admitted by experienced cattle judges that Canadian breeders have just as good, if not better, cattle than are bred in Great Britain, and plenty of them; nevertheless, although Canadians have sent many millions of dollars to British breeders for cattle and other stock, yet we are denied access to their markets. Here is one instance of many that could be given: At Senator Edwards' sale recently, competent judges were of the opinion that animals sold there at from two to three hundred dollars each would have sold at British sales for at least five times as much, hence it is evident British farmers are master hands in protecting their home markets, and are much more resourceful than the old Yankee, who boasted he had a better way of killing a dog than choking it with butter.

Now, one of your correspondents asks, what is the meaning of adequate protection, and as it may be of some interest to the farmers of Canada, the following extracts from the Encyclopedia of Commerce and English Statutes may enable this enquiring friend and others to see what was deemed sufficient or adequate protection by the people of England.

A protective tariff was first framed in England in 1337, but it would be too great a trespass on your space to give details, hence I omit until 1787, when the Pitt tariff was adopted, giving higher protection to manufacturing industries. Under it the import duties on cotton textiles was £44 on the £100 value, and in order to encourage wool-growing and woollen manufacturing, woollen imports were absolutely prohibited.

Linen goods, £44 import duty on £100 value; silk prohibited; leather prohibited; earthenware, £15 on the £100; iron manufactures per ton, £2 16s. 2d.; olive oil, £8 8s. 10½d. per ton.

In 1819 the tariff was further increased: Cottons, £50 per £100 value; woollens admitted at £50 duty on the £100 value; linens, £50 on the £100; silk prohibited, and £75 per £100 on leather; earthenware, £75 per £100; iron manufactures increased to £6 10s. per ton, and olive oil to £18 15s. 7d. per ton.

In 1825 Huskisson's tariff reduced the above duties considerably, but left them still highly protective. The highest duty quoted on woollens (when not entirely prohibited), was £67 10s. per £100 value, and on linens and cottons prior to Huskisson's tariff, the duties varied from 40 to 190 per cent.

Agricultural industries were regarded by English statesmen as transcending all others in importance, hence for centuries, by a high protective tariff, the home market was guarded for the British farmers, as the following figures amply prove. In 1804 the import duty on wheat was 24s. 6d. per qr., if price was under 63 shillings per quarter of 8 bushels; if price 63s. to 66s. per qr., 28s. 6d.; if price 66s., 6d. per qr.

In 1815 a higher duty was enacted. When wheat was under 80s., foreign wheat was prohibited, and even at 85s. per qr., the duty was 5s. 2d. per qr.

In 1828, if wheat was below 64s., duty was 23s. per qr.; at 69s., the duty was 16s. 8d., and if it reached 73s., duty was reduced to one shilling.

It is clear that the whole tariff was highly protective for centuries. In 1824 an agitation was commenced against it, and the decline of protection

was slow, and authorities seem to agree on the tariff of 1869 as being a revenue tariff; hence, protection lasted in England until 1869, and doubtless was the chief factor in giving her a foremost place among the nations of the world. It is needless to dwell on the wonderful and rapid growth of the United States, which has taken England as its guide in framing its trade policy, as anyone of ordinary observation and intelligence is familiar with her history.

Now, a comparison of the foregoing and U. S. tariff demonstrates that Canada has never had a protective policy worthy of the name, and that the so-called "National Policy" was simply a delusion. But it may be asked by some, how is it that the farmers of Canada are fairly prosperous? It is true Providence has been kind to the farmers of Canada, inasmuch as for the unprecedented period of eight or nine years in succession they have reaped a full average crop, with the exception of one year, and then only the far Western Provinces did not reap a full crop.

This happy state of things can hardly be expected to continue, for the best agricultural countries in the world have crop failures, which, in fact, has been the case in many of the great grain-growing countries of Europe and Asia during the period above mentioned, and which materially increased the prices of Canadian produce. But should a failure of crops occur in Canada (which, let us hope, Providence may avert), what position is the Canadian farmer in to face hard times? With his home market flooded with foreign produce, the outlook, to say the least, is not encouraging, as the following, taken from the Yearbook of 1907, should convince any sane farmer that his home market should be protected, unless he is content to be a mere "hewer of wood and drawer of water" for foreign countries.

In 1906 agricultural cereal products (exclusive of tropical or semi-tropical fruits, etc.) were sold in Canadian markets by United States producers to the alarming extent of \$18,606,611 worth, which should, and would, no doubt, have gone into the pockets of Canadian farmers if Canada had adopted a similar tariff to that of the United States. Returns for 1907 are not complete, being only for the first nine months, but show a still more alarming increase, climbing up to \$18,899,940 worth. Now, all that Canadian farmers were able to send over the United States tariff wall in the nine months was the comparatively paltry sum of \$2,223,941 worth. Or, in other words, we sent out of Canada into the pockets of the United States farmers more than three dollars per capita for cereals, and in return for the privilege of exploiting our markets, the shrewd Yankees sent us back less than three cents per capita.

Volumes of figures could be given, proving that hundreds of millions have annually been sent out of Canada to enrich United States, German, English and French manufacturers, the greater part, if not all, of which should have been made at home, thus building up our own country, and making for the farmer a home market, which, after all, is by far the best market.

But the question arises, what is the cause of this state of affairs? The absence of a Pitt, Huskisson, Lord Liverpool, Dingley, McKinley, or men of their calibre, among our past or present statesmen (if we ever had any), largely accounts for it; also the apathy and indifference of the people, and especially the farmers, who have allowed themselves (at least, quite a few of them) to be made the dupes of a propaganda of paid agents of foreign countries, who for generations, by the most subtle and nicely-worded but flimsy arguments, educated many of them to oppose a protective tariff, thus covertly paving the way for the countries they represent to exploit and fatten on the vitals of Canada. But if Canadians are wise they will scorn to be guided by those emissaries, and their ad captandum arguments, that protection makes the "rich, richer; the poor, poorer; creates trusts and monopolies; bloated millionaires," etc. For a tariff is not like the laws of the "Medes and Persians," the same tribunal that made it can unmake it with a stroke of the pen, if any of those imaginary evils should arise.

Simcoe Co., Ont. PRO BONO PUBLICO.

### Collecting Timber Statistics.

The public mind has at last awakened to the fact that the supply of the more valuable timber in Canada has been seriously depleted. The Forestry Branch of the Department of the Interior, Ottawa, is sending out to all sawmills and lumber consumers circulars requesting a confidential statement of the amount, kind and value of timber turned out or used in 1908. The inquiry relates to timber used in agricultural-implement and vehicle manufacture; lumber, shingle and lath produced; railroad ties purchased; pulpwood used and pulp exported; timber used in furniture and car industry, and quantity of veneer used. The information secured from these reports will be compiled in a summary for all Canada, and it is expected that publication of the results will draw attention to the importance of our timber resources, and educate the public to the necessity of summarizing Federal and Provincial Forestry

Departments. The value of the summary will depend upon full and prompt answers. All manufacturers and users of the materials named would render a valuable service by communicating with R. H. Campbell, Superintendent of Forestry, Ottawa. The timber situation is becoming serious.

### "Farming" as a Business.

To succeed in any business, it is necessary to conduct it in a thorough, businesslike way, and, no matter whether we go in for general farming, or specializing on one or more branches, we should do all in the best possible way to make a lasting success of it.

I think there are many men who determine their choice of occupation by the amount of brains they are endowed with, assuming that one does not require the same amount of knowledge to farm as is needed in other callings of life. Now, this is not the case. It has been said that any dough-head can be a lawyer, doctor, grocer, and so on, but it takes a clever man to be a good farmer. And why? Because, in no other occupation in life is there such a wide scope of thought, science and management necessary. For instance, one should know the nature and conditions of all domestic animals, their relation and adaptability to different climatic conditions; the formation and nature of the soil, and the practical knowledge of all plant life, and its tendency to enrich or impoverish the soil, together with the different insects and birds, all of which have a material effect on vegetable and animal life.

In growing grain or hay, we should strive to attain to the highest possible yield per acre, with the least danger of depleting the soil. Likewise in live stock, selection and judicious feeding are called for. Choose your dams from prolific, thrifty stock, and breed to a good healthy, well-built sire, exercising special care during the later period of gestation and tender stages of life. Hens can be brought up in the egg yield to a much higher standard, and, by study and care, can be made to lay from 100 to 150 eggs a year, instead of from 20 to 50, as many hens do.

I don't mean to say that every farmer can go into all the different lines and develop each one in a short length of time, but, by careful study, selection, system, and a little common sense, he can so improve his condition generally as to make a material financial difference in the year.

Another thing, I think we, as farmers, don't read enough to improve ourselves intellectually. We should, besides being conversant with all that is going on in the world through the daily papers, acquaint ourselves with the different markets, the different measures and bills that are introduced into the Legislature, that may directly or indirectly affect the buying and selling of some of the commodities which we have for sale, or may require to purchase; or, in fact, that are likely to affect us in any possible shape or form. It is also well to have some knowledge of the work of many of the standard authors, to cultivate an appreciation of the higher ethics, as the happiness and contentment of life should be not in dollars and cents alone, but in the developing of those qualities that are conducive to the well-being and high ideals of our fellow man. I might here say, I think, that it is this lack of intellectual development, together with the utter disregard some farmers have for their personal appearance, which makes them, as a class, rank so low in the social scale.

Again, though farmers constitute 75 per cent. of our population, they have practically no say in the government, which I think is to be deplored, as farmers should be the dominating force in the legislating body, and can be, if they will only wake up and acquaint themselves with their needs in each community; decide on a good, active, broad-minded, honest, intellectual man, combine and vote him there—and who, I say, should be endowed with all these qualities more than the farmer, who is in closest touch with the beauties of nature in all its wonder and purity. Of course, it is not my desire to hold myself or surroundings up as a paragon of efficiency, but, in thinking over this problem of successful farming, one naturally feels there is room for much improvement, and I trust that our Farmers' Clubs may be an incentive for action along this line.

Muskoka, Ont.

"FARMER'S SON."

This is the second year I am getting "The Farmer's Advocate," and it is certainly all right. The articles against militarism, and many others, as well as the Christmas Number, were each alone worth the subscription price of a year.

MENNO M. BRUBACHER.

Waterloo Co., Ont.

### To Our Club-raisers.

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

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

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

Premiums not included in club offers.

Start raising your club immediately. Get "The Farmer's Advocate and Home Magazine" into every household in your locality.

### Dumping Clause and Underhand Protection.

The following, from the Toronto Star, shows how, by the manipulation of the dumping clause, and otherwise, the ways of the protectionist, in levying toll on the consumer, are almost past finding out:

"By the application to goods on the free list of the anti-dumping clause in the Canadian tariff, something which is given with one hand may be taken away with the other.

"Take the case of cream separators as an illustration. These machines are, as a concession to the agricultural interest, placed on the list of articles which may be imported duty free. But if an American manufacturer sells such machines to a Canadian dealer, for import into this country, at a less price than he sells similar machines to American buyers, the anti-dumping clause is at once made to apply, and a duty up to fifteen per cent. may be imposed on those sent to Canada.

"American separator manufacturers are encouraged, by protection in the home market, to maintain the home price at an unreasonably high level. They are restrained by our anti-dumping law from selling at anything less than this same unreasonably high price in the Canadian market. Thus, the Canadian cream-separator manufacturer, while apparently without any protection at all, is in reality given a very effective measure of protection, and the farmer who thinks he is buying a separator in a free, open market, is really being handed a very neat thing in the line of gold-bricks.

### THE SAME IN TIN SHEETS.

"The same thing occurs in the case of tin in blocks, plates or sheets. Tin in this form is the raw material of the enameled-ware factories and establishments turning out finished tinware. This raw tin is also on the free list, but he is likewise subject to the anti-dumping enactment. Thus, American producers of this article are restrained from selling in Canada below the price charged at home; and, as the home price is made artificially high by home protection, competition from the United States in tin sheets is also made non-effective. Thus, the raw material of our manufacturers of enameled ware is made dearer than it otherwise would be; but as these manufacturers have a protection of thirty-five per cent. under the ordinary tariff, plus the surtax as against German competition, and have succeeded in eliminating domestic competition, they are in a position to add the extra cost of the raw material to the finished product, and to compel the patient consumer to pay the bill.

### BOTH BOUNTY AND PROTECTION.

"One of the most objectionable features in connection with the application of this anti-dumping part of the law to free goods is found in the case of steel rods. As a means of encouraging the manufacture of steel in this country, resort has been had to a liberal—one might almost say to a profligate—system of bonusing. A bounty is paid from the Dominion treasury on all the pig-iron made in Canada; another is paid when the pig is turned into steel, and a third when the steel is transformed into rods, the latter bounty being \$6 per ton. The Dominion Iron and Steel Company alone received nearly one and a quarter million dollars out of this bounty fund in the year ending with March last, over \$347,000 of this sum

being on rods alone. In order that the consumers of rods might not be taxed at both ends—first for the bonus given the Canadian rod manufacturers, and then in the form of excessive prices paid for steel as a result of protection against foreign competition—rods were placed on free list. But here, again, what is given with one hand is withdrawn with the other, the anti-dumping clause being applied against rods brought in from abroad in any case in which the importer secures them at less than the domestic price ruling in the country of purchase.

### WHERE PROTECTION GOES FULL LENGTH.

"This underhand method of protecting the manufacturer is, however, in its effect on the consumer, not to be compared for a moment to the effect of the regular tariff, plus the German surtax, in cases in which the protective policy is open and avowed. Take enameled ware as an example. In this line, outside competition would, under normal conditions, be mainly from Germany. But German imports are held in check by the regular tariff of thirty-five per cent., plus one-third. The effect of the restraint on trade thus created is seen in the fact that, in the year ending March last, only \$25,399 worth of enameled ware was imported from Germany, and the duty paid on this was \$11,852.78. This was at the rate of almost 47 per cent. By the time duty on packages, ocean freight, and extra cost of packing for ocean transport were added on, the protection accorded the home combination, as against Germany, must have amounted to at least 50 per cent. It is no wonder users of enameled ware have to pay tall prices; it is not surprising manufacturers of such ware are growing in riches almost as fast as are the beneficiaries of the railway-subsidy system."

### Royalty on Mines.

Editor "The Farmer's Advocate":

Why should a royalty be imposed on the miner? Is it honest? Does it deal out justice to all men alike, or is it to the interest of the farmer to oppress the miner? I would venture to say no, for the farmer wants a strong home market, and the development of our Ontario mines is the only industry that will ever give the farmer that market. Let us have a comparison that may serve to explain the matter to us. We may say a man has an estate worth \$100,000, and that he had a family of ten sons, and the father divided his property wit his sons evenly, giving each one \$10,000. Then we may say that seven of the boys did decide on investing their money in something that entailed little or no risk or chance of losing their money, so each of them bought a farm costing \$8,000, and with the remaining \$2,000 they furnished the farm with seed, tools and other necessaries for farming, and if these men carry on their farming in a good, up-to-date farming style, success is sure to be theirs.

But now comes the other three brothers, and they have made a choice of prospecting and mining, even though a great many men have proved by experience that prospecting and mining is a game of chance, and many a man has lost all he had in like business. But still, it is necessary, for the benefit of the farmer, and all other professions, for some one to develop the mines. So the three brothers each secured a mining claim at some price from the Crown or individual, and they started up their business by buying mining tools—and this helps the manufacturer. Then, they hire men, which gave employment to the laborer; and next they go to the farmers and buy their provisions from them, and this makes the market for the farmers. But the first one of the brothers failed; he lost all his money, for his mining claim was no good. The second brother did better; he got mineral from the first blasting, though not rich. He hoped that, in deepening the shaft, it would get rich enough to pay all expenses and give a net profit; but before he struck it rich his money failed, and he was compelled to stop the work. And this would be another failure, but this brother may sell his claim and get his money back.

The third brother is more successful; his claim produced rich ore from the start, and he is able to continue his mining and pay all taxes and royalty, and other expenses, and still have a net profit. But even in this case, why should the Government collect a royalty off him, for if the farmer has a good crop, he does not care to give a royalty from it to the Crown. Neither should the miner have to pay it.

Now, I am a farmer, and have done some prospecting, too; but I lost money at prospecting, so I know well how money is lost at it. I think the farmers ought to feel like patting the prospector and miner on the back, and say, "Go ahead, and make us the home market, and we will press the Government to give you fair play, as other men get."

Peterboro Co., Ont.

JOHN SEABROOK.

Incorporated 1885  
THE  
**TRADERS BANK  
OF CANADA**

Capital and Surplus, \$ 6,350,000.  
Total Assets, 34,000,000.

One of the greatest helps in accumulating money is a Savings Account. The desire to increase it, and the habit of at once depositing money received, drawing it out only as required, develops the habit of saving, and brings you out at the end of the year with a snug sum, that would otherwise have slipped away.

\$1.00 opens a Savings Account. Why not do it NOW?

**THE BANK  
FOR THE  
PEOPLE.**

One of the 85 Branches of the Traders Bank is probably convenient to you. Your account is invited. 69

**MARKETS.**

**Toronto.**

**LIVE STOCK.**

At West Toronto, Ont., on Monday, April 4th, receipts of live stock were light and trade dull, dealers having got supplies last week. There were 24 carloads, consisting of 415 cattle. Exporters, \$5.30 to \$5.60; export bulls, \$4 to \$4.75; prime picked butchers' cattle, \$5.40 to \$5.60; loads of good, \$5.30 to \$5.60, medium, \$4.90 to \$5.25; common, \$4.30 to \$4.80; cows, \$3.50 to \$4.40; milkers, \$3.00 to \$5.00; calves \$3.50 to \$7 per cwt.; sheep, \$4 to \$5 per cwt.; yearling lambs, \$6 to \$7.70 per cwt.; spring lambs, \$5 to \$10 each. Hogs, unchanged, selects, \$7.15, fed and watered, and \$6.90, f. o. b. cars at country points.

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

Receipts of live stock at the City and Union Yards were moderately large last week. There were 315 carloads, consisting of 5,743 cattle, 3,450 hogs, 914 sheep, 633 calves, and 149 horses. There were more good-quality cattle brought forward than at any time since the commencement of the year. Trade, contrary to expectations, was slow, caused mainly by drovers having paid too high prices in the country, prices which in many instances could not be obtained on the market here, after paying freight and all other expenses. Drovers had bought with the expectation of a good Easter trade. Some of the best cattle were here that have been seen for many weeks, but the demand for choice Easter cattle this season was the worst in years.

Exporters.—There were few heavy export steers of finished quality on sale, all of which sold readily at about steady quotations. Prices ranged from \$5.40 to \$5.70, but only two or three loads brought the latter figure, the bulk selling around \$5.50. Export bulls sold at \$4.25 to \$5, and two or three of extra quality brought \$5.25 and \$5.50.

Butchers.—Prime picked lots of Easter cattle sold at \$5.50 to \$6, and a very few sold at \$6.20 to \$6.50. Loads of good butchers', \$5 to \$5.40; medium to good, \$4.60 to \$4.90; common light cattle, \$3.75 to \$4.50; cows, \$3.25 to \$4.50; canners and common cows, \$1.50 to \$3

**STOCKERS AND FEEDERS.**

Trade during the week was light. Best steers, 900 to 1,100 lbs. each, \$4.50 to \$4.75; steers, 800 to 900 lbs., \$4 to \$4.25; stockers, 500 to 700 lbs., \$3 to \$3.50 per cwt.

Milkers and Springers.—The market for milkers and springers was not as strong, the demand from Montreal and other Eastern cities having materially decreased. Prices ranged from \$30 to \$60 each, the bulk selling from \$40 to \$50 each.

Veal Calves.—Receipts are increasing as the season advances. Prices held about steady, at \$3 to \$7 per cwt.

Sheep and Lambs.—There was little change in prices during the week. Export ewes sold at \$4.50 to \$5 per cwt.; rams, \$3.50 to \$4.25; lambs of good quality, \$7 to \$7.75 per cwt.; medium, \$6 to \$6.50; common, \$5 to \$6 per cwt. Spring lambs sold at \$5 to \$10 each.

Hogs.—Prices were about steady, with light deliveries. Selects, fed and watered at the market, \$7.15, and \$6.90, f. o. b. cars at country points.

Horses.—Trade in horses at the Union Horse Exchange was good all week, about 200 horses exchanging hands, at about steady prices. Five carloads were shipped to the Northwest, with a demand for more. Buyers were present from all over Ontario, as well as some from the Maritime Provinces. Both Monday's and Wednesday's sales were well patronized, and many horses changed hands by private sales. Manager J. Herbert Smith reports prices for the week as follows: Drafters, \$160 to \$200; general-purpose, \$125 to \$140; expressers and delivery horses, \$130 to \$180; drivers, \$100 to \$150 each; serviceably sound, \$35 to \$75 each.

**BREADSTUFFS.**

Wheat.—No. 2 white, \$1.07 to \$1.08; No. 2 mixed, \$1.07 to \$1.08. Manitoba—No. 1 northern, \$1.21; No. 2 northern, \$1.18, on track, lake ports. Rye—No. 2, 75c., sellers. Peas—No. 2, 95c. bid. Buckwheat—No. 2, 65c. bid. Corn—American, No. 2 yellow, 73c. to 74c.; No. 3 yellow, 72c. to 73c.; Ontario, No. 3 yellow, 66c. bid at Western points. Oats—No. 2 white, 45c.; No. 2 mixed, 47c., sellers, track, Toronto. Barley—No. 2, 65c. bid, 66c. sellers; No. 3X, 64c. sellers, 64c. bid outside. Flour—Ontario, 90 per cent. patent, \$4.10, bid for export; Manitoba patent, special brands, \$5.90; second patents, \$5.40; strong bakers', \$5.20.

**HAY AND MILLFEED.**

Hay.—Baled, in car lots, on track, Toronto, \$10.25 to \$10.75, for No. 1; and \$7.50 to \$9 for No. 2. Straw—Baled, in car lots, on track, Toronto, \$6.50 to \$7. Bran—Car lots, in sacks, on track, Toronto, \$24.50. Shorts—Car lots, in sacks, track, Toronto, \$25. Manitoba meal, with large percentage of flax screenings ground with coarse grain, \$28.50 per ton. Flax-seed meal, pure, \$3.75 per cwt. These quotations are given by C. Caldwell & Co., wholesale feed dealers, Front street, Toronto.

**FRUIT AND VEGETABLES.**

Apples.—Prices are very firm; Spies, \$5 to \$5.50 per bbl.; Baldwins, \$3.50 to \$4; Greenings, \$4 to \$4.50; Russets, \$3 to \$3.50. Potatoes—Market strong, at 65c. to 70c. per bag, for car lots, track, Toronto; onions, \$1 to \$1.25 per bag; turnips, 35c. per bag; parsnips, 50c. to 65c. per bag; red carrots, 30c. to 40c.; cabbage, \$35 per ton.

**COUNTRY PRODUCE.**

Butter.—Receipts fairly large. Prices steady. Creamery pound rolls, 25c. to 26c., but Locust Hill commands 28c.; creamery solids, 20c. to 21c.; separator dairy, 23c. to 21c.; store lots, 17c. to 19c.

Cheese.—Market firm. Prices unchanged, at 13c. to 14c. for large, and 14c. for twins.

Eggs.—New-laid, firm, at 18c. to 19c. Poultry.—Receipts light. Prices firm, but unchanged. Turkeys, 22c. to 25c.; chickens, 18c. to 22c. per lb.; fowl, 13c. to 15c.

Honey.—Prices firm, but unchanged. Extracted, 11c. to 12c.; combs, per dozen sections, \$2.75 to \$3.25.

Beans.—Market firm. Hand-picked, \$2 to \$2.10; primes, \$1.90 to \$2.

**HIDES AND WOOL.**

E. T. Carter & Co., 85 Front street East, Toronto, have been paying for No.

1 inspected steers, 60 lbs. and up, 10c.; No. 2 inspected steers, 60 lbs. and up, 9c.; No. 1 inspected cows, 9c.; No. 2 inspected cows, 8c.; country hides, 8c. to 8c.; calf skins, 12c. to 14c.; horse hides, No. 1, \$2.50 to \$2.75; horse hair, per lb., 30c. to 31c.; tallow, 5c. to 6c.; sheep skins, each, \$1.15 to \$1.25; raw furs, prices on application.

**Montreal.**

The local market for cattle has improved. Fine stock was very scarce and difficult to obtain throughout Ontario last week. As a result, prices were so high that shippers could not make any money out of them by exporting. There was little or no demand for ocean freight space for use at the opening of navigation. It was reported, however, that steamship agents demanded 80s. to 35s. for Liverpool and London space. Throughout Ontario it was reported that farmers were asking high prices for their choice cattle, 6c. to 6c. being demanded for choice stall-fed and distillery-fed steers for May shipment. There are said to be nearly 6,000 distillery cattle available. From this forward it is expected that trade here will show improvement. A few steers were sold at 7c. per pound, their average weight being 1,490 lbs., and some fine bulls brought 5c.; one bull, weighing over 2,000 lbs., brought over 6c. Generally speaking, choice steers sold at 5c. to 6c.; fine, at 5c.; good, at 5c. to 5c.; medium, at 4c. to 5c., and common, at 3c. to 4c. Owing to tight supplies trade in sheep and lambs was limited, and prices were firm, being 6c. to 6c. for best yearling lambs, and as high as 5c. to 5c. for sheep. A few spring lambs sold at \$4 to \$6 each. Calves were scarce and firm, a very choice one bringing 8c. per lb., and the remainder selling at \$2 to \$10 each. The tone of the hog market was firm, and prices were from 7c. to 8c. per pound, according to quality, weighed off cars.

Horses.—There has been quite a little city demand. Heavy draft horses, weighing 1,500 to 1,700 lbs., \$225 to \$300 each; light draft, 1,400 to 1,500 lbs., \$185 to \$240; good blocks, 1,300 to 1,400 lbs., \$175 to \$200; small or inferior animals, 1,000 to 1,100 lbs., \$100 to \$150; and fine saddle or carriage horses, \$300 to \$500 each.

Dressed Hogs.—Market firm; some advances in prices. Abattoir dressed sold at 10c. to 10c. per lb. Demand for provisions of all kinds was maintained. Lard was steady, at 9c. to 9c. per lb. for compound, and 13c. for pure.

Potatoes.—Prices were even higher than the previous week, shippers demanding 95c., track, Montreal. It is doubtful whether that price was realized. From 95c. to \$1 per 90 lbs., track, might be quoted for re-sales, while \$1.10 was quoted per 90 lbs., bagged, for small lots. American dealers were anxious buyers, and it was said they are also in the Ontario market for supplies.

Maple Products.—The first of the new syrup sold at 7c. to 7c. per lb., in tins, while it was said old syrup could be had at 4c. per lb. No new sugar was offering.

Eggs.—The market declined further, and sales were made at from 19c. to 20c. per dozen. Demand was good. Most of the eggs handled were on commission, dealers not being prepared to accept responsibility of a fluctuating market as long as they can get someone else to do so. On Monday the price advanced one cent, and the market looked firm.

Butter.—The market showed very little change. New milk butter was the feature of the market. Prices for it ranged from 21c. to 22c. per lb., though some quoted a cent lower. As for held creamery, dealers quoted it from 19c. to 21c. per lb., according to quality; best fall makes being the higher figure. Dairy butter was quoted from 15c. to 17c.; rolls being 17c. to 18c. There were no new dairies or rolls. Dealers seemed to think that new-milk butter is rather earlier than usual this year, receipts of it being now fairly liberal.

Cheese.—Makers asked around 12c. per lb. for new cheese, colored, f.o.b., country points. There was very little unsold old cheese here, and white was quoted at 12c.

Grain.—Very few changes have taken place of late. Canadian Western, No. 2

**IMPERIAL BANK  
OF CANADA**

CHARTERED 1875.

Capital Authorized, \$10,000,000.00  
Capital Paid Up, 5,000,000.00  
Res., 5,000,000.00

**SAVINGS DEPARTMENT.**

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

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

oats, were 51c. to 51c. per bush., carloads, in store; No. 1 extra feed being 50c. to 51c.; No. 1 feed, 50c. to 50c.; No. 2 Ontario, 50c. to 50c.; No. 3, 49c. to 49c.; No. 4, 48c. to 48c.

Feed.—The market for bran continued firm, at \$22 to \$24 per ton, very little being available. Shorts were in good demand, and prices were \$24 to \$25 per ton, in bags. Cottonseed and oil cake were quoted at \$32.50 to \$35 per ton.

Hay.—The market was steady, at \$12.50 to \$13.50 per ton for No. 1; \$11.50 to \$12 for No. 1 extra; \$9 to \$10 for No. 2 hay; \$8 to \$8.50 for clover mixed, and \$7 to \$7.50 for clover.

Seeds.—Demand for seeds of different sorts is increasing daily. Prices were steady, as follows: Red clover, \$13 to \$14 per 100 lbs., in bag lots, Montreal; alsike, \$16 to \$18; timothy, \$5.25 to \$6.50.

Hides.—The market showed little change. Demand was exceedingly dull, and the quality of the hides was about as bad as it could be. Spring lambs have commenced to come in, and dealers quoted 10c. each for their skins, although very few of them were offered. They quoted 7c., 8c., and 9c. per lb. for Nos. 3, 2 and 1 beef hides, respectively, and 12c. and 14c. for Nos. 2 and 1 calfskins, and sold to tanners at 4c. advance. Sheepskins were \$1 each, and horse hides \$1.50 for No. 2 and \$2 for No. 1 each. Tallow was steady at 1c. per lb. for rough, to 3c., and 5c. to 6c. per lb. for rendered.

**Chicago.**

Cattle.—Beeves, \$4.70 to \$7.10; Texas steers, \$4.40 to \$5.50; Western steers, \$4 to \$5.50; stockers and feeders, \$3.50 to \$5.50; cows and heifers, \$1.90 to \$5.65; calves, \$6 to \$8.50.

Hogs—Light, \$6.55 to \$7; mixed, \$6.65 to \$7.12; heavy, \$6.75 to \$7.15; rough, \$6.75 to \$6.90; good to choice, heavy, \$6.90 to \$7.15; pigs, \$5.60 to \$6.45; bulk of sales, \$6.95 to \$7.05.

Sheep and Lambs.—Native, \$3.75 to \$6.40; Western, \$3.75 to \$6.50; yearlings, \$6.30 to \$7.40; lambs, native, \$6 to \$6.30; Western, \$6 to \$8.40.

**Buffalo.**

Cattle.—Prime steers, \$6.35 to \$6.75.

Veals—\$7 to \$9.75. Hogs—Heavy and mixed, \$7.35 to \$7.40; Yorkers, \$7.10 to \$7.35; pigs, \$6.60 to \$6.75; roughs, \$6.25 to \$6.60, dairies, \$7 to \$7.30.

Sheep and Lambs—Lambs, \$6 to \$8.50; yearlings, \$7 to \$7.50; wethers, \$6.50 to \$6.75; ewes, \$5.75 to \$6.50; sheep, mixed, \$4 to \$6.50.

**British Cattle Markets.**

London cables for cattle were 13c. to 14c. per pound for Canadian steers, dressed weight; refrigerator beef was quoted at 9c. per pound.

**TRADE TOPIC.**

Seeds of all kinds, guaranteed pure and of high germinating power, are advertised by Geo. Keith & Sons, Toronto, in another column of this issue. This firm has gained a reputation for supplying superior seed at reasonable prices. Among the specials mentioned are Montana-grown alfalfa, clovers, timothy, oats, peas, wheat, corn, and all kinds of garden seeds. Consult their advertisement, or write for catalogue, mentioning "The Farmer's Advocate." It pays to use the best seed that can be purchased.

**QUESTIONS AND ANSWERS.**

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

**Miscellaneous.**

**COST OF ACETYLENE LIGHTING.**

Have been much interested in the several articles re acetylene lighting, and would ask you to inform us, through your paper, the cost of installing lighting for medium-sized farmhouse? Perhaps J. H. R., Peel Co., Ont.; J. B. T., Huron Co., Ont., or P. C., Essex Co., Ont., would please inform us, through your paper, their experience regarding first cost, etc.  
 C. E. R.  
 Ans.—In "The Farmer's Advocate" of January 14th, J. B. T. stated that his generator cost \$50, with burners. His house had previously been piped, but he estimated the whole cost of installation of a plant at from \$150 to \$250, according to the style of brackets and chandeliers. His annual cost for carbide is \$15. If anyone has found the cost greater or less, he may oblige by submitting a detailed statement, indicating number of rooms in house, amount, kind, and cost of piping, etc., and all pertinent particulars.

**CEMENT FOR CISTERN.**

How much cement would it require for a round cement-concrete cistern ten feet in diameter, twenty feet deep, with rock bottom, concrete to be three inches thick and plastered up inside? What proportions would the materials need to be? The soil it is to be built in is heavy clay. Would concrete three inches thick be strong enough?  
 W. W.  
 Ans.—The three-inch concrete wall would comprise, approximately, 160 cubic feet of material. Cement and sharp gravel in the proportion 1 to 5 should suit. If strict precautions are taken to avoid loss, a barrel of cement will suffice for 20 cubic feet of concrete. This would mean that eight barrels are needed. Then, for plastering inside, it is customary to put on a layer one-quarter to one-half inch thick, made of 1 part cement to 2 parts sand. This would require over two barrels more cement. It is a good plan to again dress the surface with a sloppy mixture of 1 part cement to 1 part sand, by using a whitewash brush. Very little material will be required for this process. Yes; three inches is sufficient thickness.

**LEUCORRHEA (WHITES).**

Three of my cows, about four weeks after service, will discharge white matter, and then in about a week will come in heat again. They are fed two gallons of bran, two gallons of oats and barley chop, equal parts, and a little oil cake, each day, good timothy hay and straw, and are in good condition. Please give cause and remedy. Is this contagious abortion; if not, what is it? Will it be likely to effect them next year; if so, how can I prevent it?  
 W. T. H.  
 Ans.—These are not the symptoms of ordinary contagious abortion, which usually takes place from three to seven months after conception. The condition in the case of your cows is more like what is commonly known as whites, a disease of the womb that is not contagious, but generally due to difficulty in calving, retention of the afterbirth, or excessive service, and is troublesome to treat. There is no use breeding them while the discharge continues, and letting them run on grass for a couple of months, then breeding them to a young bull, may be the best course to follow. Medical treatment consists in flushing out the womb once daily with about two gallons of a two-per-cent. solution of creolin, heated to 100 degrees, and introduced with an injection pump. Also giving internally, twice daily, one dram sulphate of iron, one dram gentian, and thirty drops carbolic acid, in a pint of water, as a drench. If they breed and carry their calves full time, it may not affect them next year.

**CONCRETE PIGPEN FLOOR.**

Have concrete floors proven a success in pigpens, and, if so, what is the best plan for laying a floor suitable for 100 hogs? We expect to build a pen in the near future, but did not know whether concrete would be suitable for a floor.  
 C. M. T.  
 Ans.—A cement floor, laid over a filling of broken stone or coarse gravel, well rammed, the foundation being tile-drained and a raised plank sleeping place provided in one corner of the pen, gives pretty good satisfaction in piggeries. While in some respects a plank floor might be regarded as preferable, especially for young pigs, the cement laid as indicated is to be recommended on the grounds of durability, ultimate economy, and sanitation. A pigpen floor is laid substantially the same as any other cement floor. It should have a slight slope towards the outside door of the pen, towards a tile in the wall leading to the outside yard, or else, as some few recommend, to a central gutter running continuously through the center of one pen after another, and discharging into a yard or tank at one end of the building. Do not allow the liquid to go to waste. The slope of the floor necessarily depends somewhat on the plans of the pen. Be sure to have drainage away from the trough, and be sure to provide a raised plank sleeping place in one corner of the pen. Whether it should be raised high enough for the pigs to walk under is a matter of opinion. If space is limited, it is probably better to have the sleeping place elevated about three feet. Lay the cement mixture in two coats, the lower one two or three inches thick, consisting of one part Portland cement to ten of gravel, and a finishing coat, half to one inch thick, consisting of one part cement to three of fine, clean gravel, or one cement to two parts of sharp sand, rammed and floated reasonably smooth. Troughs may be built in removable box moulds.

**CROP FOR FALL PASTURE—HAIRY VETCH—KALE—RAPE—MISCELLANEOUS CROPS.**

1. I have a ten-acre field in poor heart. I intend sowing buckwheat on it, to plow under latter part of June, or early in July. What would be the best crop to sow on it after plowing the buckwheat under, for fall pasture for young cattle? The land is a clay loam and is fairly level.  
 2. What sort of a cropper is sand or hairy vetch?  
 3. What value as a feed, for young cattle and cows?  
 4. Is it an easy crop to grow?  
 5. Which is considered the better for a hog pasture, on a clay loam, Thousand-headed kale or rape?  
 6. Has Teosinte, *Lathyrus sylvestris* and *Pencillaria Zeoider* been experimented with in this country, as a cattle feed? If so, with what results?  
 YOUNG FARMER.  
 Ontario Co., Ont.  
 Ans.—1. Rape.  
 2 and 3. Prof. Zavitz sums it up by saying that hairy vetches produce a crop which seems especially useful as a pasture for farm stock, especially hogs, a cover crop in orchards, or a green manure for plowing under to enrich the soil. It is especially adapted to light, sandy soils. In Canada, its chief adaptation has been as a cover crop in orchards, and in gardens from which early crops of vegetables have been removed. The greatest obstacle to its extensive employment has been the expensiveness of seeding, nearly a bushel to the acre being the amount recommended, and as the seed is chiefly imported from Germany, costing here in the neighborhood of \$5 a bushel, it can be readily understood that its cultivation would not be extensive. On the experimental plots at Guelph, it has, however, seeded successfully, being sown in the autumn and ripening in the following year, yielding at the rate of an average of 8.6 bushels of seed per acre. Being a legume, it captures nitrogen from the air, and thus, when fed off or plowed under, adds to the fertility of the soil.  
 4. Not difficult.  
 5. Rape.  
 6. Teosinte has been tested at Guelph and pronounced not suited to Ontario conditions for any purpose whatsoever. It somewhat resembles Indian corn in habit of growth, and attains a height of eight to ten feet in the Southern States.

At Guelph, three feet appears to be about the best height it has reached; the germination is rather slow. *Lathyrus sylvestris*, alias wood vetchling, or Wagner's everlasting pea, has been selected and cultivated in Europe as a perennial fodder crop. Its favorite habitat is woods and thickets, it withstands drouth, and when once established, gives very large yields of highly-nutritious food. The seed is expensive, and germinates very slowly in the open field. In fact, defective germination is one of its great drawbacks. In 1892 it was advertised in "The Farmer's Advocate." A quantity of it was grown by the staff of this paper in London, Ont., though without very satisfactory results.  
 John Percival, of England, in his Agricultural Botany, says that it possesses few, if any, advantages over alfalfa and other leguminous crops at present in use on the farm, and sees little need of its introduction into England.  
 We find no record of *Pencillaria Zeoider* having been grown in Canada, but presume that if it were an especially-meritorious species, it would have won recognition ere this.

**ALSIKE POISONING.**

Is there such a thing as a fever or inflammation produced in white-nosed horses, commonly termed "alsike fever"? If so, is it produced by contact with alsike clover? It would seem to me regrettable that such a valuable clover should be commonly condemned unless there be justification.  
 G. G. M.  
 Ans.—Cases of alsike poisoning in horses and colts occasionally occur when the pasture is nearly all of alsike. There is less liability to the trouble where the pasture is a mixture of clovers and grasses. The symptoms are inflamed spots on the skin, turning to scales and dropping off, leaving exposed sores. White noses and legs are said to be more susceptible to the ailment than solid colors. As soon as the first symptoms are noticed, the animal should be removed from the alsike pasture. Treatment in ordinary cases consists in washing the affected parts frequently with a five-per-cent. solution of carbolic acid, and the application to the ulcers of drying powders, composed of equal amounts of boric and tannic acids.

**DEPTH OF FIELD ROOT SEEDS.**

How deep should field carrot seed be sown? Also mangels and turnips, for best results?  
 S. B.  
 Ans.—The depth to which any seed should be buried depends on its size, as well as on the nature of the soil, and the moisture supply at time of sowing. Some authorities advise burying seed to a depth equal to four times the diameter of the seed. For many seeds this is a safe rule. With mangels, perhaps, in a well-pulverized clay loam, that would be ideal. If the soil is very loose and dry on top, it may be necessary to put the seed deeper. Carrots and turnips, being small seed, cannot well be sown according to the rule. Individuals will have to use judgment in the depth of sowing, in every case having a fine surface soil, placing the seed just deep enough to reach the moist soil, and having a light roller follow the seeding machine to compact the soil about the seed. Under average conditions the seed will lie about one-quarter inch below this smooth surface.

**GOSSIP.**

**FOOT- AND- MOUTH DISEASE EM-BARGO.**

An order, under the Animal Contagious Diseases Act, dated April 2nd, from the Department of Agriculture, at Ottawa, rescinds the order dated January 25th, 1909, prohibiting the importation from several States, of animals and other articles, and substitutes therefor an order maintaining the live-stock embargo only against the State of Pennsylvania. The new order forbids the importation into Canada of cattle, sheep or other ruminants, or swine, or the flesh, hides, hoofs, horns or other parts of such animals (with the exception of cured meats, sausage casings, lard and tallow), or of hay, straw, fodder, or manure, from the State of Pennsylvania. Dressed meats, and the dried, pickled, or salted, green-cured skins, or hides, and the horns, hoofs, wool and bristles of such animals, may be imported into Canada, after shipment through Pennsylvania, under regula-

tions to be made by the Department of Customs, so long as such traffic originates outside the said State. The importation of hay, straw, or other fodder, from the States of New York, New Jersey, Michigan, Maryland, and Delaware, is prohibited, except as packing material for breakable goods, but such shall be burned by the consignee immediately upon arrival. Subject to the foregoing conditions, such hay, straw or fodder may be shipped through Pennsylvania.

All previous orders and regulations governing the points at which inspection of live stock can be made for export to Europe are cancelled until otherwise ordered. No Canadian cattle, sheep, or other ruminants, or swine, shall be permitted to leave Canada for export to Europe, except through the ports of Montreal, Three Rivers, and Quebec, P. Q.; St. John, N. B.; Halifax, N. S.; Charlottetown, P. E. I.; Portland, Me., or Boston, Mass. Canadian animals for export to Europe via Portland or Boston, must be inspected at Montreal by a regularly-appointed veterinary inspector of the Department of Agriculture, and certified free of contagious or infectious disease, and otherwise fit for export. Shipments originating in or passing through Toronto, must be inspected in Toronto. Shipments originating in or passing through Montreal, must, unless accompanied by a certificate of previous inspection at Toronto, be inspected at Montreal. Until otherwise ordered, no vessel that has touched at a port in the State of Pennsylvania within 21 days, may carry stock from Canada.

**HEREFORD AND SHORTHORN SALE.**

An auction sale of the registered Hereford and Shorthorn herds of the late J. A. Govenlock, of Forest, Ont., is advertised in this issue, to take place at the farm, "Forest View," near Forest Station, G.T.R. (Stratford to Sarnia branch), on Thursday, April 15th. The "Forest View" herd of Herefords has made a splendid record in prizewinning at the leading Ontario shows in the last few years, winning the senior and junior female championships and the first herd prize at Toronto in 1909.

**TRADE TOPICS.**

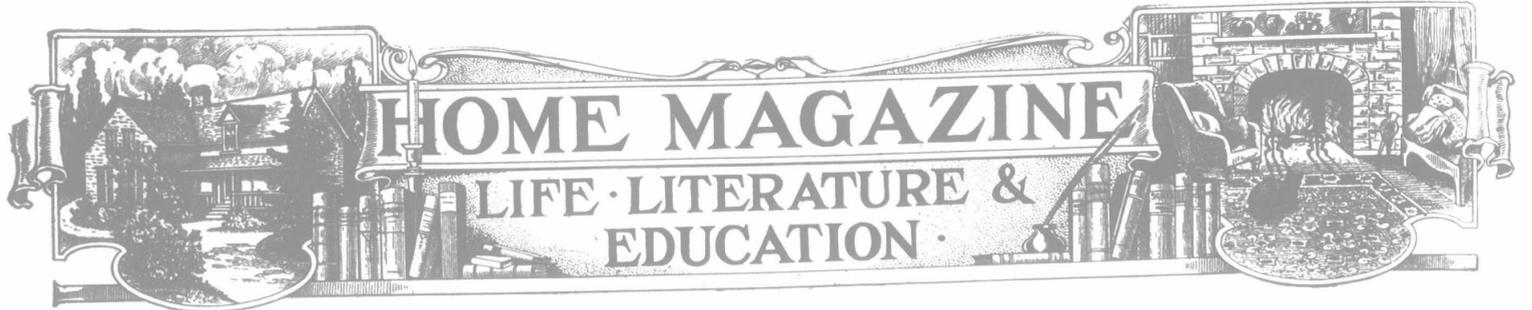
There are evidences of a very large movement of manufactured goods this year, especially in lines purchased by farmers. The Page Wire-fence Company, Limited, report March sales as showing an increase of over 40 per cent. more than in same month of last year.

"Last summer my mare went very lame with spavin. I was trying different blisters, and everything I could think of without success. I asked Mr. McLarty what to do. He said there is only one sure cure—Anchylus. I put it on the way he said, and it worked wonderfully, and my mare to-day is as sound as ever."  
 (Signed) Henry Kinch.

In making preparations for the season's spraying operations, it is very important that the best machine on the market should be provided. The Empire King, offered in this issue by the Field Force Pump Co., has many features that make it popular. A strong, steady pressure is maintained on all the nozzles; the liquid is kept thoroughly agitated, and with every stroke of the pump the suction strainer is cleaned twice. The working parts are made of brass. All kinds of sprayers are handled. Write for catalogue.

He left the farm when but a lad, his fortune for to capture,  
 Ere long a city job he had, and lively was his rapture.  
 He went from seven plunks up to ten, whereat he proudly married,  
 But never got a raise again; at ten per week he tarried.

And now the farm is up for sale; it surely is a pity!  
 The farmer looks in every mail for succor from the city.  
 But nothing comes. The farm is sold beneath the sheriff's hammer,  
 For real life is hard and cold, not like the gentle drammer.



The universally-discussed subject of Britain's immediate place in the naval world has been the occasion of grave discussion in our own Parliament of late, as to whether Canada shall raise a "defensive" navy, whose primordial cause for existence shall be that it may co-operate, in case of crisis, with the Imperial navy. This step, staved off for so long, seems inevitable. Canada is not wanting in loyalty to the motherland, and no other among the colonies would be more ready to respond to that motherland's need. At the same time, in every mind not inflamed by distorted views of military and naval prowess, there must exist only deepest regret that the present trend of affairs throughout the world renders such unheard-of measures of defence necessary. Germany has set before her a programme for an immense fleet of war monsters, such as the world has never seen before. Britain, Mistress of the Seas, must keep in advance; the United States, France, and even little Japan, fearful for their own territory and their own interests, follow in the wake. Without check somewhere, Germany must go bankrupt, Britain must go bankrupt, the United States, France, Japan, and, if once she is drawn into the vortex strongly enough, Canada. Money in countless millions will be required, not only for the building, but for the maintenance of those fleets, and the airship fleets which loom in the immediate future, and the terrible burden must be borne, to a great extent, by the men and women who work for a living, and who find the matter of subsistence, with a very little over for the comforts and pleasures that make life a pleasant thing, about all they can manage.

Nothing but limitation of armaments can stem this tide, and to that Germany has refused to consent. It would seem that, were the nations really at one on the subject of liberty and peace, a general boycott might force Germany to such a concession; and yet, complications of commercial interests would be likely to block the first step towards such an action; after all, commerce, the grand machine for money-getting, rules the world.

Things may readjust themselves, but for the present people everywhere stand helpless before the immensity of the problem, and the universal spirit of helpless rebellion finds issue in the press. Little wonder is it that Christianity is becoming a by-word among the Jews and the heathen, in regard of such preparations, or that the following letter should have been written by a shrewd and far-seeing rabbi to the New York Tribune, in reply to an editorial statement made by that periodical, that "The realization of universal peace is an impossibility, unless all nations become in substance a single nation."

"Does not your editorial mean," writes the rabbi, "that religion, and especially Christianity, since the great modern nations are Christians, is a failure? If Christianity, which is nothing if it is not the religion of peace on earth and goodwill to man, is not able to bring about that for which it stands, either it is a failure, or else it is misinterpreted. If it is misinterpreted, why are not its ministers and leaders strong enough to interpret it correctly?"

"The real crux is this: That

Christianity of to-day is not the old, original Christianity. It is not Jesusism, for it is not the religion which Jesus preached. How an effort once was made to carry back what was called Christianity nearer to the teachings and example of Jesus, with the result known in human history as the great Reformation, you and your readers know. But is it not time to carry it back yet further to the ideals of Jesus, and make Christianity the religion which he personally practiced, and which he personally practiced?"

"Your point that the difference of nations must always continue is not well taken, in my humble opinion. At this very moment an invitation has been placed in my hands for the International Peace Festival, on the 24th of this month. The patrons include the President of this great country, and the ambassadors, envoys, and plenipotentiaries of no less than twelve great nations of to-day. Shall this movement be encouraged, or shall we say it is all hopeless and we are helpless; that nations never will be united, and that every religion, not excepting Christianity, is a failure?"

"I say that it is time for the press and for the pulpit, the universities and the public schools, the colleges and the institutes, to unite in the fight against the crime, cost and curse of war; that a boycott of a nation that will not submit to arbitration, no matter how abominably brutal and inhuman a boycott may be, is preferable to the abominably brutal and inhuman crime, cost and curse of war."

"Your editorial, therefore, 'One Nation or Many?' means really 'Is Christianity a Failure?' Restore it to its first principles of peace and goodwill, and the abolition of war, respect for the direct command of God, a world-consciousness of the three R's—Reverence, Righteousness, and Responsibility—will result. Is it not worth your trying?"

"That will mean the establishment of God's kingdom on earth. I believe in that kingdom."

### "Homes: and the Bodies We Build."

By "The Spartan."

These are the days of health-fads and home-therapeutics. From the king's physician, down to the merest breakfast-food cranks, all of us are more or less infected with a mild sort of "brain-storm" or fever, for that which might be termed the "New Hearing" in regard to health. We are being told that tuberculosis can be, and is to be, fought successfully right in the home, and that most of the ills to which humanity is heir may also be combated there.

It is not many years since the above-mentioned medical celebrity—Sir Frederick Treves—expressed his opinion that humanity would only be the safer if the whole "Materia Medica" were at the bottom of the sea. Since that time, other authorities have made similar statements, which, if less sweeping, nevertheless have emphasized the essence of truth very emphatically.

True, Sir Frederick is more the surgeon than the medical practitioner in his proper sphere; nevertheless, what he knows of healing in general has given him a very high place as a world authority. In making

the statement, he probably meant that the day of drug dogma was past, and that blind faith therein must give place to more rational education of the people along health lines generally.

Of the value of a sound body and buoyant health, too much cannot be said. Nor can it be said too often, "Mens sana in corpore sano." If only the tremendous significance of the old motto could be grasped by suffering thousands! Perhaps nothing is truer in this regard than the solid German proverb, "Geld verloren, nichts verloren! Gesundheit verloren, alles verloren!" (Money lost, nothing lost; health lost, everything lost). We have our savings banks, and build up bank accounts, without caring much about the building up of the source of power and capability to accumulate those very sums. Get sound health, and friends, fortune—perhaps fame—will follow faithfully in its wake.

In the United States are published some half-score of health magazines, with subscribers totalling nearly half a million. Whence the interest in, and demand for, such publications? Simply the fact that thinking people are beginning to learn that the art of maintaining and restoring health is not necessarily limited to graduates of medical colleges, but extends to everyone who can study, reason, and then—knowing himself—courageously strike out from the beaten path.

Diet! Fresh Air! Bathing! Exercise! These are the treasures of nature's "health home," say the physical-culture magazines; and they are getting near to truths of tremendous importance when they say it.

In regard to dietetics, perhaps, the most significant contribution to the new lines of thought is Prof. Chippenden's (Yale) "Physiological Economy in Nutrition." It is not a book of theory, but a record of positive proof by experiment. Numbers of United States regular soldiers were used by the Professor to this end.

By this method, he arrived at the emphatic conclusion that the direct source of vastly the greater bulk of all bodily ills is, in simplest language, "overeating"—simple in all truth! It is almost too simple to win attention. Humanity prefers mystery.

On two light meals per day, the Professor showed, one squad of his men would not only equal the labor of the squad subsisting on the customary three meals, but completely outstrip them.

Every ounce of food eaten beyond the amount demanded by the body to restore used tissues, he continues, simply tears down the bodily vitality, and reduces its available strength. Eating for the palate, he thinks, has grossly misled humanity as to the amount really needed for this purpose of tissue-replacing. Overeating means clogged systems; and from thence, fevers, catarrh, rheumatism, and even the greatest of the scourges—tuberculosis.

His conviction merits earnest and close thought. Test your own case. For instance, if you happen to be afflicted with that commonest of complaints, catarrh, The Spartan has practiced what he preaches in this respect—has omitted one meal per day for more than five years. Results show a gain in weight, and scarcely a sign of catarrh beyond

fested itself in the whole length of time, after the first two or three months; and, moreover, what is a thousand times more important, along with the catarrh went a whole troop of accompanying minor ills, including slight indigestion.

The vital principle involved is simply the fact that, once the body is freed from hindrances, it invariably asserts at least some measure of power to throw off disease, whatever be the disorder. Moderate or abstemious diet constantly provides precisely that freedom. Dame Nature, enthroned in your vitality, will cast aside ailments as a reptile casts its slough, if you do nothing to prevent her. Chippenden reiterates the vast importance of this simple truth many times. He is decidedly impressed with it, and his high standing at Yale certainly merits consideration on the part of every individual who gives a "snap" for the body he builds. In a nutshell, the principle is this: Cut down your diet to the smallest possible quantity that will satisfy a natural appetite. Shun every ounce over this as you would a poison!

The Professor's counsel does not pass beyond the diet question, but the value of fresh air need be repeated by no one—pedagogue or other. Keep your windows open. Your blood is cleansed only by oxygen. Don't attempt to do it with coal gas, carpet dust, and rebreathed air, or your days of efficiency will be numbered, in spite of all the bottled "cure-alls" in creation. Never lose an opportunity to get out into God's free air. You would not expect a flowering plant to flourish best within doors. Neither will your body—more susceptible than the most delicate of flowers. Much has been said of deep breathing, chest-expansion and development, but more important than making a super-charged bellows of your chest is the need of maintaining at all times that erect carriage that will permit of full, natural respiration—natural respiration, and not strained or forced.

Passing on to hydrotherapy, it might be mentioned that, as a rule, the cold bath is of more value as a tonic and a nerve-strengthenener than the warm or tepid one. A great Englishman spoke of Waterloo as having been won on the cricket-grounds of Eaton; but had he said in the Anglo-Saxon's good old-fashioned morning tub, he would have been touching on a truth equally valuable. Swimming, too, is highly recommended by all health authorities as a muscle and nerve builder. But a swim, needless to say, should be a matter of minutes, not hours.

And lastly, a passing thought may be culled from the consensus of opinion in respect to gymnastics and muscular development. Above all, let it be thoroughly realized that the muscular system is inseparably linked with the digestive and nervous systems. Build up muscle, and you improve digestion as certainly as light follows darkness. Just as positively can you retone your nerves. Following in the wake of good digestion and sound nerves comes a clear brain and improved powers of concentration. Cease to regard muscle-building as a fad, useful only to athletes. Give it some real study.

Truly, "Gesundheit verloren; alles verloren!" Without red blood, you can never be more than a cipher amongst your fellows!

**Good Accommodation in Local-option Towns.**

Editor "The Farmer's Advocate":

I noticed in your issue of March 11th, a farmer styling himself "Nemo" writes from Lincoln Co., in regard to hotel accommodation in local-option centers. In our village, local option was carried three years ago last January by 28 of a majority, and a repeal vote was brought on in the south township last January, when there was nearly as much of a majority in one polling place for the by-law as there was in the whole township three years ago. When the by-law came in force, the two hotels closed up, and, as it was apparently going to put the public to considerable inconvenience, the temperance "fanatics," as friend Nemo would perhaps call them, gave one of the hotels a small bonus to open up for a month. The other hotel then promptly opened out. Shortly after this, a new tenant took charge of the latter hotel, and has conducted the business to the satisfaction of the general public ever since. In fact, it has been conducted very much better than it was under license; so much so that, whereas commercial travellers used to shun the place in license days, many of them now map out their route so that they can stay here over night. Nemo may ask, Does it pay? Well, I have not access to the tenant's books, but, to judge by appearances, he seems to be doing a profitable business, and a very large majority of the people are well satisfied with local option, and would not, on any account, return to license law.

Hotel accommodation is just like any other want of the public—it will be supplied by some enterprising party. Of course, when the bars are closed in any town or township, there may, for a short time, be some little difficulty, if the hotel-keepers see fit to close up, but the temperance people ought to combine and rent or purchase or build another building, and open out for the accommodation of the public. There is no doubt that a temperance hotel in any ordinary business center will pay a fair dividend, if properly conducted. And if it cannot furnish meals and beds at 25 cents, why let them charge 35 cents. There is no honest man wants to get a meal at less than it costs to produce it, and yield a fair living to those conducting the establishment. I have stopped at a temperance hotel in Toronto, and have got as good accommodation as I could get in a licensed hotel, and it appeared to pay the proprietor all right, for he was improving and making additions to his establishment. There is no just and valid reason why a hotel should be licensed to keep a bar for the sale of intoxicating beverages.

It has been proved beyond a doubt that alcohol in any form is a damage to the human system. I was brought up a moderate drinker, and, like friend Nemo, looked upon all temperance workers as "fanatics," but I am grateful that I was led to see the question in its true light. If friend Nemo had a daughter married to a drunken sot who abused his wife, don't you think he would be anxious to do all that he could to close up the bars, so that temptation would be put out of the drunkard's way? In this local-option center it has been demonstrated that, now that the public bar is closed, many keep perfectly sober who used to be frequently drunk when we had the license system. If the money that is spent upon alcoholic beverages, and tobacco and cigars, could be saved up, many people who are now poor would soon be comparatively rich. Alcohol and tobacco are both poisonous. Why do people use them? No farmer feeds poison to his horses or cattle. Then, why do people use them?

We all admire "The Farmer's Advocate" because it is such a help to farmers. We believe that it is the best agricultural paper on the

continent of America, and we are very glad that it does not advertise whiskey and tobacco, and other poisons. May you long continue to shine as a bright star in the journalistic firmament.

TOTAL ABSTAINER,  
Oxford Co., Ont.

**The Quiet Hour.**

**The Historical Truth of the Easter Story.**

When the accusers stood up, they brought none accusation of such things as I supposed: but had certain questions

of the Bible and yet deliberately to refuse obedience to God's commands, as our Lord warns us: "That servant which knew his Lord's will, and prepared not himself, neither did according to his will, shall be beaten with many stripes." When the chief priests and the Pharisees could not disprove the miracle of the raising of Lazarus, they decided that this man, who "doeth many miracles," must be put to death; and said that, for the safety of their own plans, it might be necessary to put Lazarus also to death. Such terrible fighting against God would hardly be possible to one who could truthfully say that he doubted the truth of the Gospel story. But wilful ignorance is almost as bad. When a man turns his back on the light and complains that he can't see, the darkness of unbelief is

lishing the faith of those who want to feel sure that it is really true. From the accounts of the visible appearances of the Risen Christ which are preserved to us, it would seem as though He took care to establish, by many infallible proofs, the fact of His Resurrection—but only to His friends. And I believe it is much the same to-day. The proofs are there, if we want to seek and find them; but they may be overlooked by those who don't feel especially interested, and they seem inadequate to those who don't want them to be true.

Poets and painters and musicians have been inspired by the beauty of Christ's marvellous Life, and have poured out the treasures of their imagination in the attempt to describe it. But perhaps the halo around the head of the King makes Him seem unreal sometimes, and it is well to look through the flowers and music of our modern Easter Day to the solid fact of the first Easter. Unless our faith rests on a basis of historical fact, it may be very beautiful, but it will be impossible to rest all our hopes on it. It is either a Fact of history, or it is the greatest falsehood the world has ever known. There can be no half measures.

Let us judge of the truth of the Resurrection story by what it has accomplished. I have no new proofs to offer, but will just put before you a few which have been gathered together by careful students. Let us see just what would have been the natural result of the death of the Nazarene Leader if there had been no Resurrection. The little company of his friends and followers, having no money or influence, would have scattered sadly to their homes. They would have had no object in trying to make people believe in One who had failed even to save himself. In a generation or two the name of Jesus of Nazareth would have been almost forgotten. But what do we find? This little body of disciples glorying in the Cross, which was the symbol of their Leader's shameful death, eagerly and joyfully attempting the apparently impossible task of making the world believe that He was alive. How they succeeded, the pages of history can tell us. It is an historical fact—a fact which no educated person can doubt—that the Founder of the Christian religion was put to death by Pontius Pilate, and yet that, in the face of terrible persecution, in about 800 years it had spread until the great Roman Empire called itself Christian. And it has gone on conquering the world ever since. The most enlightened nations are those who call Jesus their King. It has stamped out such terrible evils as infanticide, slavery, the murder of helpless prisoners, the torture of criminals, etc., wherever it has taken deep root. Christ said He was the Light of the world, and, as a matter of fact, wherever He reigns the darkness dies out. There is plenty of wickedness in Christian countries, but that only proves my statement; for the people who harden themselves in lives of deliberate sin, are never Christians in more than name. To really serve Christ, from the heart, is to fight against all kinds of evil.

There is no effect without a cause. The Great, Victorious Christian Church could not have grown and prospered and accomplished such marvellous results if it had been dead, if the Living Christ had not been working in it all these centuries. Millions of the best people in every age have been inspired to live in joy and peace and fearless courage, no matter what difficulties or dangers faced them. The greatest witness to the truth of Christ's Living Presence in the world has always been its power to inspire fresh and eager love and devotion to God and man in the hearts of men and women.

Then there is the weekly witness of Sunday. Some wonderful Event must have caused a body of Jews to change their rest-day from Saturday to Sunday. If it was not the fact of the Resurrection, what was it? Those who deny that great miracle should offer us some other good reason for the changed day. The burden of proof lies with them.

Then there is the Sacrament of the Lord's Supper. Why should disciples of a loved Master take the solemn Memorial of His death and call it their great "Eucharist," or Thanksgiving? Only the Resurrection could transform the remembrance of His death into a feast of joy. Only the Resurrection could have



Not Only a House: A Home Also.

against him of their own superstition, and of one JESUS, which was dead, whom Paul affirmed to be alive.—Acts xxv., 18, 19.

I seldom speak of the historical evidence of the Gospel story, because I don't expect this column to be read by people who echo the airy statement of Festus—given in our text—that JESUS, who claims to be the Life of the world, is "dead." And, even if men like Festus could be convinced by the overwhelming weight of evidence, this conviction would

be a sin. It is a mystery to see how many people apparently care very little whether the Bible is telling the truth about life here and hereafter, or whether it is legendary. Because, if the Bible be false, no religion can possibly be worthy of an educated person's belief. It is the only book which really throws light on the life beyond death—and we are all marching straight towards death. It is a marvellous thing that anyone who has to die can be utterly careless about the future which an immortal soul must



Suggestion for a Small House.  
Cement blocks and shingles are used.

be absolutely worthless unless their lives were the better for it. Satan knows that Jesus is the Son of God, but that knowledge only adds to his guilt while he is fighting against Him. S. James points his assertion that "faith without works is dead," by saying: "Thou believest that there is one God; thou doest well: the devils also believe and tremble." Of what value is their abject fear of a God who is not revered or obeyed by them? It is a very terrible thing for a man to be convinced of the truth

enter into. We have to die, and yet we can't die. No one, by wishing, can put out his own soul "like the flame of a candle"—as people used to say, before we were informed that it was an unscientific statement, because even the flame of a candle did not die, but was transformed into some other force.

But I am wandering from my subject. Though I care little to convince unbelievers, by argument, that the Founder of the Christian religion really rose from the dead; I feel the importance of estab-

made the Cross a token of triumph instead of sorrow and shame.

Then there was the witness of the grave-cloths in the tomb, which convinced the apostles that their Master's body had not been taken away by friend or foe, but had been changed into a spiritual body. The undisturbed folds were "lying flat," pressed down by a hundred pounds of spices, the turban-like napkin was still twirled where it had been about the sacred Head. Nothing had been stirred as the natural body changed mysteriously and rose through the folds of linen, passing out without disturbing the sealed stone.

What the spiritual body is like we cannot tell, for we can only understand things which fit into our own experience. Probably S. Peter and S. John, who had seen their Lord transfigured on the mountain, realized at once from the appearance of the grave-cloths that His body was now able to appear and disappear, according to His will, and was unfettered by the attraction of the earth or the laws of space.

I have not time to speak more on this subject, except to remark that those who doubt the possibility of a resurrection, on the ground that it is a "miracle"—and that "miracles never happen"—are speaking very unscientifically. Huxley said that the miracles of the Bible were mere child's play to the miracles of science, and that the question was purely a matter of evidence. We, who can see through solid bodies by the help of the X-ray, can listen to the voice of men who have long been dead, by means of a phonograph, and send a message thousands of miles in a few minutes—not to speak of many other seemingly impossible commonplaces of every day—should hardly dare to say that anything is impossible.

DORA FARNCOMB (HOPE).

## Current Events.

Port Arthur will build a new Collegiate Institute and gymnasium, at a cost of \$65,000.

Four thousand delegates attended the great Laymen's Missionary Movement convention, at Massey Hall, Toronto, last week.

Count Zeppelin's airship recently made an ascent to an elevation of 6,000 feet, the highest point yet reached by an airship.

Nine officials of the Marine Department of Canada have been dismissed, twelve others dismissed conditionally, and two superannuated, as a result of the evidence obtained during Judge Cassel's investigation last year.

President Taft has already struck a note which is likely to bring him into favor with the "masses" in the United States, by speaking strongly in favor of reducing the tariff on all the necessities of life.

The Massachusetts Senate has endorsed a resolution, calling upon President Taft to negotiate arbitration treaties with all the nations of the world with whom such treaties have not already been negotiated, with the end of bringing about limitation of armaments. They also urge President Taft to appoint a commission of the highest efficiency to prepare a plan for the consideration of the Government, to be presented at the third Hague Conference in 1915.

They'll come again to the apple tree—  
Robin and all the rest—  
When the orchard branches are fair to see  
In the snow of the blossoms dressed,  
And the prettiest thing in the world  
Will be  
The building of the nest.

## The Ingle Nook.

### On Child Training.

Dear Dame Durden,—I was much pleased when I read your suggestion to the Ingle Nook members to write about the training of children.

I am a great lover of children, the smaller the better, my favorite being the tiny babe in long clothes, when often there are more clothes than baby. Some people say they like children best when they are big enough to be "sassy." Of course, that is not what they mean, but they enjoy the ready answers from the little chatterers. Those same people are very apt to go too far and tease until the little ones do really become impudent. Then the amusement becomes an evil.

I think the main point in training children is that when one parent (sensible one, of course) is chastising a child, the other should keep quiet. Of course, the child will look to someone for sympathy. If the other parent goes to sympathize, let him or her do it in the right way, but under no consideration cast reflection on the one who enforced the punishment. I think that a great number of children are "spoiled" by parents finding fault with what each other has done in the presence of their children.

Some people believe in staying by the old rule, "Spare the rod and spoil the child," but sometimes they make the rod

at all." I think so, too, especially in the case of children. It makes our lives better for having loved the little ones.

Well, dear Nookers, I must close, with best wishes to all, and what better could I wish you wives and mothers than a houseful of healthy, happy children.

CONTENTED ONE.

Kent Co.

I was pleased to receive your private note. I wish to offer you my sympathy, Contented One. You are very brave.

### Lemon Biscuits, Etc.

Dear Dame Durden,—We very much enjoy the Ingle Nook, and find many letters very profitable and instructive. I wish to give "Hubby's Wife" a good recipe for lemon biscuits. This recipe makes a large quantity, but, we find, none too many, for they keep well: Four cups white sugar, 4 cups sweet milk, 2 cups lard, 5c. oil lemon, 5c. baking ammonia. Get the oil of lemon and baking ammonia at the drug store, and, if intending to use it soon, get the druggist to pulverize it, as otherwise you will need to crush the lumps. Dissolve it in the milk, mix with the other ingredients, roll out and cut and bake as cookies.

Regarding the packing of eggs, I have not tried the water-glass, but have tried a number of other methods, and find the old-fashioned way of packing in salt the best and surest.

I would like to know if there are kitchen cabinets, with white enamel tops,

water two or three times every day, and between feeding hours, when the little one seems so hungry and restless, give the bottle with warm water. It is good for her, and will quiet and often put her to sleep. We are nowadays told so much to give baby only milk until a year or more old, but I vary from that, and I have two strong, healthy children, and a very healthy baby nine months old. I would say to "Anxious Mother," when baby is a little older, try feeding her a little bread and fresh milk. I let my baby have pieces of apple. I think the juice, which she may get a little of, is very beneficial to her. An English lady tells me to let her have plenty of applesauce, and I think it would be good for her. Of course, your baby is yet too young, but you will soon have no trouble with her, when she can eat as other children.

Hoping someone may derive some benefit from these few lines. EVELYN E. Brant Co., Ont.

Now for your questions: Net waists will still be worn, although waists of satin, silk (including the soft messaline, louisine and tamoline silks), fine lawn, mull, batiste, linen, etc., will also be quite fashionable for wear with suits, or on general business occasions. Pleated skirts are almost entirely "out," only gored skirts, rather narrow in cut, being shown in the best models. Of course, for the exclusive trade, rather unique designs, almost seamless, are shown, but these require to be carried out by the most expert dressmakers and tailors, in order that they may look right, and the chances are that they will not be very much taken up by the public. For dressy occasions, princess or semi-princess gowns, jumpers, etc., will still be more in favor than the separate waist and skirt. . . . Coats are, as a rule, semi-fitted, but show the outlines of the figure well, and are usually made a little shorter than three-quarter lengths. . . . As regards color, suits or dresses may be of almost any conceivable shade that is quiet in tone. The old standard colors are, of course, always shown, and, in addition, are the new shades, taupe, wood-brown, reseda, smoke, amethyst, etc. The material will, of course, depend upon the use to which it is to be devoted—broadcloth, serge, and weaves with self-toned stripes, being used for suits (sometimes, also Panama and Venetian cloth), while for gowns, "satin Directoire," the new Henriettas, poplin, San Toy, armure, etc., will be popular. For wear in hot weather, shantung, foulards, voiles, linens, chambrays, zephyr ginghams, muslins and mulls of all kinds will, of course, be "correct."

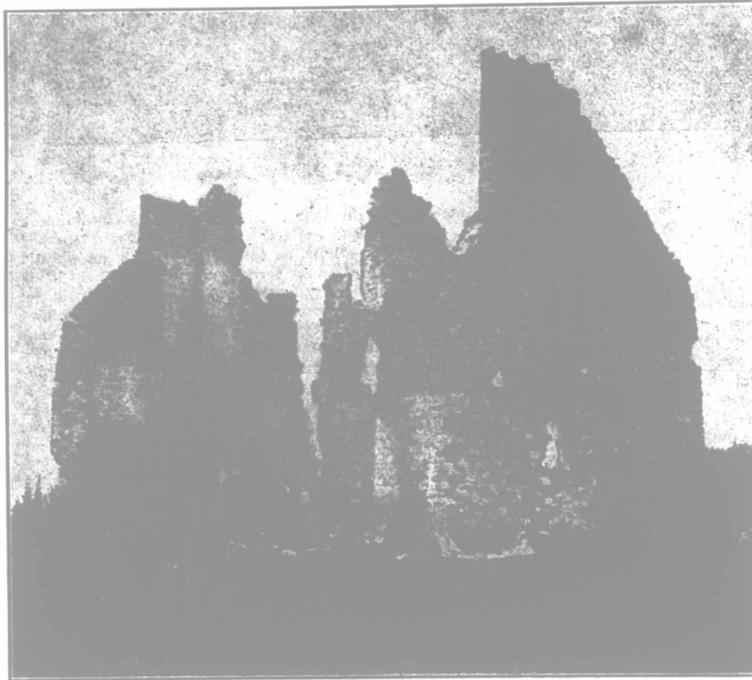
After a hurried run through the millinery shops, I may say that the spring hats are of almost every conceivable form, although the newest seem mostly all crown. For early spring, however, toques of flowers, or jetted net, seem most in favor. The main consideration, I should say, is to get something that is really becoming.

In regard to your kitchen cabinet, write to the "Manson Campbell Co., Chatham, Ont.," manufacturers, mentioning "The Farmer's Advocate." They will give you full particulars. Perhaps you had better ask them for a catalogue, as they manufacture a great variety of kitchen cabinets, and at a great variety of prices.

### Time and Labor Savers.

To lighten the work of ironing, when taking the clothes from the line, carefully smooth and fold those that you do not intend ironing. Many things seem sweeter without, and if you are not strong, it may save you a doctor's bill to leave them. Such things as blankets, knitted underwear, stockings and roller-towels, are among the articles that can be used rough, without marring the peace of the family, and if seersucker or some similar material is used for children's every-day blouses, much work can be saved. Shirtwaists, with adjustable collars and cuffs, are a saving of time, as they can be washed separately. When ironing small articles, such as handkerchiefs and napkins, draw your high kitchen stool near the ironing-board, and sit down to iron them; it will rest you wonderfully.

"Labor with what zeal we will,  
Something still remains undone,  
Something uncompleted still  
Waits the rising of the sun."



Chateau Bigot, Near Quebec.

The ruins of the famous Chateau, Beaumanoir, as they are at present.

too hard. I think that firmness from the beginning is the best rod, and seldom need a harder one. I never tease children, and always try to keep a promise made to them. It is right here, in keeping a promise, that they learn honesty from their parents.

Here is a wrinkle that was given to me about ten years ago, and I will pass it on to the younger mothers. When the little tots are between the age of one and two years, sometimes they take a notion to throw themselves on the floor and kick when things don't go to please them. Then take a little cold water and sprinkle it in their faces and you will find after a few seconds they are quite willing to take advice. Of course, the greater the resistance, the more water, according to the temperament of the child.

I think that children are what make the home life complete. Some women who have no children say, "Oh! what a lot of work they make!" but I think the reward covers the work a hundred-fold. If one of the dear little ones should be taken from us, none know how empty our aching hearts are, only those who have passed through this severe test. One writer has said, "It is better to have loved and lost than never to have loved

or something much better than zinc. I have not a cabinet, and do not want one with zinc top, as when it has been used only a short time it presents a very uncleanly appearance.

Would also like to know the new spring ideas in dresses. Are the net waists to be still in pre-eminence this summer? Someone has remarked to me that satin waists will be popular this spring. And what color and style for skirts? Are they still to be pleated? We would like Dame Durden to give us some of the new spring and summer ideas on dresses, jackets, and hats.

Could anyone give a good recipe for tomato mustard? Although tomatoes are not in season, it is well to have our recipes ready.

Have just read "Amone's" recipe for gingercakes. I think hers would be very good, but like my recipe better, as it requires neither cream nor butter. It is as follows: Three eggs, 1 cup sugar, 1 cup molasses, 1 tablespoon ginger, 2 teaspoons cinnamon, 1 tablespoon soda, 2 tablespoons vinegar. Dissolve soda in the vinegar, and flour to roll out. This is an extra-good recipe.

Have also just read "Anxious Mother's" letter about her baby. Would like to say "Always give baby a little cold

A cupboard, placed in the wall between dining-room and kitchen, so that it opens into each room, is a great convenience. In the lower part of the cupboard a dumb-waiter could be arranged with a door, so that no cold air could come up from the cellar. A basket placed on a small table, with rollers, will quickly carry dishes, clean or soiled, or food, if desired, to the cupboard, to be taken off on the kitchen side, thus making one trip do instead of going many times back and forth. After washing dishes it is a good plan to put them back on the dining-room table in readiness for the next meal. A table covered with zinc comes handy to place hot dishes on in the kitchen, and a wood-box placed in the wall, to be filled from the outside, with a lid opening into the kitchen, saves many steps and much untidiness. If a large packing-box, not more than two feet deep, is well padded with old quilts or carpet, and baby put in with his toys, he will be safe from drafts, and out of mischief, and you may leave the room for a few minutes knowing that he is safe." L. M. C. Kent Co., Ont.

Note to "Anxious Mother" and Others.

Dear Anxious Mother,—I have been much interested in your baby. I read your first inquiring letter, but felt a little timid in writing; I left it for some of the others. I raised a baby on the bottle, and had just the trouble you are having, when I was told to stop drugs and give it cream instead. I did, and that was the last medicine I had to give. Start with a couple of teaspoons in each feed and add more as required. Cream is easier to digest than milk. I just gave my baby the cream and milk and found it the best food I could get. At the last she got nearly half cream. If you use sugar, use very little, and always brown sugar.

I noticed Dinah's query on how to save time and steps. I have read so much on that subject, and, as a rule, I just came to the conclusion that no two houses are just alike, and no two women work just alike, and everyone thinks her way right. I think so much depends on the house; if it is not conveniently laid out, it is hard to plan the work to save steps. Well, as this is my first letter to the Ingle Nook, I must not stay too long. IN EARNEST. Dufferin Co., Ont.

Stomach Trouble.

"A Reader," Grey Co., Ont., writes asking advice in regard to stomach trouble. As this may arise from several causes, the advice of a physician who can give personal examination should be sought.

Rag Rugs—Chocolate Cake.

Dear Dame Durden,—I wonder if you or any of the Chatterers can give me a few suggestions about making rag rugs. I would like to have one made for our sitting-room, but our weaver does not seem to have very many ideas about patterns, colors, etc. As we use the room a great deal, it would have to be a very serviceable color.

And will someone please tell me how to can sweet apples, with lemon added to them?

Those who are fond of chocolate cake will find the following very nice, as well as economical:

Chocolate Cake.—1 cup white sugar, yolk of 1 egg, 1 cup buttermilk, 1 teaspoon soda, 2 cups flour, 1/2 cake unsweetened chocolate melted in 1 tablespoon butter, and added lastly. Ice with soft, white icing.

AN INTERESTED READER.

Prince Edward Co., Ont.

Possibly the following from Ladies' Home Journal will be of use to you and a few other people as well. You may not care for the blue and white, but other combinations could be used—brown and yellow, or brown and tan; green and tan; crimson and black, etc. A note in "House Beautiful" some time ago advised using three strands of rags instead of one, in order to make the rugs heavy enough to lie flat without tacking. This method would require a great many rags, but I should think results would be good. Now for the Home Journal article:

An Idea for Rugs.—Perhaps, because I had a decided weakness for things

Colonial, the woven-rug idea sent by a New York girl appealed to me as one of the best made-at-home gifts. And this 'smarty' also 'gave a party' at the same time.

"When Hilda was going to be married," she writes, 'the rest of us longed to do something nice for her—something different from the hackneyed shower; and, of course, it was Dolly (the second) who crystallized economy, practicability and beauty into one happy whole. She issued invitations for an ordinary Thimble Party, but each girl was privately requested to bring with her one pound of carpet-rags—blue, white, and blue and white. What a happy resurrection of utterly-abandoned cotton frocks and shirt-waists! Even discarded undergarments and stockings were useful, though all the white that not absolutely clear and clean was dipped in a soft-blue dye. Our best white came from worn sheets and table linen that some of the mothers donated. And, because allowance must be made for our love of chattering, all the cutting, dyeing and part of the sewing were done at home beforehand.

"On the auspicious afternoon we set busily to work. Three of the girls sewed plain white rags, three plain blue, three alternated a blue rag and a white one, and the other three of us sewed in hit-or-miss fashion the gingham, calicoes and percales in which the two colors were mixed. At the end of the afternoon we had our twelve pounds sewed. One of the white balls was kept for use in the borders, but the other two were made into skeins, and their ends dipped into blue dye. These give a lovely effect. We found an old German weaver who makes beautiful rugs, furnishing the chain and doing the weaving for twenty-five cents a square yard, and using two pounds of rags to the yard. We found it better to let him use his own original designs, as they were prettier than anything we could plan; but we stipulated that he use the natural-colored chain (a creamy white), and Dolly's mother slipped in a small ball of black, and one of yellow, which, with the plain blues and whites, made fascinating borders.

"The twenty-five cents which each of us donated for the weaving was the cost total of the three lovely rugs."

Cure for Croup.

Dear Dame Durden,—For a long time I have been an interested reader of "The Farmer's Advocate," especially the "Home Magazine." I have many times been blessed and strengthened by "Hope's" contributions.

At this time of year our children are more liable to have croup than at any other time, although they have had it in summer. Two nights ago, one of our children awoke with that harsh bark which used to strike terror to our hearts, but which has for us lost its power to alarm. After treating him, and while lying awake for a time to listen to his breathing, I determined not to let many days go by before writing this letter.

Several times I have thought I ought to write to tell the mothers of croupy children, of a cure for the disease which we found in a little farm paper. It is very simple as well as effective.

We always keep a bottle of raw linseed oil and a teaspoon in our room, and if I waken and hear a child with labored breathing, I rouse him up if he does not waken himself, and commence the treatment.

If the attack is severe, I give a teaspoonful of the oil, if not so severe half a teaspoonful is sufficient. Next I wet one end of a towel, enough to cover well the throat, in cold water, bind this on with the dry portion of the towel, fastening with a safety-pin. The while I talk soothingly and brightly to the child, who is usually very much frightened. To help the cure, the little nerves need to be quieted. Next cover up warmly in bed, and in a few minutes the breathing is easier and the child falls asleep.

Often one treatment is sufficient, but the oil may be given again in two or three hours, if necessary. If the patient does not sleep, the cold towel should be changed every fifteen minutes, and a flannel may be held round the lamp and heated to lay on the chest.

Hoping this treatment may be as beneficial to some mother's child as it has been to ours. MATILDA. Dundas Co., Ont.

Cleaning Zinc—Recipes.

Dear Dame Durden,—Someone asked in your magazine how to clean zinc and keep it bright. I find "Bon Ami" does it to perfection; Dutch Cleanser is good, but does not leave as bright a finish.

Not many sinks in the country can be called cosy corners, but I wish you could see mine, and you would think the name suited. We have a shelf running around three sides, covered with zinc, which extends up the back (cut with scroll at top) and one side to form splasher. We marked and cut zinc with scissors, and it fits to perfection. I find it easy to clean and always looking nice. The pump and iron sink I painted with aluminum paint, and with a white basin it looks fit for a king to use. Some day I hope to have a white sink.

I made vinegar this year from red clover blossoms, and it is delicious. Will send a recipe for salmon salad. It makes a pretty dish, and tastes as good as it looks.

Was it Lankshire Lass that gave us the maple-syrup recipe? I often make it, and it is fine. We have a large maple grove.

Our youngest, a boy near seven, attended the Macdonald Consolidated school, about five miles from our home, the first Consolidated school erected in New Brunswick. A short time ago the handsome structure was totally destroyed by fire. In our little country districts we feel the loss keenly, but hope to rebuild at once.

I would like a good recipe for "Nougatines."

Salmon Salad.—Drain a can of salmon, remove bone, skin, etc., arrange on shaved cabbage, and serve with the following dressing: Heat half teacup each vinegar and sugar (or less sugar, if liked), add a heaped teaspoon of ground mustard, blended with two rounded tablespoons soft butter, salt and pepper to taste. When it boils remove from fire; add half teacup thick, sweet cream. When cold, pour over cabbage, and sprinkle with a little of the shaved cabbage to finish. King's Co., N. B. FERN.

Possibly the above method of cleaning zinc may afford a suggestion to Evelyn E. Can any of the Chatterers send recipes for tomato mustard and Nougatines, as asked for in this week's Chat?

quired for the medium size is 7 1/2 yards 24 or 27, 6 1/2 yards 32 or 44 inches wide for walking length; 7 1/2 yards 24 or 27, 6 1/2 yards 32 or 44 inches wide for round length, when material has figure or nap, 5 1/2 yards 44 for round length, 5 yards for walking length, when material has neither figure or nap, width of skirt at lower edge 4 1/2 yards.



DESIGN BY MAY MANTON. 6266 Sailor Blouse. 6157 Three-Piece Skirt.

No gown of the season serves a more practical purpose than this one. It can be made from cashmere and the edges of the collar and cuffs embroidered, as in this instance, or it can be made from one of the pretty checked wool materials, or the skirt can be utilized for heavier material, while the blouse is made from silk, from flannel, from linen, or some waisting of the sort, and, again, the entire gown will be found most satisfactory if made from linen, pique or rep, as all these materials are to have extended vogue throughout the coming season.

For the medium size will be required, for the blouse, 3 1/2 yards of material 21 or 24, 3 1/2 yards 32 or 2 1/2 yards 44 inches wide, 1/2 yard 18 inches wide for the chemisette; for the skirt 6 1/2 yards 24 or 27, 4 yards 44 inches wide.

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

Address: "Fashion Department," "The Farmer's Advocate," London, Ont.

"The Farmer's Advocate" Fashions.



6287 Girl's Dress, 8 to 14 years.

6287.—The quantity of material required for the medium size (12 years) is 5 1/2 yards 24, 4 1/2 yards 32 or 8 1/2 yards 44 inches wide, with 1 yard of plain material 27 inches wide for trimming.



6290 Five Gore Skirt, 22 to 22 waist.

6290.—The quantity of material re-



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Bread baking is merely putting flour in appetizing form.

Flour making is merely putting wheat in shape for bread making.

## Royal Household Flour

is made from carefully selected Manitoba Hard spring wheat. Every pound is almost a pound of food; clean, and nutritious.

It goes farther, does better baking and is more satisfactory in every way than any other flour. Ask your grocer.

12

Ogilvie Flour Mills Co., Limited, Montreal.



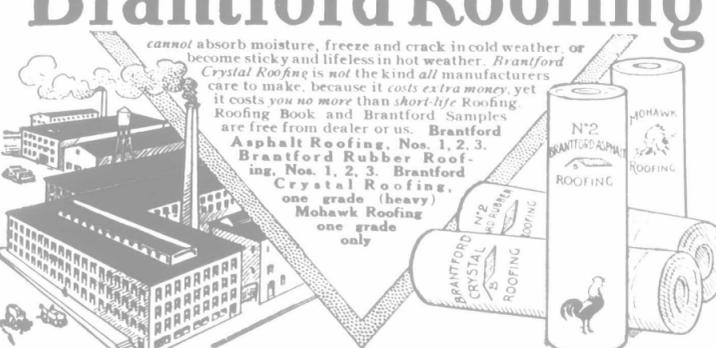


### How Weather Changes Bring Death to Roofing

The life of Roofing is Saturation and Coating. Yet this vital part is sorely neglected by nearly every Roofing maker. The Basis of most Roofing, except Brantford, is wood pulp, jute or cotton-cloth—all short-fibred. When it passes through "Saturatory Process" it does not become actually saturated—merely coated. This "Coating" is of refuse and quickly evaporates—wears off—exposing foundation to savage weather. It absorbs water and moisture, and becomes brittle, cracks, rots and finally crumbles. Even when new it softens under heat, sagging and dripping. But the Foundation of Brantford Crystal Roofing is a heavy, evenly condensed sheet of long-fibred pure Wool, saturated with Asphalt, which is forced into every fibre—not merely dipped. It is heavily coated with time-defying, fire-resisting Rock Crystals, which require no painting. This special Coating cannot evaporate and protects insides. Brantford is indestructible, pliable, tight, water, weather, spark, acid, alkali, smoke, fire-proof.

## Brantford Roofing

cannot absorb moisture, freeze and crack in cold weather, or become sticky and lifeless in hot weather. Brantford Crystal Roofing is not the kind all manufacturers care to make, because it costs extra money, yet it costs you no more than short-life Roofing. Roofing Book and Brantford Samples are free from dealer or us. Brantford Asphalt Roofing, Nos. 1, 2, 3. Brantford Rubber Roofing, Nos. 1, 2, 3. Brantford Crystal Roofing, one grade (heavy) Mohawk Roofing, one grade only.



BRANTFORD ROOFING COMPANY, LTD., BRANTFORD, CAN.

## SAVE 20c PER SHEEP

With the NEW STEWART SHEARING MACHINE With 4 combs & 4 cutters, only \$11.50

If you have but five sheep it will pay you to own this wonderful shearing machine. It does not cut or hack sheeplike hand shears, and gets one pound and over more wool per head. It shears any kind of wool easily and quickly. WE GUARANTEE IT FOR 25 YEARS. All gears are cut from solid metal, not cast; all wearing parts are file hard; spindles are ground and polished, and the driving mechanism is enclosed from dust and dirt and runs in oil. 95 per cent of all the shearing machines used in the world are Stewart patents. Send \$2.00 with your order and we will ship C.O.D. for the balance. Send for a copy of our free book "How to Shear Sheep," and our big new catalogue showing the largest line of shearing machines on Chicago Flexible Shaft Co., 110 La Salle Ave., Chicago, Ill. Write today.



### Mary Mother.

By Louise Dunham Goldsberry.

I.  
I heard the water-brook laugh in its sleep,  
Out in the silken silence of the night;  
The shiver of delight that shook the deep  
Green grasses when the winds came close.  
And somewhere from its rest  
A bird dreamt out loud in its nest.  
I heard no footfall at my door,  
Nor latchet lift,  
But, glazing all the rushy floor,  
A splendor came,  
And One, white-glowing as a flame,  
Called me by name!

I? All Israel's queens  
Have hoped for this;  
And humblest woman-child that leans  
Against her mother's lips  
Has heard the whispered prayer that she  
Her Lord's Mother might be!  
Beyond the rim of hills the blackness  
shone  
Where He passed through  
But in the woods I heard the thorn-tree  
moan  
Above its thorns:  
And oh, I hid me in my mother's bed  
To tell her what the Angel said!

### II.

My Baby, my Baby, what love-names  
shall I name thee?  
I know not one that's half as sweet as  
thou,  
Scared is my heart its very own to calm  
thee  
And kiss thee, as I kiss thee now!  
Mother's dear Baby! Life of her life  
and being,  
Only for her alone thy every baby-  
grace;  
Of all the world, thy wise, wise young  
eyes' seeing,  
Mirrors but just thy mother's face!

My Honey-cup, my Star, my azured  
Flower,  
Sleep safe in the soft curve of mother's  
arm;  
Above thy precious head no storm shall  
ever lower  
Nor stone these little feet shall ever  
harm!

### III.

Ye say, "Mary sleep";  
Ye bid me weep  
For sorrows done;  
Did they not say  
He dies to-day—  
My Son!

Once, beneath a star  
Years afar,  
We slept, The Child and I;  
Every azure vein I've kissed,  
Feet, and wrist;  
Baby-curves that lie  
Hid for but the mother-eye—  
Did they say  
"To-day?"

### IV.

Spice; I lay ye here; the Wise Men gave  
Spice that Night;  
Little Son, thou shalt not care—  
Mother's hands, 'tis, makes thee fair  
For the grave;  
Mother's lips that from the light  
Kiss thy eyelids down;  
All the journey now is done—  
Sleep, my Lord! Sleep, Little Son!

### A Rain Song.

By Clinton Scollard.

Don't you love to lie and listen,  
Listen to the rain,  
With its little patter, patter,  
And the tiny clatter, clatter,  
And its silvery spatter, spatter,  
On the roof and on the pane!

Yes, I love to lie and listen,  
Listen to the rain,  
It's the fairies—Pert and Puck,  
Nip and Nimble-toes and Lucky,  
Trip and Thimble-nose and Tucky  
On the roof and on the pane!

That's my dream the while I listen,  
Listen to the rain,  
I can see them running races,  
I can watch their laughing faces,  
At their gleeful games and graces,  
On the roof and on the pane!

—A Boys' Book of Rhyme.

## The Roundabout Club

### On Hindu Marriage.

The following letter in reply to S. Sinha's communication, has been received from a reader of "The Farmer's Advocate" in Calcutta, India:

Editor "The Farmer's Advocate":

Dear Friend,—S. Sinha tells us in his letter published by you in your paper some time ago, that in a "Hindu marriage" there are:

"Two souls with but a single thought,  
Two hearts that beat as one,"

Well, I confess I cannot understand that. His arithmetic puzzles me. Even the lowest caste Hindu has at the least two wives. Most Hindus have several; some have several hundreds. How does Mr. Sinha make out the "two souls?" In the case of a Hindu with only two wives, who have the souls? Do the two wives possess the "two souls?" Doesn't the husband possess a "soul?" Does the husband possess one of these "two souls," and all the wives (2 or 400, or more), the other? Or does he possess one, and only one of the wives the other? Now, which of these wives possess the soul? What have the remainder of the wives done that they have none? Were they each born with one soul, or were they born without souls? Perhaps they lost it when they married a man who had already got one wife, or, most likely the husband lost his when he married again with his first wife still living, but in that case, some of the wives must still be without a soul. Poor unfortunates!

But if they are

"Two souls with but a single thought,  
Two hearts that beat as one,"

why does a Hindu desire to marry a European? From the highest to the lowest they seek European women as wives. This fact is very suggestive. Even when he has had a Hindu wife, he looks out for a European wife, he is so dissatisfied with the Hindu woman. This is another sort of Hindu marriage, but the arithmetic is the same. For many Hindus have Asiatic wives, as well as European wives, too—not one European wife, but several European wives! Even in this case, I cannot make out the "two souls." Perhaps the Hindu gentleman has one soul, and all the Hindu wives the other, and the Europeans none, for these certainly deserve none; or he has one, and the Europeans the other, whilst the poor Hindus have to go without; or maybe he has one, and both Europeans and Asiatics only one between them; or he has none, and European and Hindu wives have the two souls; or all the Hindu wives the two souls, leaving none for the Hindu husband and the European wives.

There is still another kind of Hindu marriage. There is one wife to several husbands. But I cannot make out only "two souls" even in this case.

It would be very interesting to know how Babu S. Sinha makes out the "two souls" in a "Hindu" marriage.

Babu Sinha says: "I think I could have explained the matter more clearly if I would not have been a bachelor." As he is not married, he is certainly disqualified. What does he know about the married state? He has theories and ideals, but not the reality. The facts upset his hypotheses. What is the use of guesswork? How does he know that such and such ideas prevail in the hearts of Hindu wives? Even if he were a married man, he could not tell. The Hindu wife can tell. She knows by experience. Also, wives confide in wives. As for Hindu women not caring to re-marry, they are mostly prevented from doing so. Sometimes she does not re-marry because she has no chance to do so. She does marry again when she can possibly do so. Hindu women are the same as the women of all nations. Some certainly do not prefer to suffer the tortures of hell a second time. Others, again, would like to re-marry, for lightning is not supposed to strike twice in the same place. They hope for better luck. Some wish to be supported. Some would prefer even a bad man, rather than have no husband at all. They will even support him.

With regard to "beloved husbands," you will find the wives are not anxious to remain with them until they die. Many seek escape from their purgatory by suicide. Sometimes even the two wives die together rather than continue to suffer. Some elope. Rather than stay with the "beloved husbands," they will even profess Christianity and go to a mission. As for the "beloved husbands" whose "hearts beat as one," with their numerous wives, they beat them, torture them, even cut off their noses, etc. The beloved husband of these numerous wives, and these unfortunate wives, have not

"Two souls with but a single thought,"

for the husband's thought is to maltreat the wife, and the wife certainly does not desire it. One thing, he does not ill-treat all at once.

If a "Hindu marriage" is so desirable, why does not Babu Sinha marry? The mere fact that he is unmarried, tells us that he does not think it good to marry. He "would" be a bachelor. Wise man! He knows it is best to be a bachelor.

Babu Sinha speaks of "the spiritual union of two souls." Whose "two souls"? In a "Hindu marriage" there are more than "two souls." How can there possibly be a "spiritual" union between husband and many wives? Is he spiritually united with 2, 4, 200, etc., wives? He says it "cannot exist without love." Does he mean to assert that the Hindu husband loves his 400 wives, who are Hindus, and several European wives also? Are these "a married couple?" I thought "a couple" meant two only. If a mehter (sweeper) has two wives, even they cannot be called "a married couple," for he is one, and they are two, and one and two make three. At least, I learned so at school. But Mr. Sinha's arithmetic is decidedly different. His letter about "two souls," "two hearts," and "a married couple," is decidedly misleading. He is remarkably ignorant about India. "Hindu marriages," etc. He knows nothing about his subject. Perhaps this is not his fault, but his misfortune. Perhaps he has never had a chance to marry a Hindu girl, or perhaps no Hindu father would have him as a son-in-law! But he seems to be a celibate from choice; he "would" be a bachelor. He evidently knows better than to marry a "Hindu" wife. He knows a "Hindu marriage" is undesirable. He probably is perfectly aware that many Hindu husbands first give their wives to the Hindu priests before they take them as wives.

There is a great deal to say regarding "Hindu marriages." But I have given you a few facts.

Yours, in the Master's service,  
(SISTER) MAYA SANGHAMITTA.  
Calcutta, India.

**A Girl's Opinions.**

To Editor of Roundabout Club:

I agree with former writers, that there is too much "silly" conversation among the young folk of to-day. Is it the lack of storing the mind with proper food? Reading good, interesting, elevating literature, and "Current Events," keeping in touch with the outside world, would have a tendency to change the topics of conversation. Again, who is there that has not some little talent for "music," which will bring out the finest and noblest inspirations and thoughts?

"It flooded the crimson twilight,  
Like the close of an Angel's Psalm,  
And it lay on my fevered spirit  
With a touch of infinite calm;  
It quieted pain and sorrow,  
Like 'Love,' o'ercoming strife;  
It seemed the harmonious echo,  
From our discordant life;  
It link'd all perplexed meanings  
Into one perfect peace."

But, there, I'm awa' frae the subject. Like "Bob James," I thought this subject too hard a "problem" for my young years, but will try in my humble way to add my little testimony. I am glad, indeed, that he does not think all girls are giddy and "unwomanly." It is true, there are noble, true, pure, innocent, wholesome girls—girls who have kept "unspotted from the world."

Young men want their "choice" to be "pure" and "unspotted." Is it not

right that "pure" and "unspotted" girls should be just as anxious that their choice be the same?

How many—both girls and boys—"play" with affection, make false pretences, and are guilty of that unwomanly and unmanly act, "flirting"? Shame on such actions! Are there not higher and nobler heights to attain, than to have "time" to waste on dangerous ground?

We cannot all have facial beauty, but Joseph Addison says: "Good nature will always supply the absence of beauty, but beauty cannot supply the absence of good nature." Let us make our lives beautiful.

"Marriage" is so lightly spoken of by some folk, you would almost think it was the "end" of life. I think it is the "beginning" of a "partnership" that will either "elevate" or "lower" the lives of the "partners." If affection is reigning in the home, husband and wife doing their part to make this "new home" the loveliest, cheeriest, most heavenly and grandest home on earth, will there be room for strife, unhappiness, separation or divorce? I think not. Such a home is truly elevating. "We mutually pledge to each other our lives, our fortunes, and our sacred honor."

But, on the other hand, if either have entered into marriage without thought,

prayer and "studied" care—just for position, wealth, or a place to live in—what a woeful existence; not a "home"—neither happy! They may own a beautiful mansion, have everything money can buy,—but happiness. What is wealth when love and hope are dead? Anyone can own a "house," but everyone isn't capable of making a "home." There is no sphere of life so exalted that it may not be made the school of the humblest virtues, and none so lowly that it may not become the scene of the purest and most lasting triumphs.

Perhaps you will infer from my words that I have realized the hopes of my choice, and am sailing on the "matrimonial sea." Not so, but if it is ever my lot to "sail this sea," I earnestly hope my "Ideal Home" may be realized.

Now, as to the qualities a young woman admires in a young man. I think they can be expressed in the two words—"Christian manliness." We all admire a "manly" man, one who is temperate, kind, broadminded, thrifty, generous, noble, pure and clean-souled,—not necessarily "handsome," but "worth his weight in gold in regard to sterling qualities." If a boy is thoughtful of his mother and sisters he will be of his wife.

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#### Our Literary Department.

##### Study IV.

##### STANZA XVIII.

For more is not reserved  
To man, with soul just nerved  
To act to-morrow what he learns to-day:  
Here, work enough to watch  
The Master work, and catch  
Hints of the proper craft, tricks of the  
tool's true play.

##### XIX.

As it was better, youth  
Should strive, through acts uncouth,  
Toward making, than repose on aught  
found made:

So, better, age, exempt  
From strife, should know, than tempt  
Further. Thou waitest age: Wait death  
nor be afraid!

##### XX.

Enough now, if the Right  
And Good and Infinite  
Be named here, as thou calls't thy hand  
thine own,  
With knowledge absolute,  
Subject to no dispute  
From fools that crowded youth, nor let  
these feel alone.

##### XXI.

Be there, for once and all,  
Severed great minds from small,  
Announced to each his station in the  
Past!

Was I, the world arraigned,  
Were they, my soul disdained,  
Right? Let age speak the truth and  
give us peace at last!

##### XXII.

Now who shall arbitrate?  
Ten men love what I hate,  
Shun what I follow, slight what I re-  
ceive;

Ten, who in ears and eyes  
Match me: We all surmise,  
They, this thing, and I, that: whom  
shall my soul believe?

##### XXIII.

Not on the vulgar mass  
Called "work" must sentence pass,  
Things done, that look the eye and had  
the price;

O'er which, from level stand,  
The low world laid its hand,  
Found straightway to its mind, could  
value in a trice:

##### XXIV.

But all, the world's coarse thumb  
And finger failed to plumb,  
So passed in making up the main ac-  
count:

All instincts immature,  
All purposes unsure,  
That weighed not as his work, yet swelled  
the man's amount:

##### XXV.

Thoughts hardly to be packed  
Into a narrow act,  
Fancies that broke through language and  
escaped:

All I could never be,  
All, men ignored in me,  
This, I was worth to God, whose wheel  
the pitcher shaped.

(1) Name three words in stanzas XIX., XX., used in a rather peculiar way, and give the signification as used here.

(2) Of what use is the clause "as thou calls't thy hand thine own," St. XX.? What word forms the completion of the verb "Be," St. XXI.? What word might be inserted in lines 4, 5, St. XXI., to bring out the meaning more fully? Explain line 3, St. XXV., and also the reference in "whose wheel the pitcher shaped."

(3) Follow the poet's course of thought which causes him to ask the question, "Now, who shall arbitrate?"

(4) The poet uses the terms "vulgar mass," "low world," "world's coarse thumb." Now we know that Browning did not despise "work" of any kind, nor yet the "world" as understood in the ordinary sense: he has said, "All good things are ours, nor soul helps flesh more, now, than flesh helps soul." Explain, then, his use of the above terms.

(5) Write an essay on the stanzas assigned for Study IV.

Kindly send in papers so that they may reach this office on or before April 24th. One more study will complete this series.

#### Essay, Study II.

The following essay, notwithstanding some rather peculiar constructions, possesses so much originality that it will be read with much interest by our students of Rabbi Ben Ezra. It was submitted on Study No. II.

"Oh, yet we trust that somehow good Will be the final goal of ill,  
To pangs of nature, sins of will,  
Defects of doubt and taints of blood,  
That nothing walks with aimless feet,  
That not one life shall be destroyed,  
Or cast as rubbish to the void,  
When God hath made the pile com-  
plete."

"I'll find a way or make it," should be a motto for us as well as the Roman. Royal roads, like those of the peasant, are filled with stumbling blocks. As Mercy cleared the path of thorns and briars from before the Red-cross Knight, so Jesus, if we but trust, will lead us gently over the "dinty furlongs." In stead of taking up the cross assigned to us with weeping, let us rather go forth rejoicing that we can labor in the harvest, and also let us see well to it that we return the talents, saying, "Lord, thou deliveredst unto me five talents, behold I have gained beside them five talents more."

After each fall, like the ancient son of Neptune, we should rise stronger to face the contest. To be able to sympathize with our brothers we must have been with them in the struggle. Consolation from a Sybarite would be very hollow indeed. The gain to ourselves in striving deserves the effort, so let us rather underestimate the battle in counting the spoils.

The truth of the adage, "He who aims at a star shoots higher far than he who aims at a tree," has been proved to the uttermost. While it seems a contradiction of facts, yet success is made up of repeated failures. No man ever reaches his ideal, but when he looks back on his life he rejoices to know that he was the standard-bearer of an army whose banner bore that "strange device, 'Excelsior!'"

The human being who can see no need of betterment in himself has become one of that vast throng known as the submerged tenth. Man is but an atom compared with Infinity. If such an idle thought arose in his mind as to the force his body could expend, in making a projectile of his soul, at dissolution he would find his soul, if able to search, perilously near this planet. Without God and faith in God, man's works amount to very little, if anything, in gaining him a "mansions in the skies."

However, the wonderful gifts of sight, hearing and memory, should be turned to account. Some have heredity to lean on, strong, well-knit bodies, supplemented by retentive brains. With all these blessings, should we not spare one moment to thank our Creator for our lives?

"This awful God is ours," Who appeared in majestic power on Sinai; Who shone with dazzling brilliancy in the burning bush; Yet underneath all this glory the "All-great is the All-loving too," and we hear a "still, small voice" saying,

"O heart I made a Heart beats here.  
Face My Hands fashioned, see it in  
myself.

Thou hast no love nor may'st conceive  
of Mine,

But love I gave thee with Myself to  
love;

And thou must love me Who have died  
for thee."

It was 11 p. m., and the conversation begun to lag. Finally the spirit moved young Staylate, and he said:

"Those Kentucky night riders are a bad lot, aren't they?"

"Oh, I don't know," rejoined Miss Wearion as she tried in vain to strangle a yawn. "They might be worse."

"Why, how could they?" he asked.

"They might be night sitters," she replied.

Whereupon the young man in the parlor scene suddenly remembered that his mother might be uneasy about him and proceeded to fade away.

# The Golden Dog

(Le Chien D'Or.)

A Canadian Historical Romance.

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## CHAPTER XIII.—Continued.

There was immense talk, with plenty of laughter and no thought of mischief, among the crowd. The habitans of en haut and the habitans of en bas commingled, as they rarely did, in a friendly way. Nor was anything to provoke a quarrel said even to the Acadians, whose rude patois was a source of merry jest to the better-speaking Canadians.

The Acadians had flocked in great numbers into Quebec on the seizure of their Province by the English—sturdy, robust, quarrelsome fellows, who went about challenging people in their reckless way—Etions pas mon maitre, monsieur?—but all were civil to-day, and tuques were pulled off and bows exchanged in a style of easy politeness that would have shamed the streets of Paris.

The crowd kept increasing in the Rue Buade. The two sturdy beggars who vigorously kept their places on the stone steps of the barrier, or gateway, of the Basse Ville, reaped an unusual harvest of the smallest coin—Max Grimau, an old, disabled soldier, in ragged uniform, which he had worn at the defence of Prague under Marshal de Belleisle; and blind Bartemy, a mendicant born—the former, loud-tongued and importunate; the latter, silent, and only holding out a shaking hand for charity. No Finance Minister or Royal Intendant studied more earnestly the problem how to tax the kingdom than Max and Blind Bartemy how to toll the passers-by, and with less success, perhaps.



Little Champlain Street, Quebec.

To-day was a red-letter day for the sturdy beggars, for the news flew fast that an ovation of some popular kind was to be given to the Bourgeois Philibert. The habitans came trooping up the rough mountain road that leads from the Basse Ville to the Upper Town; and up the long stairs lined with the stalls of Basque pedlars—cheating, loquacious varlets—which formed a by-way from the lower regions of the Rue de Champlain—a break-neck thoroughfare little liked by the old and asthmatical, but nothing to the sturdy "climbers," as the habitans called the lads of Quebec, or the light-footed lasses who displayed their trim ankles as they flew up the breezy steps to church or market.

Max Grimau and Blind Bartemy had ceased counting their coins. The passers-by came up in still-increasing numbers, until the street, from the barrier of the Basse Ville to the Cathedral, was filled with a noisy, good-humored crowd, without an object except to stare at the Golden Dog, and a desire to catch a glimpse of the Bourgeois Philibert.

The crowd had become very dense, when a troop of gentlemen rode at full speed into the Rue Buade, and, after trying recklessly to force their way through, came to a sudden halt in the midst of the surging mass.

The Intendant, Cadet and Varin had ridden from Beaumanoir, followed by a train of still flushed guests, who, after a hasty purification, had returned with their host to the city—a noisy troop, loquacious, laughing, shouting, as is the wont of men reckless at all times, and still more defiant when under the influence of wine.

"What is the meaning of this rabble, Cadet?" asked Bigot; "they seem to be no friends of yours. That fellow is wishing you in a hot place," added Bigot, laughing, as he pointed out a habitan who was shouting "A bas Cadet!"

"Nor friends of yours, either," replied Cadet. "They have not recognized you yet, Bigot. When they do, they will wish you in the hottest place of all!"

The Intendant was not known personally to the habitans, as were Cadet, Varin, and the rest. Loud shouts and execrations were freely vented against these as soon as they were recognized.

"Has this rabble waylaid us to insult us?" asked Bigot. But it can hardly be that they knew of our return to the city to-day." The Intendant began to jerk his horse round impatiently, but without avail.

"Oh, no, your Excellency! it is the rabble which the Governor has summoned to the King's corvee. They are paying their respect to the Golden Dog, which is the idol the mob worships just now. They did not expect us to interrupt their devotions, I fancy."

"The vile moutons! their fleece is not worth the shearing!" exclaimed Bigot angrily, at the mention of the Golden Dog, which, as he glanced upwards, seemed to glare defiantly upon him.

"Clear the way, villains!" cried Bigot loudly, while darting his horse into the crowd. "Plunge that Flanders cart-horse of yours into them, Cadet, and do not spare their toes!"

Cadet's rough disposition chimed well with the Intendant's wish. "Come on, Varin, and the rest of you," cried he, "give spur, and fight your way through the rabble."

The whole troop plunged madly at the crowd, striking right and left with their heavy hunting-whips. A violent scuffle ensued; many habitans were ridden down, and some of the horsemen dismounted. The Intendant's Gascon blood got furious; he struck heavily right and left, and many a bleeding tuque marked his track in the crowd.

The habitans recognized him at last, and a tremendous yell burst out. "Long live the Golden Dog! Down with the Friponne!" while the more bold ventured on the cry "Down with the Intendant and the thieves of the Grand Company!"

Fortunately for the troop of horsemen the habitans were utterly unarmed; but stones began to be thrown, and efforts were made by them, not always unsuccessfully, to pull the riders off their horses. Poor Jean La Marche's darling child, his favorite violin, was crushed at the first charge. Jean rushed at the Intendant's bridle, and received a blow which levelled him.

The Intendant and all the troop now drew their swords. A bloody catastrophe seemed impending, when the Bourgeois Philibert, seeing the state of affairs, despatched a messenger with tidings to the Castle of St. Louis, and rushed himself into the street amidst the surging crowd,



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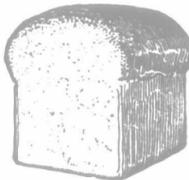
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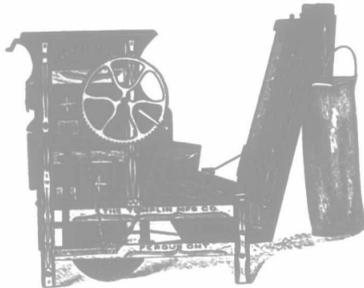
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THE STEEL TROUGH & MACHINE, CO., LTD., TWEED, ONT.

implored, threatening and compelling them to give way.

He was soon recognized and cheered by the people; but even his influence might have failed to calm the fiery passions excited by the Intendant's violence, had not the drums of the approaching soldiery suddenly resounded above the noise of the riot. In a few minutes long files of glittering bayonets were seen streaming down the Rue du Fort. Colonel St. Remi rode at their head, forming his troops in position to charge the crowd. The colonel saw at once the state of affairs, and being a man of judgment, commanded peace before resorting to force. He was at once obeyed. The people stood still and in silence. They fell back quietly before the troops. They had no purpose to resist the authorities—indeed, had no purpose whatever. A way was made by the soldiers, and the Intendant and his friends were extricated from their danger.

They rode at once out of the mob amid a volley of execrations, which were replied to by angry oaths and threats of the cavaliers as they galloped across the Place d'Armes and rode pell-mell into the gateway of the Chateau of St. Louis.

The crowd, relieved of their presence, grew calm; and some of the more timid of them got apprehensive of the consequences of this outrage upon the Royal Intendant. They dispersed quietly, singly, or in groups, each one hoping that he might not be called upon to account for the day's proceedings.

The Intendant and his cortege of friends rode furiously into the courtyard of the Chateau St. Louis, dishevelled, bespattered, and some of them hatless. They dismounted, and foaming with rage, rushed through the lobbies, and, with heavy trampling of feet, clattering of scabbards, and a bedlam of angry tongues, burst into the Council Chamber.

The Intendant's eyes shot fire. His Gascon blood was at fever heat, flushing his swarthy cheek like the purple hue of a hurricane. He rushed at once to the Council-table, and seeing the Governor, saluted him, but spoke in tones forcibly kept under by a violent effort.

"Your Excellency and gentlemen of the Council will excuse our delay," shouted Bigot. "when I inform you that I, the Royal Intendant of New France, have been insulted, pelted, and my very life threatened by a seditious mob congregated in the streets of Quebec."

"I grieve much, and sympathize with your Excellency's indignation," replied the Governor, warmly; "I rejoice you have escaped unhurt. I despatched the troops to your assistance, but have not yet learned the cause of the riot."

"The cause of the riot was the popular hatred of myself for enforcing the royal ordinances, and the seditious example set the rabble by the notorious merchant, Philibert, who is at the bottom of all mischief in New France."

The Governor looked fixedly at the Intendant, as he replied quietly—"The Sieur Philibert, although a merchant, is a gentleman of birth and loyal principles, and would be the last man alive, I think, to excite a riot. Did you see the Bourgeois, Chevalier?"

"The crowd filled the street near his magazines, cheering for the Bourgeois and the Golden Dog. We rode up and endeavored to force our way through. But I did not see the Bourgeois himself until the disturbance had attained its full proportions."

"And then, your Excellency? Surely the Bourgeois was not encouraging the mob, or participating in the riot?"

"No! I do not charge him with participating in the riot, although the mob were all his friends and partisans. Moreover," said Bigot, frankly, for he felt he owed his safety to the interference of the Bourgeois,

"it would be unfair not to acknowledge that he did what he could

to protect us from the rabble. I charge Philibert with sowing sedition that caused the riot, not with rioting himself."

"But I accuse him of both, and of all the mob has done!" thundered Varin, enraged to hear the Intendant speak with moderation and justice. "The house of the Golden Dog is a den of traitors; it ought to be pulled down, and its stones built into a monument of infamy over its owner, hung like a dog in the market-place."

"Silence, Varin!" exclaimed the Governor, sternly. "I will not hear the Sieur Philibert spoken of in these injurious terms. The Intendant does not charge him with this disturbance, neither shall you."

"Par Dieu! you shall not, Varin!" burst in La Corne St. Luc, roused to unusual wrath by the opprobrium heaped upon his friend the Bourgeois; and you shall answer to me for that you have said!"

"La Corne! La Corne!" The Governor saw a challenge impending, and interposed with vehemence. "This is a Council of War, and not a place for recriminations. Sit down, dear old friend, and aid me to get on with the business of the King and his Colony, which we are here met to consider."

The appeal went to the heart of La Corne. He sat down. "You have spoken generously, Chevalier Bigot, respecting the Bourgeois Philibert," continued the Governor. "I am pleased that you have done so. My Aide-de-Camp, Colonel Philibert, who is just entering the Council, will be glad to hear that your Excellency does justice to his father in this matter."

"The blessing of St. Bennet's boots upon such justice," muttered Cadet to himself. "I was a fool not to run my sword through Philibert when I had the chance."

The Governor repeated to Colonel Philibert what had been said by Bigot.

Colonel Philibert bowed to the Intendant. "I am under obligation to the Chevalier Bigot," said he, "but it astonishes me much that anyone should dare implicate my father in such a disturbance. Certainly the Intendant does him but justice."

This remark was not pleasing to Bigot, who hated Colonel Philibert equally with his father. "I merely said he had not participated in the riot, Colonel Philibert, which was true. I did not excuse your father for being at the head of the party among whom these outrages arise. I simply spoke truth, Colonel Philibert. I do not eke out by the inch my opinion of any man. I care not for the Bourgeois Philibert more than for the meanest blue-cap in his following."

This was an ungracious speech. Bigot meant it to be such. He repeated almost of the witness he had borne to the Bourgeois's endeavors to quell the mob. But he was too profoundly indifferent to men's opinions respecting himself to care to lie.

Colonel Philibert resented the Intendant's sneer at his father. He faced Bigot, saying to him: "The Chevalier Bigot has done but simple justice to my father with reference to his conduct in regard to the riot. But let the Intendant recollect that, although a merchant, my father is above all things a Norman gentleman, who never swerved a hairbreadth from the path of honor—a gentleman whose ancient nobility would dignify even the Royal Intendant." Bigot looked daggers at this thrust at his own comparatively humble origin. "And this I have further to say," continued Philibert, looking straight into the eyes of Bigot, Varin and Cadet, "whoever impugns my father's honor impugns mine; and no man, high or low, shall do that and escape chastisement!"

The greater part of the officers seated round the council board listened with marks of approval to Philibert's vindication of his father.

But no one challenged his words, although dark, ominous looks glanced from one to another among the friends of the Intendant. Bigot smothered his anger for the present, however; and to prevent further reply from his followers he rose, and bowing to the Governor, begged His Excellency to open the Council.

"We have delayed the business of the King too long with these personal recriminations," said he. "I shall leave this riot to be dealt with by the King's courts, who will sharply punish both instigators and actors in this outrage upon the royal authority."

These words seemed to end the dispute for the present.

CHAPTER XIV. The Council of War.

The Council now opened in due form. The Secretary read the royal despatches, which were listened to with attention and respect, although with looks of dissent in the countenance of many of the officers.

The Governor rose, and in a quiet, almost a solemn, strain, addressed the Council: "Gentlemen," said he, "from the tenor of the royal despatches just read by the Secretary, it is clear that our beloved New France is in great danger. The King, overwhelmed by the powers in alliance against him, can no longer reinforce our army here. The English fleet is supreme—for the moment only, I hope!" added the Governor, as if with a prevision of his own future triumphs on the ocean. "English troops are pouring into New York and Boston, to combine with the militia of New England and the Middle Colonies in a grand attack upon New France. They have commenced the erection of a great fort at Chouagen, on Lake Ontario, to dispute supremacy with our stronghold at Niagara, and the gates of Carillon may ere long have to prove their strength in keeping the enemy out of the Valley of the Richelieu. I fear not for Carillon, gentlemen, in ward of the gallant Count de Lusignan, whom I am glad to see at our Council. I think Carillon is safe.

The Count de Lusignan, a gray-headed officer of soldierly bearing, bowed low to this compliment from the Governor. "I ask the Count de Lusignan," continued the Governor, "what he thinks would result from our withdrawing the garrison from Carillon, as is suggested in the despatches?"

"The Five Nations would be on the Richelieu in a week, and the English in Montreal a month after such a piece of folly on our part!" exclaimed the Count de Lusignan.

"You cannot counsel the abandonment of Carillon, then, Count?" A smile played over the face of the Governor, as if he too felt the absurdity of his question.

"Not till Quebec itself fall into the enemy's hands. When that happens, His Majesty will need another adviser in the place of the old Count de Lusignan."

"Well spoken, Count! In your hands Carillon is safe, and will, one day, should the enemy assail it, be covered with wreaths of victory, and its flag be the glory of New France."

"So be it, Governor. Give me but the Royal Roussillon, and I pledge you neither English, Dutch, nor Iroquois shall ever cross the waters of St. Sacrament."

"You speak like your ancestor the crusader, Count. But I cannot spare the Royal Roussillon. Think you you can hold Carillon with your present garrison?"

"Against all the force of New England. But I cannot promise the same against the English regulars now landing at New York."

"They are the same whom the King defeated at Fontenoy, are they not?" interrupted the Intendant, who, courtier as he was, disliked the tenor of the royal despatches as much as any officer present—all the more as he knew that Pompadour was advising peace. "The consideration of a woman's considerations is more than upholding the glory of France."

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Even a child can ice a cake perfectly, in three minutes, with Cowan's Icing. Eight delicious flavors. Sold everywhere.

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SECURE ONE OF OUR PREMIUMS.

He Bought Her a 1900 Washer

One of Our Readers Tells How Her Husband Learned What Washday Means to a Woman.

Dear Editor—Most men have no realization of what "wash-day" means to a woman. My husband is one of the best men that ever lived, but he laughed when I asked him one day to get me a 1900 Gravity Washer. I told him it would wash a tubful of clothes in six minutes. "Why, wife," said he, "a washing machine is a luxury. And, besides, there's no better exercise than rubbing clothes on a washboard. It's good for the back. I think we had better wait till we get the farm paid for before footing away money on such new-fangled things as washing machines."



John's Busy Day.

I suggested to John that he had better do the washing. We couldn't hire a girl for love or money, and the situation was desperate.

So one morning he started in. My! what a commotion there was in the kitchen. From my bedroom I occasionally caught glimpses of poor John struggling with that mountain of dirty clothes.

If ever a man had all the "exercise" do the washing, my husband was that man! Couldn't help feeling sorry for him, and yet it made me laugh, for I remembered how he made fun of me when I hinted so strongly for a 1900 Gravity Washer. When he finally got the clothes done and on the line he was just about "all in."

That evening John came to my room and said kind of sheepishly: "What's the name of the firm that makes those Washers you were telling me about?" I looked up their advertisement and found the following address:

The secret of the easy operation of the 1900 Washer is in the peculiar "S" shaped links, which no other washer can have; then it has no iron to come in contact with the clothes, and also has a removable tub, which is a great convenience. 1400

Centre and Hill View Holsteins

We are now offering 8 choice young bulls from 6 to 10 months of age, with high official backing. These are a grand lot of young bulls. We are entirely sold out of females for the present.

P. D. EDE, Oxford Centre P. O., Woodstock Sta., Ont.

When Writing, Mention This Paper.

F. A. N. Bach, Manager, The 1900 Washer Co., 357 Yonge St., Toronto, Canada.

That's all he said, but he lost no time in sending for their Free Washer Book. The book came in due time, and with it an offer to send the 1900 Gravity Washer on thirty days' free trial. My husband jumped at the chance to try the Washer without having to spend a cent. "We'll have four weeks' use of the Washer anyway, even if we don't decide to keep it," he said. So he told the company to send on the Washer.

It was sent promptly, all charges paid, and the 1900 Washer Company offered to let us pay for it in little easy payments. The next week I felt well enough to use it. It is the nicest Washer I ever saw, and it almost runs itself. Takes only six minutes to wash a tubful, and the garments come out spotlessly clean. We were all delighted with the Washer, and wrote to the company that we would keep it and accept their easy payment terms of 50 cents a week. We paid for it without ever missing the money, and wouldn't part with the Washer for five times its cost.

If women knew what a wonderful help the 1900 Gravity Washer is, not one would be without it. It saves work and worry and doctors' bills. Takes away all the dread of wash-day. I feel like a different woman since I have quit the use of the washboard. If any woman's husband objects to buying one of these labor-saving machines, let him do just one big washing by hand-rubbing on the old-fashioned washboard, and he will be only too glad to get you a 1900 Gravity Washer.

Anybody can get one on free trial by first writing for the Washer Book.

Don't be talked into buying any other machine—there are many imitations, but none "just as good" as the 1900 Gravity Washer.

Excuse me for writing such a long letter, but I hope, Mr. Editor, you will print it for the benefit of the women readers of your valuable paper.

Sincerely yours, MRS. J. H. SMITH.

"Among them are many troops who fought us at Fontenoy. I learned the fact from an English prisoner whom our Indians brought in from Fort Lydius," replied the Count de Lusignan.

"Well, the more of them the merrier," laughed La Corne St. Luc. "The bigger the prize, the richer they who take it. The treasure-chests of the English will make up

for the beggarly packs of the New Englanders. Dried stock fish, and eel-skin garters to drive away rheumatism, were the usual prizes we got from them down in Acadia!"

"The English of Fontenoy are not such despicable foes," remarked the Chevalier de Lery; "they sufficed to take Louisbourg, and if we discontinue our walls, will suffice to take Quebec."

Louisbourg was not taken by them, but fell through the mutiny of the base Swiss!" replied Bigot, touched sharply by an allusion to that fortress where he had figured so discreditably. "The vile hirelings demanded money of their commander when they should have drawn the blood of the enemy!" added he, angrily.

"Satan is bold, but he would blush in the presence of Bigot," remarked La Corne St. Luc to an Acadian officer seated next him. "Bigot kept the King's treasure, and defrauded the soldiers of their pay; hence the mutiny and the fall of Louisbourg."

"It is what the whole army knows," replied the officer. "But hark! the Abbe Piquet is going to speak. It is a new thing to see clergy in a Council of War!"

"No one has a better right to speak here than the Abbe Piquet," replied La Corne. "No one has sent more Indian allies into the field to fight for New France than the patriotic Abbe."

Other officers did not share the generous sentiments of La Corne St. Luc. They thought it derogatory to pure military men to listen to a priest on the affairs of the war.

"The Marshal de Belleisle would not permit even Cardinal de Fleury to put his red stockings beneath his council-table," remarked a strict martinet of La Serre; "and here we have a whole flock of black gowns darkening our regimentals! What would Voltaire say?"

He would say that when priests turn soldiers it is time for soldiers to turn tinkers and mend holes in our pots, instead of making holes in our enemies," replied his companion, a fashionable freethinker of the day.

"Well, I am ready to turn pedlar any day! The King's army will go to the dogs fast enough since the Governor commissions Recollets and Jesuits to act as royal officers," was the petulant remark of another officer of La Serre.

A strong prejudice existed in the army against the Abbe Piquet for his opposition to the presence of French troops in his Indian missionary villages. They demoralized his neophytes, and many of the officers shared in the lucrative traffic of fire-water to the Indians. The Abbe was zealous in stopping those abuses, and the officers complained bitterly of his overprotection of the Indians.

The famous "King's Missionary," as he was called, stood up with an air of dignity and authority that seemed to assert his right to be present in the Council of War, for the scornful looks of many of the officers had not escaped his quick glance.

The keen black eyes, thin resolute lips, and high, swarthy forehead of the Abbe would have well become the plumed hat of a marshal of France. His loose black robe, looped up for freedom, reminded one of a grave senator of Venice, whose eye never quailed at any policy, however severe, if required for the safety of the State.

The Abbe held in his hand a large roll of wampum, the tokens of treaties made by him with the Indian nations of the West, pledging their alliance and aid to the great Ontario, as they called the Governor of New France.

(To be continued.)

The auction sale of the Holstein herd of R. S. Stevenson & Son, Ancaster, Ont., on April 1st, drew a very large attendance of bidders from a wide range of distances, and fairly good prices all around were realized, the pure-bred females ranging in price from \$25 to \$310, and averaging over \$172 each. The grade cows brought \$60 to \$75 each. The herd bull sold for \$325.

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**BLACK MINORCA**—Pure-bred eggs for hatching from heavy laying strain, one dollar per fifteen. Edward Hacker, Beachville, Ontario.

**BARRED ROCK** eggs, for hatching, from best laying strain in Canada, \$2 per fifteen. Burten E. Post, Colney's Bay, Ontario.

**BARRED ROCK EGGS**, from a pen of the "National strain." Selected for this choice barring and persistent layers of perfect colored eggs, and mated with choice cockerels. Vigorous, blocky, barred to the skin. Price \$1 per 13, or \$2 for 40. W. C. Shearer, Bright, Ontario.

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

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After 1st April \$7 cockerels reduced to \$5 each, \$5 ones to \$4 each. After 15th April \$7 ones to \$4 each, and \$5 ones to \$3 each. Orders booked now and filled in rotation.

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**YOUNG MAN** (Canadian), aged 20, seeks situation with reliable, experienced fruit and market gardener; by the year preferred. Strictly temperate. Apply: C. A., FARMER'S ADVOCATE, London, Ontario.

**Married Man** Wanted to engage by the year for farm work and stock feeding; must be experienced along these lines. One having some experience in handling show Shorthorns and Clydesdale aless preferred. Comfortable house on the farm supplied.

GEO. D. FLETCHER, Binkham P. O., Ont. Wellington Co.

## Farm for Sale

Aged owner, to get quick sale of his 60-acre home farm at the low price of \$2,500, will throw in 8 cows; 600 c. rus wood, apple orchard good for 100 to 200 lbs. yearly; 9-room house, 2 barns; all in fine condition. For full details and travelling instructions to this Empire State money-maker, see page 34, "Strout's April Bulletin," just out; full of fresh bargains; illustrated; copy free. Dept. 2415, E. A. Strout Co., University Bldg., Syracuse, N. Y.

## TRADE TOPIC.

In many communities where sheep are raised it is no longer unusual to see them shorn by the hand-power shearing machines. This machine is rapidly taking the place of the old hand shear. It is said to make a smoother job, get more wool, and the wool is longer in fibre. The extra wool from a small flock is said to pay for the machine the first season. The Stewart hand-power shearing machine is one of the best on the market. The Chicago Flexible Shaft Company make it, and offer it to sheep-owners on the basis that it must please them or it can be returned at the expense of the manufacturers. Local dealers furnish the machine, or you can get it direct from the makers.

## GOSSIP.

W. K. McNaught, M.P.P. for North Toronto, has moved in the Provincial Legislature for the appointment of a commission to investigate the conditions under which milk is produced, cared for, and supplied to the people.

## SASKATCHEWAN BREEDERS MAKE CHANGES.

During the week of the Winter Fair at Regina, Sask., the stockmen at their annual meeting decided to dissolve the Saskatchewan Stock-breeders' Association and organize four associations representing the different classes of stock. This arrangement will facilitate the organization of a winter fair board, under which the show will be conducted in future.

The following officers were elected:—Horse-breeders.—President, Alex. Mutch, Lumsden; Vice-President, W. H. Bryce, Arcola. Committee of Directors—Messrs. Robert Sinton, Regina; J. Traynor, Condie; R. H. Taber, Condie. Cattle-breeders.—President, P. M. Bredt, Edenwold; Vice-President, George Kinnon, Cottonwood. Committee of Directors—R. M. Douglas, Tantallon; J. C. Pope, Regina; R. W. Caswell, Saskatoon. Sheep-breeders.—President, F. T. Skinner, Indian Head; Vice-President, R. M. Douglas, Tantallon. Committee of Directors—P. M. Bredt, Edenwold; Frank Shepherd, Weyburn; G. W. Quick, Maple Creek. Swine-breeders.—President, A. B. Potter, Montgomery; Vice-President, M. Brennan, Francis. Committee of Directors—Peter Horn, Regina; Jas. Brown, Lumsden; M. J. Stowe, Davidson.

## WINTER FAIR AT REGINA.

The exhibits at the Winter Fair, held at Regina, Sask., recently, showed an improvement over the records of past years, both in numbers and general quality. As usual the Clydesdale classes were the feature of the show. Thos. McMillan, of Seaforth, Ont., who placed the ribbons, pronounced the Clydesdale females the strongest aggregation he had seen in Canada. They comprised the champion of last Ontario Horse-breeders' Exhibition at Toronto; the champion of last Chicago International, and the champion of the Western Summer Fairs in 1908. Taber won on Eva's Gem, the fine Saskatchewan-bred mare spoken of in our last issue as winning the brood-mare class. Bell Rose, last winter's Toronto winner, was reserve.

Among those prominent in the prize money were: R. H. Taber, of Condie; A. & G. Mutch, of Lumsden; P. M. Bredt, of Regina; Traynor Bros., of Condie; R. H. Millar, of Lumsden; J. E. Martin, of Condie; Robert Sinton, of Regina; W. H. Bryce, of Arcola; Peter Horn, of Regina; Hugh Gilmour, of Pasqua, and John Graham, of Carberry, Man.

The three best in the classes were:—Clydesdale stallions, aged, over four years—Traynor Bros.' Black Ivory; Mutch's Baron Cedric, and Horn's Gold Medal. Four years—Bryce's Baron of Arcola; Traynor Bros.' Cedarstrom, and Sinton's Baron Bolton. Three years—Mutch's Duke of Barcheskie; Traynor Bros.' Baron Charming and Traynor's Tarbreoch Cedric. Two years—Bryce's Revelanta's Heir; Traynor Bros.' Homespun, and Mutch's Oak Leaf. Yearlings—Martin's Condie's Baron's Headlight, Bredt's Baron of Edenwold, and Millar's Silver King.

Clydesdale Females.—Brood mares—Taber's Eva's Gem; Bredt's Irene, and Taber's Baron's Sunbeam. Yeld mares—Taber's Bell Rose; Taber's Baron's Lassie, and Bredt's Black Diamond. Three years—Mutch's Glaswick Baroness; Taber's Queen of the Waves; and Traynor Bros.' Ladylike. Two years—Traynor's Royal Gem; Mutch's Ingleson Beauty; and Traynor Bros.' Mona's Queen.

Stallion championships: Any age, Duke of Barcheskie, Canadian-bred, Condie's Baron's Headlight. Female championships: Any age, Eva's Gem; Canadian-bred, Eva's Gem.

Percheron awards went to W. E. & R. C. Upper, of North Portal, on Robosse, W. C. Swanston, of Benson, on Doctin, and R. Sinton, of Regina, on Bourar B.

the aged class. In the junior section, Upper had first, and Dr. Henderson, of Carberry, Man., second and third. Upper also won in the female sections.

In Hackneys and Coachers, Taber won the stallion class with Copmanthorpe Swell, and in the female class with Emerald. Upper and G. W. Dale, of Qu'Appelle, exhibited good Thoroughbreds.

In cattle classes, Shorthorns predominated, with specimens from the herds of J. M. Douglas, of Tantallon; P. M. Bredt, of Edenwold; R. W. Caswell, of Saskatoon; Geo. Kinnon, of Cottonwood, and R. Johnston, of Radisson. There were a few Herefords and Angus. Jas. Hope, of Carberry, Man., won the grade-steer class.

Sheep and swine were not as numerous as they should be in the pens. In sheep, the prizes were distributed among M. I. Colton, of Tregarva; F. T. Skinner, of Indian Head; A. B. Potter, of Montgomery; Hugh Armour, of Regina, and Dr. Hunt, of Indian Head.

Fifty-seven pure-bred animals of the beef breeds were sold by Auctioneer T. C. Norris, of Griswold, Man. Superior animals brought fair prices, while on inferior specimens the bidding was slow. Top prices were: \$305 to P. M. Bredt, and two at \$250 each from the same owner. Douglas sold one at \$215. Prices ran down to \$50, giving an average for Shorthorns of \$169. A few Herefords sold at figures ranging from \$75 to \$125.

Messrs. Smith & Richardson, Columbus, Ont., report the recent sale to Mr. Alex. Graham, Oro, Simcoe Co., Ont., of the noted Clydesdale stallion, President Roosevelt, imported, [7759] (1865), sire Marcellus, by Hiawatha. President Roosevelt has made an enviable prizewinning record at leading Canadian shows, having won second at the Spring Stallion Show in Toronto in 1908, and third at the Canadian National Exhibition, Toronto, fall of same year, first and championship at the Canada Central Exhibition, Ottawa, in the same year; also second at the Spring Stallion Show, Toronto, 1909, and first and championship at Eastern Ontario Live-stock Show, Ottawa, 1909. Messrs. Smith & Richardson have also sold to Mr. Robert Armstrong, Carp, Carleton Co., Ont., the imported three-year-old stallion, Lord Dunure (13856), and to Mr. J. K. Kennedy, Moose Jaw, Sask., the two-year-old colt, Huriford, winner of first in class at Ottawa, 1909.

## CHASE AWAY THE TIRED FEELING

Dodd's Kidney Pills will do it Quickly and Naturally.

It is Caused by Sluggish Circulation Brought on by Deranged Kidneys Failing to Strain Impurities Out of the Blood.

Stayner, Ont., April 5.—(Special).—In the spring, the kidneys always need attention. They have additional work in straining the winter's accumulation of impurities out of the blood, and if they are at all out of order, it is sure to tell on them. It is only a question of the best method of treating them, and Ernest Colwell, of this place, adds his testimony to the great mass of proof that the one sure cure for sick kidneys is Dodd's Kidney Pills.

"Some time ago," says Mr. Colwell, "I had severe pains and soreness in the small of my back, and sometimes noticed a brick-dust sediment in my urine, so, of course, I knew my kidneys were affected. I procured some of Dodd's Kidney Pills, which readily cured the pains and soreness and restored the urine to its natural color. I always recommend Dodd's Kidney Pills."

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Write for Book and Samples—Free

The book will tell you all about REX Flintkote ROOFING and give photographs of buildings on which it is used, with letters of recommendation from users. The samples will show you what REX Flintkote ROOFING really is and enable you to test its properties.

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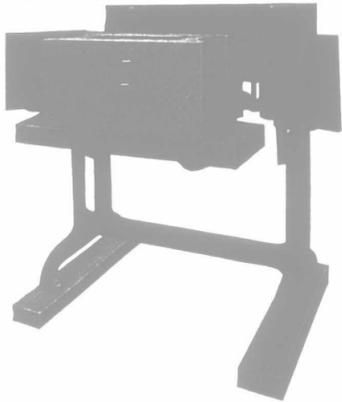
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#### QUESTIONS AND ANSWERS. Miscellaneous.

##### WEAK STIFLE.

Have a colt coming two years. Several times, on going in stable, have found his stifle partly out. He gives the leg a jerk and it goes in place. There is no cracking sound. Do you think he grew too fast (this is my opinion), and is it really stifle displacement? I never noticed it till the beginning of December.

BUSY MATRON.

Ans.—The colt is evidently weak in his stifle, though the displacement may be only partial. If no lameness is discernable, he may improve with age, without treatment. The standard treatment for dislocation is keeping the animal quiet in a box stall, and blistering the stifle at least twice at intervals. Take 1½ drams each, biniodide of mercury and cantharides, and mix with 2 ozs. vaseline. Clip the hair off front and inside of joint, and rub the blister in well. Tie so he cannot bite the parts. In 24 hours rub well again with the blister, and in 24 hours longer wash off and apply sweet oil. Let him loose now in a well-bedded box stall, and apply sweet oil every day. Blister once a month at least until a cure is effected.

##### PIGS DYING.

I have three sows that had thirty pigs about the first of February; did well for four weeks, and then the little pigs took to dying. Their stools are as yellow as sulphur; they last about two days and then die. The sows are fed barley, oats, and a little chaff. They have good, dry, warm place. The sows look well and feed well. Will you kindly give me the cause and a cure for the trouble?

T. V. S.

Ans.—I am unable to account for the condition of the pigs in question, unless it is the ration fed the sow. Would advise leaving out the barley and chaff, and substituting wheat middlings in place of same. A mixture of finely-ground oats and wheat middlings, about equal parts, makes a first-class ration for a sow, and it is difficult to improve upon such a ration. Of course, sometimes difficulties will arise when there is something wrong with the ventilation or the atmosphere generally in the piggery, but, apparently, from the statement submitted, these conditions are all right. It is impossible to say with absolute certainty what is the trouble, but it is quite possible that it is the feed, and I would advise the change suggested.

G. E. DAY.

##### IMPOUNDING ANIMALS—FENCING.

A and B are neighbors. A, last year, let his horse run on the road, and gave B a lot of bother by getting into his crops. B asked A if he could not keep it off the road, as it was damaging his crops, and A's answer was that he was not going to keep it off the road, that he had no other feed for it. Last year B had a fence along the road, but A's horse would get over any ordinary fence. Last fall fence burned down. B lives in an organized township, where the council has provided poundkeepers. A lives in an unorganized township.

1. Provided the horse bothers this year, what steps should B take to recover damages?
2. Does a man have to fence his farm in to keep other people's stock out, or only to keep his own in?
3. If so, is there any such thing as a lawful road fence?
4. Is it illegal to erect a barbed-wire fence along the road?
5. What would you consider a lawful line fence, or would that be left to the decision of the fence-viewers?

Ontario.

W. J. R.

Ans.—1. Apparently, your township council has made provision for such cases by by-law passed pursuant to Sec. 546 of the Consolidated Municipal Act, 1903. (3 Edw. VII., Chap. 19)—probably by way of impounding, and you should accordingly have the township clerk show you such by-law for the desired information.

2. Generally speaking, it is to keep his own stock in.

3, 4 and 5. These questions depend for answer upon local municipal by-laws.

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with strong rigid Wringer Stand

This new Wringer Attachment is "head and shoulders" above any other. The entire stand is absolutely rigid—always in position—never in the way—and the water drains right into the tub. "New Century" Washing Machine—complete and delivered at any railway station in Ontario or Quebec—only \$9.50. Write for free booklet.

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C. H. McNISH, Lyn, Ont.

DAHLIAS 16 KINDS (my selection) \$1. Send for beautiful illustrated catalogue of new dahlias. H. P. VAN WAGNER, STONY CREEK, ONT.

#### QUESTIONS AND ANSWERS. Miscellaneous.

##### CORN, ALFALFA, CLOVER AND ROOTS.

Editor "The Farmer's Advocate": In your issue of March 25th, Mr. Deadman writes that he believes that by growing alfalfa we can dispense with corn and roots. Other writers tell us to grow more corn and build silos; others advocate growing more roots. I intend to build a silo, and I like roots, and I am going to sow ten acres of alfalfa this spring, but before building a silo I would like the opinions of some experienced farmers, through your valuable paper, as to whether it pays to grow corn and roots, considering the cost of labor and building silo and machinery for cutting corn, and which of the two policies is the better to follow. (a) Silage, or alfalfa or roots; (b) silage, and alfalfa and roots? W. T. H.

Ans.—We say the second; silage and alfalfa and roots; also clover—and plenty of them, especially of silage, clover and alfalfa, with a moderate acreage of roots each year to provide an appetizing and tonic relish for the stock. What say our readers?

#### TRADE TOPIC.

An increasing interest in cement construction is accompanied by improved machinery for doing the work. The Singer Down-face Block Machine, manufactured by Vining Bros., and advertised in this issue, a most complete outfit, is offered at a very reasonable price. Contractors and those intending to build should write for catalogue.

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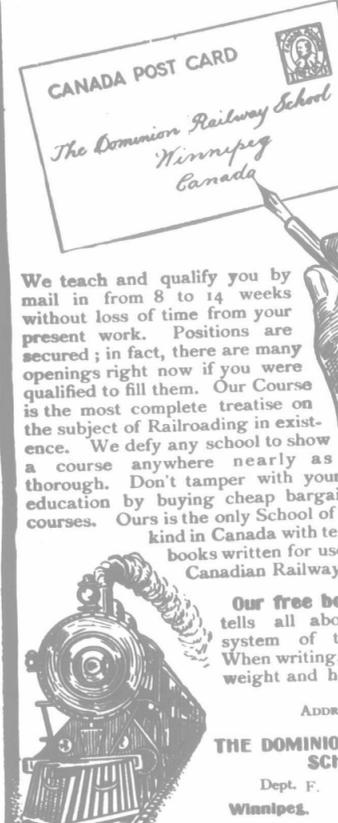
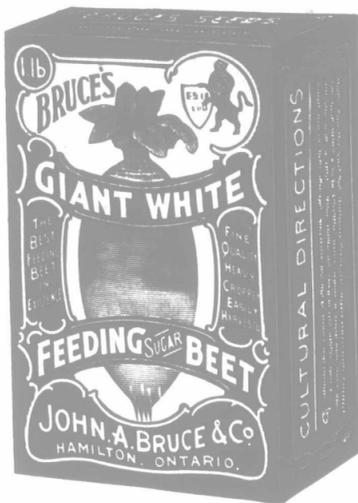
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Regina, Sask.; Hamilton, Ont.; Vancouver, B. C.

### QUESTIONS AND ANSWERS. Veterinary.

#### CRACKED HEELS AND MALLENDERS.

Mare is in good condition, but has broken out in her legs. The front legs have broken out just behind the knees, and the hind legs at heels and fetlocks.

J. J. B.

Ans.—This is a skin disease. The trouble at the knees is called mallenders; that at the heels, cracked heels, or scratches. The mallenders will be hard to cure, on account of the action of the joint. Give her a purgative of 8 drams aloes and 2 drams ginger. Follow up with 1 1/2 ozs. Fowler's Solution of Arsenic twice daily for a week. Dress the cracked parts 3 times daily with a lotion composed of 1 oz. each of sulphate of zinc and acetate of lead to a pint of water. Do not wash the parts; keep clean by brushing or rubbing with cloths.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### TIME TO SOW SALT ON BARLEY

When is the best time to sow salt on barley? At the time of sowing the grain, or just when the seed is sprouted, or when there is a good raid? R. H.

Ans.—Just before the grain is sown or immediately after.

#### BARLEY ON BEET LAND—SALT AS FERTILIZER.

I have four acres of beet land that I wish to sow to barley. What value is salt to it as a fertilizer? How much of it should be sown to the acre? Also, how would you sow? With the grain, or by hand after seeding, or before the drill? C. A. D.

Ans.—If your beet land was in proper condition for the production of a satisfactory crop last year, it should not be necessary to add any fertilizer this season to get a fine crop of barley. Salt is an uncertain fertilizer; sometimes beneficial and sometimes injurious. It does not supply plant food to any appreciable extent. Its benefit, if any, comes from the action on the soil, rendering plant foods already there more available. Some claim, also, that it tends to hold moisture in the soil. On some soils the straw of cereal crops is brightened and made stiffer by the use of salt. The advisability of its use is very questionable, depending somewhat on the nature of the soil and the season. About 200 pounds per acre, put on by any means that will ensure reasonably even application, before the seed is sown, is advocated as a fair amount to use. Its most marked effect is usually observed on mangels. Break and scatter any large lumps and avoid an uneven application.

#### POULTRY HOUSING—HORN DISTEMPER.

1. What size would you build a poultry house where fifty hens are being kept? This house would be for winter and summer use.
2. How warm should a poultry house be in winter time to give good results? Should it be so it would not freeze?
3. Would you advise ground floor in poultry house if the ground was dry?
4. Is there any such disease in cattle as horn distemper.

#### SUBSCRIBER.

Ans.—1. Fifty hens are rather too many to keep in one flock for best results. We would prefer to recommend two portable colony houses, each about eight or ten feet by twelve, to accommodate 25 birds apiece. A fifty-hen portable house would require to be not less than 12 x 16 feet in dimensions; 14 x 16 would be better. A stationary house for 50 birds should be at least 14 x 16 feet; even this is somewhat less than the allowance commonly advised by poultry authorities, which is about 5 or 6 square feet per bird.

2. It need not be warm. An occasional zero temperature inside will do no harm to breeds with reasonable sized combs so long as the atmosphere is dry, the air pure, and the birds well lighted during the day. In fact, the more to be feared than cold.

3. Yes.

4. No.

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Are you going to seed down a field with this valuable forage plant?

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"Diamond" Brand Timothy, \$3.25 "

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#### SEED PEAS.

Golden Vine, Canadian Beauty, Potter, Black Eye, Twin Brother, \$1.25 per bush., f.o.b.

#### SPRING WHEAT.

Red Fife, White Fife, White Russian, Wild Goose, \$1.50 per bush., f.o.b.

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Imp. Leaming, White Cap Yellow Dent, Mammoth Southern Sweet, Red Cob, Pride of the North, \$1.10 per bush., f.o.b.; Compton's Early, Longfellow, Canada Yellow, North Dakota White, \$1.40 per bush., f.o.b.

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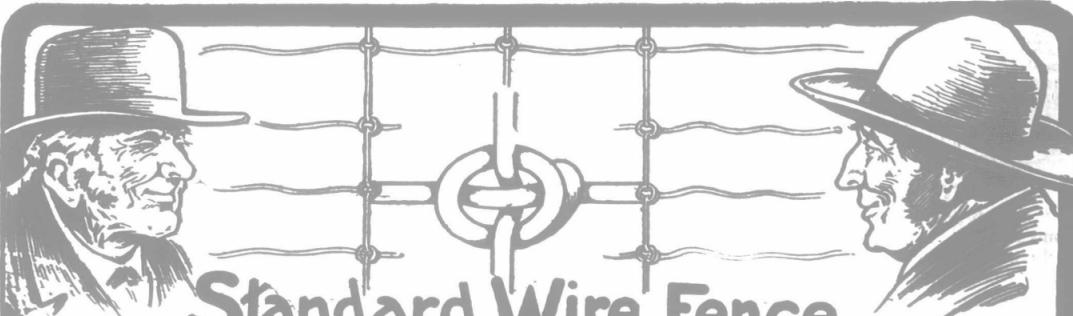
GOSSIP.

The Canadian National Bureau of Breeding will make a big showing at the Montreal Horse Show, in May, 12th to 15th. Besides exhibiting a large number of stallions in the Special Bureau Class, there will be a good representation in the open class, and at least one entry in the class for Thoroughbred stallions under four years old. All Bureau stallions stationed in the Province of Quebec, four years old and upwards, are eligible to compete in the open class. The National Bureau will probably enter Sea Horse Rosemount, Masterman, Ostrich, Oraculum, Javlin, and Our Boy, in this class.

**T. H. HASSARD'S CLYDESDALES.**  
That 1909 is thus far proving a record-breaker in the demand for good big horses, including stallions and mares for breeding purposes, is attested by all those in the horse business. Importers report the last three months as the best in many years, dozens of stallions having been sold and scattered from one end of the country to the other, where all will do their share in improving the draft horses of Canada. The well-known importer of Clydesdale horses, Dr. T. H. Hassard, of Markham, Ont., reports the sale of over twenty stallions in the last few months, and he has still left in his stables at Markham, ten stallions of as royal breeding and as high a standard of individuality and quality as can be found in the country. They are: Dunure Nikko (imp.) [8792] (14102), a bay three-year-old weighing 1,850 pounds, by the champion, Hiawatha, dam by the double champion, Prince of Albion; this is one of the best colts ever imported to Canada, and a winner both in Scotland and Canada. Black Regent (imp.) [8798], a black three-year-old weighing 1,800 pounds, sired by the great breeding horse, Dunure Freeman, dam by the Cawdor-cup champion, Royal Gartley; this is a grand quality colt and a wonderful mover. Coming Times (imp.) [8795], a brown three-year-old weighing 1,800 pounds, sired by George the First, dam by the noted sire and winner, Boreland Pride; this is a big, smooth colt. Loreburn (imp.) [8790], a bay four-year-old weighing 1,850 pounds, by the invincible Hiawatha, dam by the four-times Cawdor-cup winner, Prince of Carruchan; this is a show horse all over, a credit to his illustrious sire and grand-sire. Baron Midseat (imp.) [8791], a bay four-year-old weighing 1,950 pounds, by the noted breeding horse, Baron Solway, dam by Midseat Prince; this is a very thick, smooth horse, of superb quality. Silver Cloud (imp.) [8797], a bay four-year-old weighing 1,800 pounds, by Prince of Merryfield, dam by Scottish Crown; this is a very stylish quality horse. Carrellus (imp.) [8799], a brown six-year-old weighing 1,800 pounds, by Hiawatha, dam by Prince of Carruchan; as his royal breeding would indicate, this is a grand mover and a quality show horse. Dunure Matt (imp.) [14550], a brown two-year-old, by the champion and sire of champions, Baron o' Buchlyvie, dam by Ethiopia; this is a coming show horse. Prince Togo (imp.) [8788], is a brown weighing 2,050 pounds, eight years old, a half-brother to Hiawatha, being sired by Prince Robert, dam by William the Conqueror, and his third dam is by Barnley; he is a big flash horse of superb breeding, and a sire of high order. Mr. Hassard has also on hand four Hackney stallions and two Standard-bred stallions. All are for sale at close-cut prices, and on favorable terms.

QUESTIONS AND ANSWERS.  
Miscellaneous.

**MIXED GRAINS AND FLAX.**  
What proportions of oats, barley and peas would you recommend for a crop of mixed grain, and how much seed per acre would you advise? Would you advise sowing flaxseed with it?  
H. E. W.  
Ans.—Barley, oats and peas, three pecks of each to the acre should be a fair mixture. Varieties that take, approximately the same time to mature, should be used. If experience has shown this to be so heavy seeding on your soil, use less of the barley. It is probably better to attempt growing flax mixed with other crops. Flaxseed must be fed judiciously, and, if grown with grains, it should be found to be not evenly distributed after threshing.



## Standard Wire Fence

No trouble with cattle breaking through and destroying crops. No fear of fences being down after an ordinary storm.

There are no soft wires—no weak spots in the "STANDARD."

"Standard" Wire Fence is all No. 9 Hard Steel Wire, that has the strength and lasting qualities which every farmer wants.

All wires are well galvanized. That means no rust and long wear—and the crimp in the wires allows for contraction and expansion.

Then there's the "Tie That Binds"—the greatest little invention of recent years.

This tie hooks on the running wire and locks smooth on both sides. Being a long oval loop, it permits of a long bend in the line wires.

This tie does not injure the running and upright wires, yet holds the wires absolutely secure at the point of crossing.

Get the true facts about wire fences. Write for our book and sample lock.

**THE STANDARD WIRE FENCE CO. OF WOODSTOCK, LTD. - - - WOODSTOCK, ONT. 8**

The  
**Jones  
Patent  
Elevator  
Pays for  
Itself**

**THE Jones Patent Elevator is the only Sling Outfit that lowers its load into mow before being tripped. It unloads your whole harvest, bound or unbound, such as hay, short dry clover, loose barley, peas, sheaves, seed clover, etc. The sling don't have to fall all the way from track, in peak of barn, to mow—as with other horse forks or sling outfits. Jones' Patent Elevator lowers load from track to man in mow. He can take his fork and swing load to any part of mow and trip it. In this way mow is kept level, saving nearly all work of mowing away, besides doing away with the old time packing down of hay and grain in centre of mow. Jones' Patent Elevator has many other new important improvements, all of which are explained in our free catalogue. The Jones Patent Elevator is made of finest malleable iron and steel, of double weight and strength. It is the strongest elevator and unloads any load of hay or grain in three lifts. There are thousands giving excellent satisfaction. We will ship a Jones Patent Elevator on trial. After you use it, if you are not pleased, ship it back and we will pay freight both ways. It is sold on easy terms, and will pay for itself the first season. Drop us a card and we will send you our Booklet free, which explains the Jones Patent Elevator in detail.**

Write us today, address:  
**The Hamilton Incubator Co., Ltd., Hamilton, Ont.**



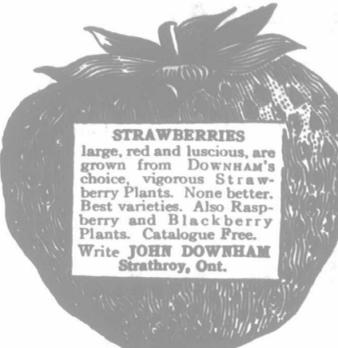
# RENNIE'S

Strong Growing  
**Stand the Test**

Leading merchants sell them. In sealed packages.

**WM. RENNIE CO., Limited, Toronto,  
Montreal, Winnipeg, Vancouver.**

# SEEDS



**STRAWBERRIES**  
large, red and luscious, are grown from DOWNHAM'S choice, vigorous Strawberry Plants. None better. Best varieties. Also Raspberry and Blackberry Plants. Catalogue Free. Write **JOHN DOWNHAM** Strathroy, Ont.

### Guaranteed Wheels

We guarantee our Low, Wide-tire Steel Wheels against any defect in material and workmanship. We guarantee they will not break in the coldest weather, or on rockiest road. It will pay you to learn more about these Guaranteed Wheels, so write for catalogue.



**DOMINION WROUGHT IRON WHEEL CO., LIMITED, Orillia, Ontario.**

**SEED BARLEY (Mandscheuri)**  
In 1908 field competition won by 9½ points over county, and 2 points over Province. Very clean, heavy yielding, strong-strawed. \$1.00 per bushel.

**J. & D. J. CAMPBELL,  
FAIRVIEW FARM, WOODVILLE, ONT.**

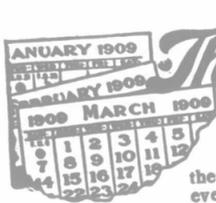
**SEED OATS BLACK JOANETTE.**  
Produced 500 bushels from 10 bushels seed last year. Extra well cleaned. Send for sample and price.  
**J. S. HENDERSON, ROCKTON ONTARIO**

## Executors' Sale!

OF CANADA'S GREATEST HERD OF  
**HEREFORDS AND SHORTHORNS**  
At Forest, Ontario, Thursday, April 15, 1909.

The entire herds, part of the estate of the late J. A. Govenlock, Forest, Ont., winners at all leading fairs, will be sold without reserve.

**T. E. ROBSON AND W. E. MOLOY, AUCTIONEERS.**



## Three Months gone!

Three months of this year have gone and you are run right down! If you are "played out" in 3 months how can you hope to keep up for the rest of the year? Read the following story from B.C. and receive the hope it gives to every weary, worn and played-out man and woman.

### COULD SCARCELY GET AROUND

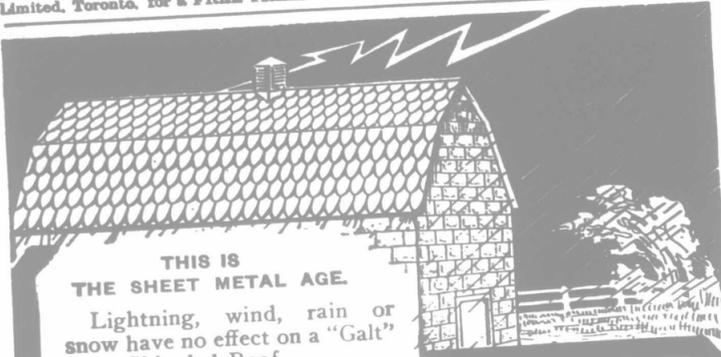
"Mrs. Worden has taken four bottles of PSYCHINE and it has made a new woman of her. Before she started to take PSYCHINE she could scarcely get around to do her work, and now she can do it without feeling the least fatigued. I will strongly recommend PSYCHINE to any one. It will relieve their suffering."

W. J. WORDEN, Works Point Barracks, Victoria, B.C.

This is just what PSYCHINE was intended to do. Thousands of weary toilers have praised God for PSYCHINE, the Greatest of Tonics, and many were on the verge of decline before they heard of it. But no matter how far gone, PSYCHINE has proved their friend and wrought deliverance. PSYCHINE goes to the seat of the trouble, and while it is creating Rich, Red Blood, it attacks any diseased parts of the Throat, Lungs, Chest and Stomach. PSYCHINE is rightly merited the title given it by thousands, viz., the "Great Tonic Healer." PSYCHINE is highly recommended by the Medical Profession because of its great Tonic properties. It creates an appetite and gives new life when all else has failed.

All Druggists and Stores sell PSYCHINE at \$1.00 a bottle. Send to Dr. T. A. SLOCUM, Limited, Toronto, for a FREE TRIAL.

**PSYCHINE**  
THE GREATEST OF TONICS FOR HEALTH AND ENERGY



### THIS IS THE SHEET METAL AGE.

Lightning, wind, rain or snow have no effect on a "Galt" Steel Shingled Roof.

Lightning just glides off our steel roof, follows down the conductors and disappears into the ground.

The continuous, overlapping, interlocking top joint and the Gale-proof, closed-end, side-lock afford no opening for the wind—and entirely prevent water or snow from being blown through the joints—one of the weaknesses of other shingles.

THE GALT ART METAL CO., LIMITED, GALT, ONT.  
Sales and Distributing Agents: Dunn Bros., Winnipeg and Regina.

## "Galt" Shingles

### Are You Building?

If so, don't take chances on your roof by buying "extravagant claims," but get a good old-fashioned roofing of quality, made by a firm established in 1817.

**Paroid Roofing Facts.**—It has stood the test of years on Government buildings, mills, farm and poultry buildings. Easiest to lay—most attractive.

## PAROID ROOFING

is not a low priced roofing, but the slight difference in cost over cheap roofings is made up by a big difference in quality.

**OUR GUARANTEE:** Buy one roll of PAROID, apply it to your roof. If you are not satisfied that you have the best, we will send you a check for the amount you paid for the roofing and the cost of applying it.

Write for more facts and sample of PAROID, also free booklet of plans entitled "Practical Farm Buildings" if about to build.

F. W. BIRD & SON, Established 1817.  
Dept. 113 HAMILTON, ONT. Br'ch Office, Winnipeg, Man.



### Our Hand Spramotor No. 1 or No. 2.

Mounted on a cart, with strong hardwood frame; 52-inch wooden wheels, with iron hubs; steel axles. For one horse. All-brass 4-row sprayer. Wheels and nozzles adjustable from 26-inch to 36-inch. Vertical adjustment from rack 16-inch. Automatic vertical nozzle adjustment, brass spramotor. Ball valves. Automatic compensating plunger. Mechanical agitator. Can be used for orchard, vineyard, mustard and potatoes, or painting and whitewashing. Sold without cart as well. Prices from \$16 to \$50. Guaranteed for one year. Treatise on crop diseases free.

SPRAMOTOR, LIMITED, 1056 KING ST., LONDON, ONT.

### GOSSIP.

#### HORSE NOTES.

W. C. Kidd, of Listowel, Ont., has sold the good pacer Barthena Bars, 2,094, to James Tonkin, of Fort William. Mr. Kidd owns the crack trotter, Monbars Jr., by Monbars; dam Wild Crocus, 2,25; largely entered in rich stakes the coming season, and other stars of the turf.

Mr. James Wetherill, manager of Cruickston Park Farm, Galt, Ont., is reported, has purchased the Imp. Hackney stallion, Crayke Mikado 9176, foaled 1904, sire Garton Duke of Connaught, dam Halsham Topsy, by Lord Derby 2417. It is the intention to mate a number of the Standard-bred mares to this famous stallion.

M. W. Savage, Minneapolis, now owns the following famous quintette of trotting and pacing stallions: Dan Patch, 1,55; Minor Heir, 1,594; Directum, 2,054; Roy Wilkes, 2,064, and Arion, 2,074. The average speed of these five horses, by their records, is 2.02 17-20, and each one of them has the breeding of a champion to back up his breeding. Two are representatives of the Wilkes family—Dan Patch and Roy Wilkes, the first named being the world's champion, and king of the Wilkes tribe. Directum is the top-notch of the famous Dictator family. Arion is at least the peer of any representative of the Electioneer family, while Minor Heir represents the best line of the Mambrino family, that coming through Mambrino King (with a Wilkes cross) and a cross to Harold through the female line.—Horse World.

#### HAWTHORN SHORTHORNS.

The widespread fame of the Hawthorne dairy-bred Shorthorn herd of Wm. Grainger & Son, of Londesborough, Ont., is such that the demand for herd-headers bred essentially on milk-producing lines from this great herd is continually on the increase. Of last year's crop of bull calves from the large herd, all are sold of serviceable age but two, and most of them were bought by correspondence, and the flattering letters received by the Messrs. Grainger from their purchasers on arrival of the bulls are certainly very encouraging, and a testimonial of their straightforward way of doing business. These two young bulls are by no means the culs, but are a straight, thick pair, as good, Mr. Grainger says, as he ever bred, sired by the splendid Lavender bull, Lavender Lorne, a son of the Lavinia-bred bull, Pleader, essentially dairy bred, as the Lavenders and Lavinias are among the greatest milk-producing strains of the Shorthorn breed, and these young bulls, on their dam's side, are bred from a strain descended from another great milking strain, founded on Imp. Princess 419, and closely related to cows that have shown their ability to produce from 16 to 20 lbs. butter in seven days. These young bulls will go quick, as there is a big demand for bulls bred as they are. There are also for sale a number of choice females from calves up to others in milk. The farm is most easily reached from Blyth Station on both the G. T. and C. P. R., distant about four miles. In writing, address all correspondence to Londesborough P. O., Ont.

#### MORRISTON TAMWORTHS.

The Morriston herd of large English Tamworth hogs, the property of Mr. C. Currie, Morriston, Ont., whose record as a show herd are second to none in Canada, are particularly strong this spring. The baker's dozen of big brood sows, nearly all of them prizewinners at Toronto National and Guelph Winter Show, are in fine condition, and nearly all rearing litters by that grand stock hog, Imp. Knowles King David. These sows, ranging in weight from 400 to 700 lbs. each, are ideal in type and quality all over. No more desirable breeding stock is available in Canada than the produce of these sows. Very many of the younger things, both in sows and boars, are the get of Ingram's Choice, imported in dam, a hog that has won his honors at Toronto in the strongest kind of company, and has proven himself a sire of prizewinners. Lately, Mr. Currie has purchased from the great herd at Macdonald College, Ste. Anne de Bellevue, Que., a young hog for breeding purposes. He is a grand young hog, bred from imported sire and dam, and should make good as a sire. Although the demand for breeding stock has

been very strong this winter, Mr. Currie has still for sale a number of young sows, from three to six months of age; also a limited number of young boars, from four to six months; a most desirable lot, and bred from winners. Including the youngsters, of which there are a large number, the herd is now about 90 strong. Parties wanting something extra nice in Tamworths should communicate with Mr. Currie, as those on hand of breeding age will soon be gone.

### TRADE TOPICS.

Ontario-grown stock of vigorous plants of standard varieties of strawberries, raspberries and blackberries, are offered for sale in this issue by John Downham, of Strathroy. Care is taken to select only choice plants. A catalogue will be sent on application to Mr. Downham.

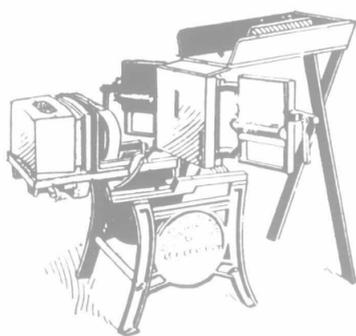
Among the building materials selected by the United States Government for shipment to Messina to provide shelter for the earthquake sufferers, was Paroid Roofing, advertised in this issue. A quantity sufficient to cover 770,000 square feet was supplied. This is a high tribute to the manufacturers. It proves that experts considered the roofing suitable for hot climates, and also that it can be quickly and readily made use of. Railway managers, manufacturers, and farmers, do not hesitate to testify to the merits of Paroid Roofing. It has been on the market since 1817.

Following is one of the many testimonials received by Tuttle's Elixir Co., 32 Gabriel street, Montreal, Can.: It gives me the greatest pleasure to state that I have used Tuttle's Elixir, and I cannot express myself too strongly upon its merits as a curative for lameness in horses. I may state that I have a valuable carriage horse which the veterinarians pronounced to be spavined, and upon their advice I used various spavin cures. The horse was laid up for months, and the application of the spavin cures did him absolutely no good. I fortunately was induced to try your Elixir. One bottle was applied according to directions. It located the lameness, which proved to be in the stifle. I continued the use of the Elixir for three weeks, and my horse was sound, and has been sound ever since, and that is months ago. P. Faucher, 796 Craig street, Montreal, P. Q.

The new illustrated catalogue prepared by The London Concrete-machinery Co., gives full instructions for handling concrete for different classes of work, with figures and estimates in many kinds of construction. Handsome illustrations are given of four types of concrete-mixers, concrete-block machines, silo-block machines, silo curbs for building round monolithic silos, cement-brick machines, ornamental porch-column and baluster moulds, pier-block moulds, lawn-vase moulds, headstone moulds, grave-post moulds, tile and sewer-pipe moulds, rock-crusher, sill-step and window-cap mould, fence-post mould, hitching-post mould, side-walk tools, cement-working tools, wheelbarrows, and many cement-working appliances. Read their advertisement in this issue and write for a catalogue, mentioning "The Farmer's Advocate."

The merit and popularity of Planet Jr. implements is shown by the two million users at the present time, and the enlargement of the factory which has been made necessary to supply the increasing demand. S. L. Allen & Co., of which Mr. Allen is head, is the organization which now make these implements, and they have issued a new 56-page illustrated catalogue which they are sending free to those who write to S. L. Allen & Co., Box 1108F, Philadelphia, Pa. Mr. Allen, years ago, modelled his implements with the prime purpose of reducing back-breaking labor and increasing returns from garden crops. They were not long in use on his own farm before neighbors wanted to borrow from him. He then decided to manufacture and sell to meet the demand. Improvements from time to time maintain the popularity of Planet Jr. implements, of which 45 kinds now are made.

# BUILD CONCRETE SILOES FROM Solid Concrete or Concrete Blocks



The London Adjustable Silo Block Machine.

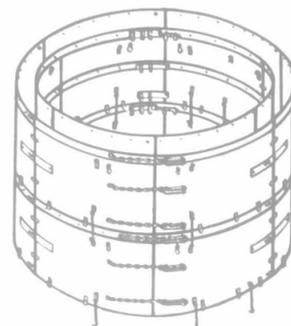
The **London Adjustable Silo Curbs** build the Concrete Silo described on page 574 of this journal.

We **control the patent rights** and manufacture the only Adjustable Silo Curb. These curbs **need no recommend** from us. They are now used by the Government Farms and Institutions, and extensively in every corn-growing district in Canada.

If there is no contractor in your vicinity operating these curbs, **why not secure a set yourself and go into the business?**

The **LONDON ADJUSTABLE SILO BLOCK MACHINES** build the celebrated sealed air-tight concrete block silo described on page 1896 of the Christmas number of the FARMER'S ADVOCATE.

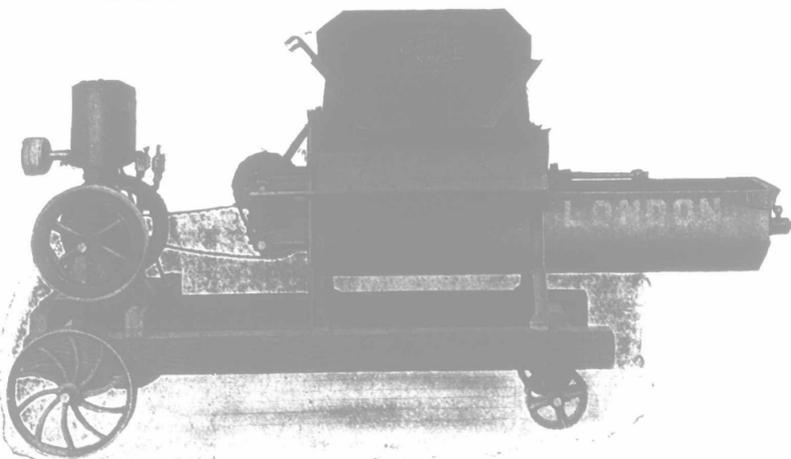
Our catalogue tells all about these siloes. **When writing us for catalogue** always inform us whether you simply desire a silo built or whether you contemplate taking contracts of building concrete siloes.



The Patent Adjustable Silo Curbs.

## The LONDON AUTOMATIC CONTINUOUS-BATCH CONCRETE MIXER, No. 1.

Capacity, 40 yards per day.



Price without power, \$160.00; equipped with power, as shown in this illustration, \$275.00.

With this machine you can defy competition on small contract work. **Why does it save you money?** Simply because the **materials only have to be handled once. No extra shovelling, no wheeling, no measuring, just keep the hoppers full, and the machine will do the rest.** Will give **any desired proportion**, will mix **any kind of material** with any consistency of moisture. **Measurements absolutely perfect.**

This machine is selling **as fast as we can make it.** **Let us have your order. We guarantee you satisfaction** or will refund your money.

We also manufacture concrete mixers for hand power, also large concrete mixers with a capacity of 180 yds. per day. We also manufacture Face-Down Concrete-block Machines, Cement-brick Machines, Sill, Step and Window-cap Moulds, Concrete Fence-post Moulds, Concrete Sewer-pipe and Tile Moulds, Concrete Block and Brick Cars, Wheelbarrows and Carts, Ornamental Pier Block and Porch Column Moulds, Baluster Moulds, Lawn-vase Moulds, Hitching-post Moulds, Mortar Screens, Mortar Hoes, Sidewalk Tools, and a full line of Concrete Machinery and Cement-working Tools.

**THE London Concrete Machinery Co., LTD.**

19 Marmora Street, LONDON, CANADA.

We are the largest manufacturers of Concrete Machinery in Canada.



## MODEL Incubators and Brooders

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

Twelve Reasons Why YOU Should  
Use Model Goods:

1st. Because there are no other goods on the market just as good as the Model Goods.

2nd. Because we give about double the value for money that other manufacturers do.

3rd. Because you have no trouble in hatching good, strong, healthy chicks with the Model Incubators.

4th. Because the Model Regulators are as near perfect as it is possible to make them. We claim we have the best regulator on earth.

5th. Because you will find the Model the most simple machine to handle; no cut-offs or other devices. Model Incubators regulate themselves; once set will run a whole season without change.

6th. Because you can go to your rest at night perfectly satisfied that the lamp and regulator will take care of the machine without the least anxiety or care on your part.

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

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

7th. Because all our machines are manufactured of the best hardwood (chestnut) with double walls, and packed with wool.

8th. Because the Model Goods are built for business, and to last a lifetime.

9th. Because we do not attempt to compete with a lot of the poor trash there is on the market.

10th. Because we want you to try us just once. We know if you do we have made a life-long customer.

11th. Because the Model Brooders take care of the chicks when hatched and rear them.

12th. Because we could fill a book with reasons why you should purchase Model Goods, but don't know one reason why you should not send us along your order and give us a trial.

## FENCE TALK No. 5

Page Fences have "high-carbon" horizontal 9-gauge wire.

High-carbon wire is harder, tougher, and far stronger—from a third to a half as strong again—stands 2,400 lbs. strain-test.

Page Fences, because of this extra strength, have ample spring in reserve to hold a long panel tight and sagless with fewer posts by a third.

Page Fence uprights are fastened to horizontals by a positive lock, clinched so tightly as to make a solid joint that cannot work loose nor slip—even under the severest strain. But the intersecting wires are not injured.

These are the reasons why Page Fences cost less and wear best, because they need a third less posts and a third less labor to erect, and yet make a tighter, sightlier, sag-proof and more enduring fencing. Go by the book—it tells all about every style of Page Fences and shows how to prove fence-value before you buy. Ask for it (it's free) from Page Wire Fence Co., Ltd., Walkerville, Toronto, Montreal, St. John, Vancouver, Victoria.

Other fences have only "hard drawn" wire.

Hard drawn wire is softer, is weaker—stands but 1,800 lbs. strain-test.

Other fences thus lack springiness, need three posts to Page Fence's two and then sag and give.

Other fences half-fasten the crossing wires together with a mere twist of wire that will slip. Some use locks that dent and weaken the wire.

## "PAGE FENCES WEAR BEST"

## DON'T BUY GASOLINE ENGINES

UNLESS YOU INVESTIGATE "THE MASTER WORKMAN," a two-cylinder gasoline, kerosene or alcohol engine, superior to any one-cylinder engine, revolutionizing power. Its weight and bulk are half that of single cylinder engines, with greater durability. Costs Less to Buy—Less to Run. Quickly, easily started. Vibration practically overcome. Cheaply mounted on any wagon. It is a combination portable, stationary or traction engine. SEND FOR CATALOGUE. THE TEMPLE PUMP CO., Mfrs., Mcagher and 15th Sts., Chicago. THIS IS OUR FIFTY-SIXTH YEAR.

**Well DRILLING & PROSPECTING MACHINES.**  
Fastest drillers known. Great money earners!  
**LOOMIS MACHINE CO., TIFFIN, OHIO.**

## SEA GREEN & PURPLE SLATE ROOFS NEVER WEAR OUT

**SEA GREEN AND PURPLE SLATE** is nature's own product—not man made. Quarried from solid rock—split into convenient form for laying, and then in its natural state ready for the roof. **SOLID ROCK CAN NOT WEAR OUT** It can't burn, rust, warp, crack, tear, or decay. That's why Sea Green or Purple Slate Roofs never wear out and never require painting and repairing like all other roofing. Sea Green & Purple Slate Roofs are suitable for any building, new or old. Give perfect protection. Reduce insurance rates because spark and fire-proof. Afford clean cistern water. Not affected by heat or cold. First cost—only a trifle more than short lived roofing. Settle your roof question for all time. Don't spend more money for poor roofing. Write to us for our free book "BOOFS"—it will save you money. Give name of your local roofer. Write today.

AMERICAN SEA GREEN SLATE CO., Box 3 Granville, N. Y.

## "Leader" Fence

Has the Double Grip Lock

Don't buy wire fence until you've seen our new woven fence which is so vastly superior that we have appropriately named it the Leader. It is a hard steel wire fence, heavily galvanized—both laterals and stays No. 9.

But the "Leader" Lock—that is the really great improvement. It has the double grip—makes twice as strong a binding—twice as strong and durable a fence. Of

course, it takes more wire, but it makes a fence so much better that it will be that much easier to sell. Will give such genuine satisfaction that we are certain of repeat orders from all purchasers

Will You Sell "Leader" Fence For Us

in your locality? Also act as our representative for our complete line of farm and ornamental fence and gates? Write to-day for our money-making proposition.

Frame & Hay Fence Co., Ltd., Stratford, Canada

## Success Manure Spreader Has Light Draft Roller Bearings

When purchasing a manure spreader you naturally look for the lightest draft machine, but you need look no farther than the "Success" spreader. The "Success" has always been the lightest draft manure spreader, and the recent introduction of Five Sets of Roller Bearings still further decreases the draft—places the "Success" far ahead of its competitors.

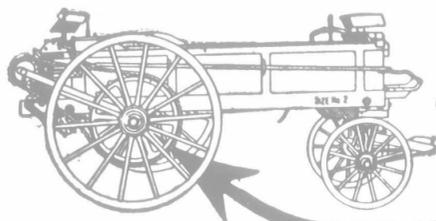
The arrows show you where these draft-reducing Roller Bearings are located—one set on either end of the rear axle, one on either end of cylinder shaft, one in the combination gear and sprocket. Thus, you see, the "business end" of the spreader—the mechanism that has the work to do—is made to run with the greatest ease and smoothness.

These "Roller Bearings" prevent the wearing out of boxes and other bearings—and add years to the life of the machine. They decrease the draft at least the equal of a horse.

These "Roller Bearings" are accurately cut out of cold rolled steel and rivetted together in substantial, durable boxes. They can be removed from the machine without coming apart.

● If you want the easiest running, most durable, greatest improved manure spreader in the world buy the New 1909 "Success."

A Simple instantaneous change of Feed Device. One lever moves a pinion from one row of teeth to another on a Disc Gear, without separating pinion and gear and no ground is shipped.



ARROWS ALL POINT TO ROLLER BEARINGS ON BUSINESS END OF "SUCCESS" SPREADER.

B Force Feed Worm and Gear Drive guarantee smooth and positive motion of the apron whether going up or down hill, or on level.

C Beater of "Success" is driven by Direct Steel-Pinned Chain Drive. This method makes "Success" lighter draft than any other spreader.

THE PARIS PLOW CO., LIMITED, PARIS, ONT.  
Western Agents: The John Deere Plow Co., Ltd., Winnipeg, Regina, Calgary and Edmonton  
Agents for Quebec and Maritime Provinces: Frost & Wood Co., Ltd., Montreal, Quebec, St. John, N. B.

### GOSSIP.

Messrs. John McFarlane and W. H. Ford, Dutton, Ont., have sold to Wm. Carrol, Cowal, Ont., a very handsome dark red 16-months-old bull, Royal Prince. They have twelve nice ones still on hand at various ages, from 10 to 18 months, from imported sires, and some out of imported dams. They also make mention of a profitable sale of Lincoln sheep to Mr. R. S. Robson, of Iderton, Ont.; twelve ewes of extra-good quality, and eight shearing rams of good type. In Hackneys they have for sale a three-year-old broken-in; also a yearling filly.

In Berkshires for sale there are a number of choice youngsters of both sexes, from three to five months of age, sired by that splendid hog, Oakdale Masterpiece. In Leicesters there are left two ram lambs, and a few shearing ewes could be spared; also eggs from the Buff Orpingtons, Pekin ducks and Bronze turkeys.

Mr. F. E. Pettit, whose advertisement of Holstein cattle in "The Farmer's Advocate" resulted in the sale of all the stock offered, now advertises a valuable recipe for calf scours, which he considers of great value to dairymen, he having had fifteen years' experience with it without a single loss.

### SIMPLE SUBTRACTION.

During an arithmetic lesson the teacher was endeavoring to make one point clear: "Now, boys and girls, in order to add, subtract or multiply, it is necessary that the things must be always of the same denomination. For example, we couldn't take three oranges from four apples, or multiply nine horses by two cows." Thereupon Sammy Stilson evinced signs of uneasiness. "What is it, Sammy?" asked the teacher. "Why, ma'am," asked Sammy, as he stood up, "can't you take five quarts of milk from four cows?"

The 1909 prize-list for the Canadian National Exhibition, Toronto, will be out in the course of three or four weeks, and will be mailed on application to Dr. J. O. Orr, Secretary, City Hall, Toronto, who writes: "We are making several changes, and adding to the live-stock section several thousand dollars' worth of prizes. The Jersey cattle, for instance, will be increased from seven to twelve hundred dollars."

Messrs. John Dryden & Son, Brooklin, Ont., in ordering a change in their advertisement of Shorthorns, in which they offer for sale the noted bull, Prince Gloucester =40998=, write: "We are offering our chief stock bull, with a good deal of reluctance, but our herd is full of his blood and we have used him considerably during the winter. All who have been interested in watching the awards at the Toronto Show during the past few years know this bull, and know that he is a sire of calves good enough to win in some of the strongest rings seen at that exhibition. No need to dwell on his individuality, but enough to say that he is right in every way, a splendid worker, very sure, and easy to handle. If he were not right we would not offer him for sale for breeding purposes. We also have four yearling bulls that we have never been able to duplicate for breeding and quality. We want to sell them, and if persons needing a bull will come and see these, we shall have no trouble in getting together on the price. Come and see the old bull, and either buy him or one with some of his blood, and you will never regret your purchase."

### TRADE TOPIC.

The Paquet Company, Limited, of Quebec, P.Q., was established by the late Z. Paquet, in the year 1850. At that time it was a very unpretentious store indeed, occupying one floor, over which the owner and proprietor lived with his family. On Sunday morning, October 14th, 1866, this little building was burned to the ground, but the greater part of the stock was saved from the flames. On the next day, Z. Paquet was doing business in a new stand. Here he continued in business with such success, that on September 15th, 1876, the stock and building of the late Mr. Carrier, at 165 St. Joseph street, was purchased. This event marked the commencement of a remarkable and quite unprecedented success. The business increased so rapidly that the new quarters were soon found insufficient to meet the requirements. The store was greatly enlarged, but three years later, it was found necessary to more than double the floor space, and a large four-story building was erected. In 1890 an immense six-story building was added, and in the following year a small three-story building was annexed. This was added to in the year 1905, making a total frontage of 181 feet. The company was reorganized in June, 1907, under the name of The Paquet Company, Limited, with an authorized capital of \$1,500,000. The company owns and operates an immense factory containing 97,000 square feet of floor space, in addition to the main building, the area of which is 116,778 square feet. The clothing business of The Paquet Company is a most important feature, and their new method of clothes-making is bringing them an immense volume of business by mail, from all parts of Canada. An attractive feature of their clothing advertising is their great free-delivery offer, which enables their mail-order customers to have Paquet guaranteed clothes delivered free of express charges to any part of Canada.

### STONELEIGH SHORTHORNS, LEICESTERS AND BERKSHIRES.

The old and always reliable firm of E. Jeffs & Son, of Bond Head, Ont., breeders of Shorthorn cattle, Leicester sheep, Berkshire hogs, Buff Orpington poultry, Pekin ducks and Bronze turkeys, are still doing business at the old stand, about four miles from Bradford Station, G. T. R., on the east, or about the same distance from Beeton Station, G. T. R. and C. P. R., on the west. Their large and well-selected herd of Shorthorn cattle are essentially a dairy strain, Scotch-topped, the foundation being descendants of Red Rose (imp.), by Baron of Kildale; Red Rose (imp.), by Skipton; Margaret (imp.), by Snowball; Morlina (imp.), by Lillybeck, and Camilla (imp.), by Fusilier, on which have been used such noted bulls as Imp. British Statesman, Imp. Gladiator, Imp. Killerby's Heir at Law =34563=, Prince Arthur =23377=, Wynock Chief =49146=, Royal Luerne =60945=, and the present Bellona-bred stock bull, Imp. Famous Pride, a noted prizewinner, sired by the great Brawith Bud bull, Golden Fame, dam Fanny 2nd, a Cruickshank Bellona, by the Marr Missis bull, Financier. This is one of the great stock bulls of the country, and will certainly make good on the Stoneleigh herd. Many of the choice Shorthorns of the country have been bred in this herd, which was probably never stronger than just now, among them being two yearling heifers by Royal Luerne, and five two-year-old heifers by Warnock Chief, that are good buying for anyone wanting to found a herd of deep-milking Shorthorns. In bulls for sale there are only two left fit for service; both are top quality, one sired by Royal Luerne, the other by Warnock Chief. Anyone wanting a dairy-bred Shorthorn bull should look after these, as they are an excellent pair.



# A Free Book about Paint & Prosperity

Every farmer should know the relation between these two things. Well-painted farm houses, barns and out-buildings give the appearance of prosperity, and the farmer who uses good paint judiciously is prosperous.

Good paint not only makes your farm look prosperous, but it makes farming more profitable to you, because it makes your farm buildings last longer and protects your stock and crops better.

Every farmer should study these things. We will help him. We have written very carefully a book called "Paints and Varnishes for the Farm," which is worth the thoughtful reading of every man who makes his living from the farm. It describes those particular finishes among the Sherwin-Williams Paints and Varnishes which are especially adapted to the use of the farmer. It tells what they are, how they are used, why they are good and where the profit to the farmer comes in in using them.

Write for this book today. Then look over your farm and talk with the nearest Sherwin-Williams dealer.

The book will help you; the dealer will help you; the paints will help you.

## SHERWIN-WILLIAMS PAINTS AND VARNISHES FOR THE FARM

- |                                                                                                                 |                                                                                             |
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| S-W P. (SHERWIN-WILLIAMS PAINT, PREPARED)<br>—for preserving good buildings.                                    | S-W BUGGY PAINT<br>—for refinishing the carriage.                                           |
| S-W MODERN METHOD FLOOR FINISHES<br>—for any floor, old or new, in any style.                                   | S-W WAGON AND IMPLEMENT PAINT<br>—for preserving farm machinery.                            |
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| S-W METALASTIC No. 2<br>—a durable paint for protecting metal surfaces.                                         | S-W MEDICINAL LINSEED OIL<br>—for treating and conditioning of horses and other live stock. |



**THE SHERWIN-WILLIAMS Co.**

LARGEST PAINT AND VARNISH MAKERS IN THE WORLD  
Address all inquiries to 139 Centre St., Montreal.



**The Angle LAMP**



There's no longer any reason for prejudice against kerosene lighting. The Angle Lamp employs a new principle which does away with all smoking and offensive odors and makes the best and the most satisfactory light in the world.

**Brilliant as Gas**

or electricity, and better than either, because its light is soft and mellow and does not hurt the eyes. It's the light with "no under shadow," lighted and extinguished like gas. It is safe, clean and convenient. A great difference between the Angle and any other lamp.

**Sold on 30 Days Trial**

You should get the Angle book and read about this lamp. Write us for catalog 62 671

**THE 1900 WASHER CO.**  
355 1/2 Yonge St., Toronto.

#### For Spraying

Fruit Trees, Shrubs, Bushes and Plants, there's nothing to equal



**EUREKA**  
COMPRESSED AIR, FOUNTAIN  
SPRAYER

Requires but one pumping to empty entire contents of tank. Automatic lever valve stops flow of liquid while going from one plant to another. Easy, light compact, tested to stand 5 times the pressure required to expel liquid. Two nozzles, with hose attachment for spraying small trees. Write for catalogue. 1

**THE EUREKA PLANTER CO.**  
Limited, - Woodstock, Ont.

You cannot possibly have a better Cocoa than

## EPPE'S

A delicious drink and a sustaining food. Fragrant, nutritious and economical. This excellent Cocoa maintains the system in robust health, and enables it to resist winter's extreme cold.

## COCOA

Sold by Grocers and Storekeepers in 1/2-lb. and 1-lb. Tins.

### Big Potato Crop at Least Expense

Write now for **Free Book** that tells how to increase your Potato Crop 40 to 75% and how to cut out **labor and expense** by using

#### ASPINWALL POTATO MACHINES

which cut, plant, cover, fertilize, spray, dig and sort potatoes. Practical Success guaranteed and proven by our 25 years' experience in potato machine building. Address Head Office.

**Aspinwall Mfg. Co.**  
323 Sabin St.  
Jackson, Mich., U. S. A.  
Canadian Factory, Guelph, Ont., Canada



**\$65**

**GILSON**  
GASOLINE  
ENGINE

For Pumping, Cream Separators, Churns, Wash Machines, etc. **FREE TRIAL**. Ask for catalog all sizes.

**GILSON MFG. CO. LTD.** 150 York St., Guelph, Ont.

PLEASE MENTION THIS PAPER.

#### QUESTIONS AND ANSWERS. Miscellaneous.

##### LINE FENCING, ETC.

"Subscriber," Halton Co., Ont., your statement of case is too lengthy for publication; and we would just say, in answer to your questions, that you will have to abide by the decision which has been rendered against you by the Appellate Court at Toronto, that the circumstances are not such as to warrant a prosecution for perjury, and that the case is not one over which fence-viewers would have jurisdiction.

##### RAW GROUND PHOSPHATE ROCK.

Can ground rock phosphate be obtained in Canada, and at what price? I do not see it advertised in any agricultural journals. I have quotations from the dealers in the United States ranging from \$4 to \$4.85, including duty, but the freight is high. A. A. H. Quebec.

Ans.—On page 363 of "The Farmer's Advocate" of March 11th, 1909, it was explained that raw ground rock phosphate, carrying about 33 per cent. of phosphoric acid, might be obtained for about \$14 per ton in dealers' warehouses, prospective purchasers being referred to firms advertising fertilizers through our columns.

##### A CO-OPERATIVE CONCERN.

Some four or five years ago a number of farmers, numbering about twenty, formed a syndicate to buy a \$3,000 threshing outfit. Some took one share, others took three or four, and as high as ten shares. The secretary-treasurer was instructed by the shareholders to have the company or syndicate registered, but he neglected to do so, and it was never done. The shareholders never received any scrip or anything to show what shares they held in the company. Neither did they receive any receipts for the money they paid into it.

1. Is there any difference in the eye of the law between a company and a syndicate?
2. Can a shareholder demand from the officers of the company scrip or something to show what shares they hold in the company?
3. Should this company have been registered?
4. Is it lawful to run a company or syndicate in such a loose manner as this has been?
5. Would it not be a wise thing for the president to call a meeting of the shareholders and have it organized over again in a more legal manner?

##### A SHAREHOLDER.

Perth Co., Ont.

Ans.—1. Yes; many.

2. Yes.

3. Yes; under the Act respecting Co-operative Association (Revised Statutes of Canada, 1897, Chapter 202).

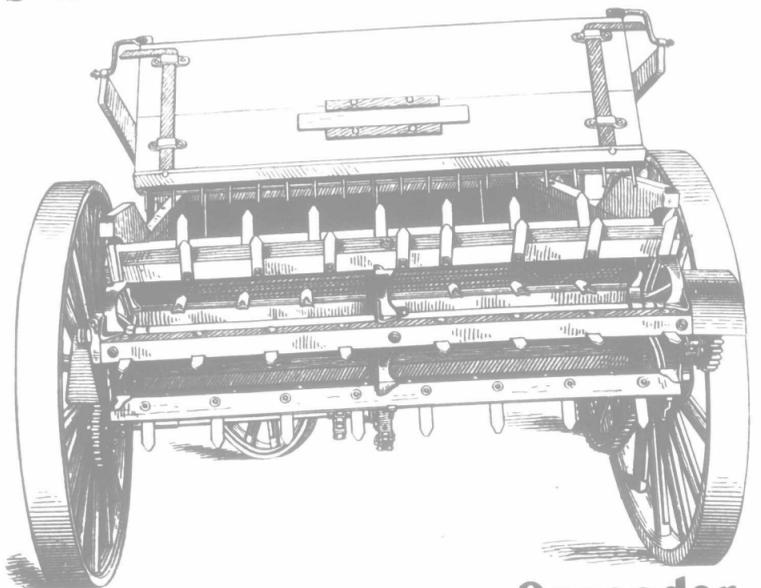
4. No.

5. Most decidedly; and the requirements of the Act mentioned should be carefully observed and complied with.

##### TRADE TOPIC.

This past season The Aspinwall Mfg. Co., Jackson, Michigan, U. S. A., have first offered to the trade generally their New Double-cylinder High-pressure Sprayer, which has met with wonderful success. This machine was designed especially to meet the requirements of potato-growers desiring a sprayer of extra-high pressure, and among its many advantageous features, has an index plate for showing pressure, also syphon agitator to keep the mixture from clogging, and the nozzle arrangement in front in constant view of the operator. While primarily a potato-sprayer, it is frequently used for beans, cabbage, strawberries, and other plants and vines. Catalogue, fully descriptive of this machine, together with other potato machinery made by the company, will be mailed from the Canadian factory of the Aspinwall Mfg. Co., at Guelph, Ontario, on request.

The statement appearing in a recent issue of an English farm paper that prizes for Hackney stallion races were to be given at the Canadian National Exhibition, Toronto, as stated by the manager of the Exhibition to be unauthorized and without foundation in fact.



### The 1909 Kemp Manure Spreader

Equipped with the Reversible, Self-sharpening, Graded Flat-tooth Cylinder. The latest improvements of J. S. Kemp, the inventor of the first Manure Spreader. The result of 34 years in the use and manufacturing of Manure Spreaders. Send for our catalogues, fully describing this machine, and also our Imperial Horse-lift Drill. The only drill equipped with a horse-lift.

### W. I. KEMP CO., LTD., STRATFORD, ONTARIO.

Western Agents: **PARLIN & ORENDORFF**, Canadian Plow Co., Winnipeg, Regina, Calgary.  
Agents for Ontario: **T. C. ROGERS & CO.**, Guelph, Ont.  
Agent for Quebec: **D. BRYSON**, Westmount, Que.

# AMERICAN FENCE



MADE BY  
**THE Canadian Steel & Wire Co., LIMITED**

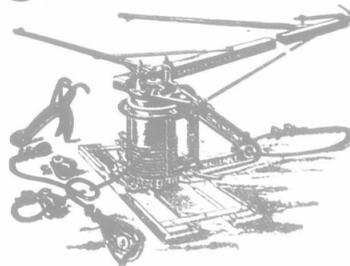
A sound, substantial, enduring fence, built on the elastic, hinged-joint principle—the most scientific, practical and perfect fence principle known. It yields to great and sudden pressure but returns again to the original shape.

Thoroughly galvanized and protected against weather.

FOR SALE BY

Reliable dealers everywhere. If unable to locate our agent, write us at Hamilton, Ontario.

## STUMP AND TREE PULLERS



Made in five different sizes. The only malleable iron stump puller made. It is manufactured here and warranted here. It is the only stump puller made on which you have a chance to try it without making full advance payments. Catalogue A.

Write for further particulars to:

**CANADIAN SWENSONS, Limited.**

Lindsay, Ontario, Canada.



### How a DAIN HAY LOADER and DAIN SIDE DELIVERY RAKE More than PAY for Themselves in One or Two Seasons

HERE are actual hay-harvesting facts: A pretty big percentage of the hay-crop of the country is left in the field each season—And a still bigger percentage of the feeding value of the hay is lost in getting it into mow or stack—Lots of hay is left on the ground in shocking and pitching-out-of-the-stack—After you've got your hay out of the field by hand-loading, you can mark the location of every shock and windrow by the loose hay lying around—That's absolute waste.

Another thing—either hand-loading or the ordinary loader and rake, scatter-off the leaves—and authorities all agree that much of the nutrition, the feeding value of hay, is in the leaf.

Now, a Dain Hay Loader gets all the hay—either out of the swath or windrow—Two sets of raker-teeth gently gather all the hay from the ground and the elevating-fingers carry it up the elevator onto the load—well forward—where one man can easily handle it—It cannot drag the hay back off the wagon like the return carrier Loader will do. And there's

**No Bunching, Wadding or Tangling** to make hard work for the man-on-the-load—or to choke-up the loader.

The raker-teeth are self-adjusting, taking the hay as-it-comes, heavy or light—they can't clog or get stopped-up.

The Dain Loader is entirely free from complicated mechanism—

And it is the smoothest-and-lightest-running—lightest-draft loader on the market.

It works close up to fences and ditches—And over any kind of ground. It is hammock or swing mounted—which saves it from all "racking" and jar.

And here's the big advantage in using a Dain Side Delivery Rake ahead of the Loader—First, it delivers two swaths of hay upside-down into a loose, continuous windrow—And the loader following it will take up a load in half the driving or traveling necessary when loading from the swath—

And then this rake, with its raker-teeth slowly revolving on a reel, leaves the windrow loose and open—

Permitting a free circulation of sun and air through the hay, producing air-cured hay, preserving all the rich, nutritious juices, making the hay worth from 75c to \$1.00 more a ton.

The Dain Rake has three sets of raker-teeth, which take the hay up clean without threshing it. These tools save enough hay in one or two seasons to pay for themselves.

Both loader and rake are substantially and dependably constructed throughout—

The name Dain on any hay tool assures superiority at every point.

Your implement dealer will show you how these tools "work"—

Or write us—we'll tell you about them.

Address

**DAIN MANUFACTURING CO.**  
Mention this paper. Preston, Ontario.

## Choice Farm Lands

FOR SALE ON EASY PAYMENTS.

In Western Canada there are great opportunities for the willing farmer. He can make money and success of farming. We have for sale the very choicest of Farm Lands in Saskatchewan, and guarantee to please the most particular. Let us tell you about them, and how others are making money here. Write at once for maps and pamphlets and full information. Our years of experience are at your disposal. All we want is to know if you are interested. Write at once.

**TRACKSELL, ANDERSON & CO., REGINA, SASK.**  
British Columbia Office: 1210 Broad St., Victoria.

## CLYDESDALES AND FRENCH COACHERS

We have still on hand a few choice Clydesdale stallions—all young—that for size, style and quality will stand inspection. We have also a few Clyde fillies—imported and Canadian-bred, and two French Coach stallions. Correspondence and inspection invited. Our prices are easy and terms to suit. Phone connection.

**R. NESS & SON, HOWICK, QUEBEC.**

## Stallion Goods

**ARTIFICIAL MARE IMPREGNATORS**  
Impregnators for getting in foal from 1 to 6 mares from one service of a stallion or jack, \$3.50 to \$6.00. The popular Safety Impregnating Outfit, especially adapted for impregnating so-called barren and irregular breeding mares, \$7.50. Breeders Bags, Servicing Hobbles, Stallion Bridles, Body Rollers, Shields, Supports, Emulsifiers, Ereseurs, Service Books, etc. First quality goods only. All prepaid and guaranteed. Write for FREE Stallion Goods Catalogue.

**CRITTENDEN & CO., DEPT. 38 CLEVELAND, OHIO, U.S.A.**

**CLYDESDALES AND SHORTHORNS.**—Both imported and Canadian-bred, at Columbus, Ont., the Home of the Winners. Our last importation landed in August. They include the pick of Scotland, from such renowned sires as Baron's Pride, Everlasting, Baron o' Bucklyvie, Hiawatha, Marsells, Sir Everest, and Prince Thomas. We have on hand over 30 head to choose from, from the above noted sires, from 1 to 6 years old, and including stallions and mares. Correspondence solicited. Call and see them at our barns, Columbus, Ont., before purchasing elsewhere. Our prices are right. Long-distance phone in houses. Phone office, Myrtle station. Myrtle station, C.P.R.; Brooklin station, G.T.R.; Oshawa station, G.T.R.

**Smith & Richardson & Sons, Columbus, Ont.**

**MP. CLYDESDALE STALLIONS AND FILLIES.**—Our new importation of stallions and fillies are the best we could select in Scotland, particularly well bred, with the size, smoothness and quality that Canadians admire. Show-ring stuff. Come and see them. Will sell on terms to suit. **JOHN A. BOAG & SON, Queensville P. O., Ont.; Newmarket Sta., G. T. R.** Telephone and telephone one-half mile from farm. Metropolitan Street Ry. from Toronto crosses the farm.

**IMPORTED SHIRES** At their St. Thomas stables, the John Chambers & Sons Co., of England have for sale stallions and fillies from their noted Shire stud, high-class representatives of the breed. Correspondence solicited. Address **DR. C. K. GEARY, St. Thomas, Ont.**

**IMPORTED CLYDESDALES** My new importation of Clydesdale stallions and fillies, land-acter, and right royally bred. I will sell them at very close prices, and on terms to suit. **C. W. BARBER, Gatineau Point, Quebec.** "Close to Ottawa."

### QUESTIONS AND ANSWERS. Veterinary.

#### BLINDNESS.

Four-year-old horse has gone blind. The eye is perfectly clear. He lost the sight about six weeks ago. A. A. McE.

Ans.—From the symptoms given I presume your horse is blind from amaurosis (a paralysis of the optic nerve). In cases of this kind the eye may be clear, but the pupil is dilated and much rounder than normal, and does not expand and contract by the action of darkness and light as a healthy eye does. Prospects of recovery are slight. The administration of nerve tonics, as 2-dram doses of nux vomica, three times daily, may possibly effect a cure. V.

#### Miscellaneous.

#### CHRONIC COUGH.

Please give the best-known prescription to cure cough (acute) in a horse, caused from slight cold and distemper, a remedy that may be given by placing on the tongue preferred.

Ans.—Give a ball every morning for ten days, composed of 2 drams solid extract of belladonna, 1½ drams gum opium, 1 dram camphor, and 30 grains powdered digitalis, mixed with sufficient treacle to make it plastic.

#### SHOE BOIL.

What is a good remedy for a shoe boil on a horse? SUBSCRIBER.

Ans.—This trouble usually requires the services of a surgeon before being finally cured. If it is well fomented with warm water in the early stages, and the following liniment applied every day for two weeks, well rubbed in, the more serious blemish may be avoided: Soap liniment ½ pint, strong spirits of ammonia ¼ dram.

#### MILLET AS NURSE CROP—SEEDING DOWN LOW LAND—CRIMSON CLOVER FOR PLOWING DOWN.

1. I have some land very wet in spring, on which I intend sowing millet. Do you think it possible to seed down with the same?

2. What mixtures of grasses and clovers would you recommend for land subject to overflow in spring? Do you think Brome grass would do in the mixture?

3. What do you think of sowing Crimson clover with oats and barley, with a view to plowing down in the fall? Would the clover grow tall and prevent cutting the grain?

Ans.—1. Millet, being a rank grower, with thick foliage, and being usually sown later than ordinary spring-grain crops, is not satisfactory for a nurse crop for seeding to grass or clover. On soil such as you mention, you most likely would have such growth of millet that the grasses or clovers would be choked out and deprived of moisture and plant food.

2. The fact that the land is subject to overflow in the spring serves as no guide to what grasses or clovers would suit. Doubtless the area is heavy soil, and wet, but it is possible for light soil, well drained, to be overrun by the spring freshets. A good mixture for low, wet land, consists of Red-top, 6 pounds; Kentucky Blue grass, 6 pounds; timothy, 2 pounds; alsike, 2 pounds, and red clover, 3 or 4 pounds. This would furnish a good stand for permanent pasture. The red clover and timothy, though not permanent, would give fair growth the first and second seasons, and gradually would be replaced by the others. Brome grass is advised by some for permanent pasture on low land, but it is very persistent, and so has been discarded by many in the West because of the difficulty in getting rid of it.

3. Crimson clover is, strictly speaking, an annual plant, and not particularly adapted to Canadian climate. We have not heard of farmers making extensive use of it in the way you suggest. Experiments indicate that common red clover or Mammoth red clover are superior. There would be little danger of it being so tall that you could not cut the grain.

A registered red yearling Shorthorn bull, sired by Bapton Chancellor (imp.), is advertised for sale by Jas. R. Wood, Preston, Ont.

### HORSE OWNERS! USE

**GOMBAULT'S CAUSTIC BALSAM.**  
A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all bunches from horses. Impossible to produce scar or blemish. Send for circulars. Special advice free.  
**THE LAWRENCE-WILLIAMS CO., Toronto, Canada.**

### LAND FOR SETTLEMENT!

Lands are offered for settlement in some cases FREE, in others at 50 CENTS per acre, in various districts in NORTHERN ONTARIO. Write for information as to terms, homestead regulations, special railway rates, etc.

**HON. JAMES S. DUFF,** Minister of Agriculture.  
Thee. Southworth, Director of Colonization, Toronto.

## Fistula and Poll Evil

Any person, however inexperienced, can readily cure either disease with **Fleming's Fistula and Poll Evil Cure**—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting, just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in Fleming's Vest-Pocket Veterinary Adviser. Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durably bound, indexed and illustrated.  
**FLEMING BROS., Chemists**  
75 Church St., Toronto, Ontario

## IMPORTED Clydesdale Stallion FOR SALE.

**WHINBLOOM (12785)**, sire Prince Thomas (10262), dam Gaily favorite (14322), by Prince of Carruchan (8151); 2nd dam Doff of Doonhill (13409), by Flashwood (3604); 3rd dam Matty of Doonhill (830-), by Ga-net Cro-s (1662); 4th dam Jean of Arbrack (755), by Giengarnock (327). Color bay; stripe on face, four white legs. Foaled July 6, 1903. Bred by John C. Robertson, Fodderty Dingwall, Rosshire, Scotland.

Any person wanting a good horse will find this a good bargain, as the owner is going out of business.  
**GEO. BROWN, Prop., BRIGHT, ONT.**

**LAMENESS from a Bone Spavin, Ring Bone, Splint, Carb, Side Bone or similar trouble can be stopped with**

**ABSORBINE**  
Full directions in pamphlet with each bottle, \$2.00 a bottle at dealers or delivered. Horse Book 9 D free.  
**ABSORBINE, JR.**, for mankind, \$1 a bottle, removes Painful Swellings, Enlarged Glands, Gout, Wens, Bruises, Varicose Veins, Varicosties, Old Sores, Allays Pain.  
**W. F. YOUNG, P.B.F., 73 Westmouth St., Springfield, Mass.**  
**LYMAN, BONS & CO., Montreal, Canadian Agents.**

## Imported Clydesdale Stallion FOR SALE OR HIRE.

**CREMORNE (7903) (1297)**, 5 years old, weighing 1,950 lbs., with 7 ft. 5 ins. heart-girth; black, with white stripe; good-tempered, with abundance of snap; best of feet, legs and action; won 3rd at Sherbrooke, 4th at Ottawa, 1908. Foaled 60% in 1908. Terms to hire, \$200 cash in advance.

**HENRY M. DOUGLAS, MEAFORD, ONT.**  
**Ormsby Grange Stock Farm, ORMSTOWN, P. Q.**

**DUNCAN McEACHRAN, F. R. C. V. S., D. V. S., Proprietor.**

Importer and breeder of **CLYDESDALES**, high-class pure-bred Farmers or ranchmen starting breeding Clydes, pure or grade, specially invited to correspond.

**FOR SALE: Three Registered Clydesdale Stallions**, rising four years old, also one registered brood mare, in foal to imported sire, four years old. One of these stallions is imported, others Canadian-bred. All three good heavy ones, with lots of quality. Apply to: **R. T. Brownlee, Hemmingford, Que.**

**Dr. Bell's Veterinary Medical Wender** cures inflammation of lungs, bowels and kidneys. The 20th-century wonder. Agents wanted in every county. Write for terms.  
**DR. BELL, V. S. Kingston, Ont.**

**Shannonbank Clydesdales, Ayrshires, Yorkshires.**—One stallion rising three years, by imp. Hopewell. Two young bulls ten months, and some heifers from six months to two years. Yorkshires of both sexes. **W. H. TRAN, Cedar Grove, Ont. Locust Hill Sta., C. P. R.**

# A \$5,000 DAN PATCH STALLION FREE

This New Picture of DAN PATCH 1:55 in Six Brilliant Colors  
MAILED FREE



DAN PATCH 1:55.

This new picture of Dan Patch 1:55, is the finest I have ever gotten out for framing. It is printed in six brilliant colors and is free of advertising. It gives his age and a list of all the fast miles paced by Dan. Being made from a "Speed Photograph" it shows Dan as lifelike as if you stood on the track and saw him in one of his marvelous and thrilling speed exhibitions. You ought to have a fine picture of the King of all Harness Horse Creation and the Fastest Harness Horse the world has ever seen. I will mail you one of these Large, Beautiful, Colored Pictures of Dan Patch 1:55 free With Postage Prepaid and full particulars concerning my plan of Giving Away a \$5,000.00 Dan Patch stallion if you will simply write me.

## A \$5,000 DAN PATCH STALLION FREE

An Absolutely Free Hair Counting Contest Without Money or Purchase Consideration And Open To Any Farmer, Stockman or Poultry Breeder. Can you count the number of hairs drawn in a picture of "Forest Patch," sired by Dan Patch, dam by Monaco by Belmont. Write for one of the Above Dan Patch Pictures. I will also mail you a photo engraving of "Forest Patch," the fine Registered Stallion to be given away and ALSO Drawing showing hairs to be counted and also stating easy conditions. Every stock owner will want to count the hairs on this Splendid \$5,000.00 Dan Patch Stallion because it means a small fortune free for someone. We paid \$60,000 for Dan Patch and have been offered \$120,000. We would have lost money if we had sold Dan for One Million Dollars. "Forest Patch" might make you a fortune of \$25,000 to \$50,000 as a great stock horse for any community because he will make a 1200 lb. stallion with great style and beautiful conformation. E. B. SAVAGE, Toronto, Canada.

Mail this Free Coupon To-Day to E. B. SAVAGE, Toronto, Can.  
You MUST Fill In THE THREE BLANK LINES IN THIS FREE COUPON

### OUT OFF HERE

E. B. Savage, International Stock Food Co., Toronto. Will you please mail me Postage Paid one of the Beautiful Six Color Pictures of Dan Patch 1:55, the World's Champion Harness Horse, described above, and also full particulars of your plan of Giving Away a \$5,000.00 Dan Patch Stallion. I have filled out the coupon, giving the number of live stock I own, and my name and address.

I own..... Cattle..... Hogs..... Horses..... Sheep.....  
Name.....  
Post Office..... Province.....

### QUESTIONS AND ANSWERS. Veterinary.

#### LAME MARE.

Mare has shown slight lameness in one hind leg for a year. When walking, jogging slowly or going quite fast she goes sound, but when going at a smart jog she goes slightly lame. She stands sound. J. S. S.

Ans.—It is not possible to diagnose this trouble with reasonable certainty without a personal examination. I would advise you to show her to your veterinarian. I am of the opinion she is not lame, but has acquired the habit of hitching when going at a certain gait. With very few exceptions a lame horse will show more marked symptoms when jogging slowly with a free head than at any other gait. Even if this mare is really lame the symptoms are so peculiar that it is doubtful if a veterinarian would be able to diagnose. V.

#### CEREBRO-SPINAL MENINGITIS.

Eight-months-old colt, fed on first-class hay, bran, grain and silage, and good spring water, and turned out every day in yard where spoiled silage was thrown (but he was not seen eating it), took cerebro-spinal meningitis, and died in three days. What caused the trouble? Is there any cure, and how should he have been treated? A. B. D.

Ans.—If you are correct as regards the quality of the food and water given to the colt, he must have eaten some of the spoiled silage, as the disease is caused by either food or water of poor quality and containing decayed vegetable or animal matter. Treatment in well-marked cases is seldom successful. It consists in administering a purgative to remove all unabsorbed matter from the stomach and bowels, and following up with iodide of potassium three times daily. For a colt of this age the dose would be about 20 grains. V.

#### UMBILICAL HERNIA.

Yearling colt has a rupture the size of a hen's egg just in front of the sheath. It has been this way since last summer. Is there any possibility of the colt outgrowing it? E. C. B.

Ans.—This is an umbilical or navel rupture. It is possible it may disappear without interference, but it seldom does so after the patient is a year old. It would be better to get your veterinarian to operate. In some cases a truss composed of leather or canvas, arranged around the body so as to keep the bowel pressed back into the abdominal cavity for five or six weeks will effect a cure. It is hard to keep the truss from shifting, but it can be done. There is less danger of evil results from this treatment than from an operation, which, in some cases, is followed by a fatal case of tetanus. There is no special truss made for the purpose. A man must exercise his own ingenuity in applying one and keeping it in position. V.

#### WORMS.

Yearling colt had colic. I gave it a pint of raw linseed oil and it got better. It has since passed some worms. I saw the following prescription in "The Farmer's Advocate": Three ounces each of sulphate of iron and sulphate of copper, and 2 ounces each of calomel and tartar emetic, to be made into 24 powders. I took the prescription to my druggist and he said there were three poisons in it and that one powder would kill a full-grown horse. Is that so?

Would raw linseed oil do as a purgative instead of aloes, after the last powder has been taken? H. R. P.

Ans.—Your druggist does not know nearly as much about the actions of medicine as he thinks he does. The prescription given is for a full-grown horse. For your colt, take one-third the amount of each drug and make into 24 powders. Give one night and morning until they are all taken. Then purge with 3 drams aloes and 1 dram ginger, or with 10 to 12 ounces raw linseed oil. You gave the colt an excessive dose of oil, but I presume a good part of it was wasted. V.

The German Coach stallion, Black Prince, is advertised for sale in this paper by S. S. Lawrason, St. George, Ont.

### Dr. Page's English Spavin Cure

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle and to remove all unnatural enlargements.



This preparation (unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin or money refunded, and will not kill the hair. Manufactured by Dr. Fredrick A Page & Son, 7 and 9 Yorkshire Road, London, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents:

J. A. JOHNSTON & CO., Druggists,  
171 King St. E., TORONTO, ONT.

### ANCHYLOS

THE MODERN TREATMENT FOR  
Bone Spavin and Ringbone.

1. It will not injure or eat into the parts or destroy the hair.  
2. Your horse may work after the third day.  
3. Guaranteed to cure, has ever failed.  
To introduce my remedy, I will mail it to any address for one dollar, believing the best way to reach the people is to demonstrate in every locality what the remedy will do for you.  
Order now, don't expect me, I have done all that, and can cure your horse. Address:

J. A. McLarty, Thessalon, Ont.  
Manufacturing Chemist.

Mention this paper in replying.

### GERMAN COACH

STALLION FOR SALE.  
BLACK PRINCE No. 773.

Stands 16 1/2 han s. Weight 1500 lbs. Has proven a sure foot getter and a prizewinner. First at Galt, April, '05; Toronto and Ottawa, '04. Will be sold on easy terms. Apply:

S. S. LAWRASON, ST GEORGE, ONTARIO

For Sale: Imported Clydesdale Stallion  
ADONIS (10953).

sired by the noted Baron's Pride (9122). Bay in color. He has travelled six successful seasons in this vicinity. Five and a half miles from Mt. Forest station, G. T. R., or three and a half miles from Holstein station, G. T. R.

John McDougall, Jr.,  
P. O. Box 238, Mt. Forest, Ont.

### Shetland, Welsh and Iceland Ponies

I have on hand a number of single ponies and matched pairs; all ages; thoroughly broken to harness and reliable in every way.

E. DYMENT, Copetown P.O. and Sta.

**UNION STOCK - YARDS Horse Exchange**  
WEST TORONTO, CANADA.

The Greatest Wholesale and Retail Horse Commission Market.

Auction sales of Horses, Carriages, Harness, etc., every Monday and Wednesday. Horses and harness on hand for private sale every day.

The largest, best equipped and most sanitary stables in Canada. Half-mile of railway loading chutes at stable door. Quarter-mile on track for stowing horses. Northwest trade a specialty. HERBERT SMITH, Manager.  
(Late Grand's Repository)

**NEW CLYDESDALE IMPORTATION.**

My new importation of 24 Clydesdale stallions is now in my stables. I invite inspection and comparison. I think I have the best lot for size, style, character, quality and action ever imported. 27 Clyde stallions and 8 Hackney stallions to select from. Prices right, and terms to suit.

**T. H. HASSARD, MARKHAM, ONT.**

POST OFFICE, PHONE AND STATION.

**2 Clydesdale Stallions  
Hackney Stallions**

For sale. Intending purchasers will find it greatly to their advantage to see these horses before buying elsewhere. **O. Sorby, Guelph, Ont.**

**Clydesdale Stallions and Mares!**

A fresh lot has just arrived, including many prizewinners. Some extra big ones. Prices right. Inspection invited.

**DALGETY BROS., LONDON, ONTARIO.**  
Stables Fraser House. Address correspondence to Dalgety Bros., Glencoe, Ont.

**NEW IMPORTATION OF CLYDESDALES.**

My new importation of Clydesdales are now in my stables: 14 stallions, 2 fillies. Visitors will find them as choice a lot as ever seen in Canada. Big, full of style and quality, and bred right royally.

**T. D. ELLIOTT, Bolton, Ontario, P. O. and Station**

**COMPLETELY SOLD OUT!**

EXPECT TO LAND MY NEW IMPORTATION OF CLYDESDALES AND HACKNEYS about March 10th. My motto is: Quality, not quantity.

**THOS L. MERCER, MARKDALE, ONT., P. O. AND STA.**

**IMPORTED CLYDESDALES**

My new importation for 1908 has now arrived stallions and fillies—personally selected. Highest in breeding, highest in quality; with abundance of size and character. Sold on terms to suit. **GEO. G. STEWART, HOWICK, QUE.**

**Clydesdales and Hackneys**

We have for sale a few choice Clydesdale mares, imported and Hackney stallions and mares for sale always. **RODDENSON & BIRDAL, BEAVERTON, ONTARIO.**  
G. T. R. and C. N. R.

MANY DON'T KNOW HEART AFFECTED.

More People Than are Aware of It Have Heart Disease.

"If examinations were made of everyone, people would be surprised at the number of persons walking about suffering from heart disease."

This startling statement was made by a doctor at a recent inquest. "I should not like to say that heart disease is as common as this would imply," said the expert, "but I am sure that the number of persons going about with weak hearts must be very large."

"Hundreds of people go about their daily work on the verge of death, and yet do not know it. It is only when the shock comes that kills them that the unsuspected weakness of the heart is made apparent."

"But undoubtedly heart weakness, not disease, is more prevalent nowadays. I should think that the stress of living, the wear and rush of modern business life, have a lot to do with heart trouble."

There is no doubt but that this is correct, and we would strongly advise any one suffering in any way from heart trouble to try a course of MILBURN'S HEART AND NERVE PILLS

Price 50 cts. per box or 3 boxes for \$1.25, at all dealers or will be mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

GOSSIP.

Mr. John Elder, Hensall, Ont., who advertises for sale seed barley of the famous No. 21 variety, writes: I have done some business through my "ad." in "The Farmer's Advocate." I wish you to continue it for a little longer, as I have several hundred bushels left yet, and I count same as cheap at \$1 per bushel as the two-points Mandscheuri at 60c., as it yields more and stands up where the Mandscheuri will all go down.

Mr. A. A. Colwill, Newcastle, Ont., in ordering a change in his advertisement, writes: "I wish to call special attention to a registered Clydesdale mare, six years old, in foal to one of the best imported Clydesdales in this part of the country. I am only offering this mare because I have three mares in foal and can spare one. She is sound and right in every respect, and a good breeder, and will be well worth looking after. I would also call the attention of your many readers to the three Shorthorn cows, with heifer calves at foot, and all bred again. These will be sold well worth the money; also a host of Tamworth boars and sows, from two to five months old, and a few sows bred to farrow in May, June and July. No fancy prices asked."

LAKEVIEW HOLSTEINS.

On completion of the buildings now in process and in contemplation, the Lakeview Stock Farm will be one of the best-equipped stock and dairy farms in the Dominion. Situated a short distance from Bronte, Ont., a station a few miles east of Hamilton, in one of the richest agricultural sections of Ontario, the location is an ideal one for the carrying on of a large dairy farm, and the maintenance of the large herd of high-class and high-producing Holstein cattle. In laying the foundation and subsequent additions to this great herd, no expense was spared in purchasing the best available, both in Canada and the United States, with official butter records from 12 lbs. for two-year-olds to 24 lbs. for five-year-olds. At the head of the herd is the great bull, Count Hengerveld Fayne De Kol, a full brother to the world's champion four-year-old, Grace Fayne 2nd's Homestead, whose official seven-day record of 29.16 lbs. was the world's best. She has since made over 30 lbs. in seven days. His sire, Pieterdje Hengerveld Count DeKol, has 75 daughters in the A. R. O., two having records that average 32 lbs., 5 having records that average over 30 lbs., and 30 of them records that averaged over 20 lbs.; while his dam, Pieterdje Hengerveld, has an official milk record of 492.10 lbs., and a butter record of 21.83 lbs. in 7 days, and her dam, Netherland Hengerveld, a record of 26.57 lbs. The dam of Count Hengerveld Fayne DeKol is Grace Payne 2nd, with a seven-day butter record of 26.30 lbs., and a milk record of 677 lbs., while her sire, Aaltje Salo 3rd's Tritonio Netherland, has 33 daughters in the A. R. O., 11 of them with records that average over 20 lbs. From such breeding, the Lakeview herd will certainly take its place as one of the richest-bred and highest-producing herds in Canada. At present for sale are several herd-headers, one of them out of a cow whose four nearest dams have records that average 23.28 lbs. in seven days, two of them are sired by Brightest Canary, whose dam's and grandam's records average 21 lbs., and whose milk showed a butter-fat test of over 4 per cent. These are only a sample of the richness of the breeding of these young bulls, four of which are old enough for service. There is also for sale one two-year-old bull, used to some extent on the herd, very richly bred, and a show bull all over. There are also for sale eight or ten high-grade Holstein cows, from three to five years of age, these are a high-class lot, and very heavy milkers, among them being heifers that, as two-year-olds, gave over 8,000 lbs. of milk in the season. These grades will be sold well worth the money, as their room is wanted for new purchases of pure-breeds. Under the very capable management of Mr. W. D. Brockon, the farm manager, the herd is in extra-nice condition. The farm is connected with long-distance Bell phone.

RAW FURS

100,000 MUSKRAT 5,000 RED FOXES 50,000 COON 20,000 SKUNK WE ALSO BUY OTHER FURS. Ship to us at once and satisfy yourself that WE are the VERY BEST buyers of Raw Furs in Canada. THE MONTEITH, STROTHER FUR CO., 11 & 13 CHURCH ST. TORONTO

WE ARE PRICING VERY REASONABLY 10 Choicely-bred Young Shorthorn Bulls

Also one extra good imported bull, 22 months old. We have always something good to offer in females. Imported or home-bred. Write for what you want, or come and see them. Bell phone at each farm. W. G. PETTIT & SONS, FREEMAN, ONTARIO.

WILLOW BANK STOCK FARM

Shorthorns, Leicesters. Herd established 1855; flock, 1848. The great Duthie-bred bull, imported Joy of Morning = 32071, at the head of herd. A choice lot of cattle of either sex to offer. It will pay you to see them. Also choice Leicesters. JAMES DOUGLAS, Caledonia, Ont.

Scotch Shorthorns!

I am offering a few choice young bulls, also heifers in calf to imp. bull. Will be pleased to furnish pedigrees and prices upon application. JOHN MILLER, Brougham, Ontario. Clarendon Stn., C.P.R.

SOME SHOW PROPOSITIONS IN BOTH MALE AND FEMALE SHORTHORNS as well as a number of the useful sort of both sexes. Prices right. Large lot to select from. Up-to-date in breeding, etc. Catalogue. JOHN CLANCY, Manager. H. Cargill & Son, Cargill, Ont.

HAWTHORN HERD OF DEEP-MILKING

Shorthorns For Sale: 6 young bulls and 11 heifers, sired by Aberdeen Hero (imp.) = 28840. Some bred to the Lavender bull, Lavender Lorne = 65706. WM. GRAINGER & SON, London, Ont.

Imported Bull!

To save inbreeding I will sell the Cruickshank (Duthie bred) imp. bull, Sittyon Victor = 50093 = (8/397), a proven sire of merit, gentle and active. Also some young bulls by him, out of imp. dams. Addr. as: John Brydone, Milverton, Ont.

WHY NOT BUY A HIGH-CLASS SCOTCH SHORTHORN COW, Or a Heifer, Or a Bull Or a Few Shropshire Ewes, Or a Few Cotswold Ewes, NOW, While You Can Buy Them Low? I can offer you something in any of them that will make a start second to none. ROBERT MILLER, STOUFFVILLE, ONT. Write for what you want.

Choice Scotch Shorthorns We are offering several very nice heifers: Duchesses of Glousters, High-class show heifers among them. Also a few extra good young bulls. S. F. JOHNSON & SON, Ashburn P. O., Myrtle Station.

Scotch Shorthorns Twelve choice red bulls, 10 to 18 months, by Imp. Prote tor; some out of imported dams. Also Hackney fillies. M. C. and P. M. Rys. McFarlane & Ford, Box 41, Dutton, Ont.

Stoneleigh Shorthorns and Berkshires For sale: Two choice yearling bulls—dark bred, and a few one and two year old heifers. Berkshires of both sexes. And eggs of Buff Orpingtons, Pekin ducks and Broze turkeys. E. Jeffs & Son, Bond Head P. O., Ont.

SHORTHORNS Belmar Parc. Calves for sale by our grand quartette of breeding and show bulls: Nonpareil Archer, Imp., Proud Gift, Imp., Margold and Saylor, Nonpareil Eclipse. Females, imported and from imported stock, in calf to these bulls. An unsurpassed lot of yearling heifers. John Douglas, Manager. PETER WHITE, Pembroke, Ont.

VALLEY HOME SHORTHORNS and BERKSHIRES Our herd is strong in Nonpareil, Marchioness, Jilt, Mina, Glosterina, Rosebud and Lady Brant blood. In order to save holding a public sale, we will sell very cheap 15 one- and two-year-old heifers and several extra choice bulls. Berkshire sows safe in pig. S. J. PEARSON & S. N. Meadowvale P. O. and Sta.

Scotch Shorthorns Canada's greatest living sire, Mildred's Royal, heads my herd. For sale are young bulls and heifers, show stuff and Toronto winners out of Stamford, Lady Ythan, Claret, Emeline Matchless and Belona dams. A visit will be appreciated. GEO GIER, Grand Valley P. O., Ont. Waidemer Sta., C. P. R.

SPRING VALLEY SHORTHORNS One 14 months' old imported bull, bred by A. M. Gordon. Good enough to head any herd. Five Canadian-bred bulls from 12 to 16 months. Will be priced very reasonable, as we do not want to run them over. KYLE BROS., AYR, ONT.

Rowan Hill Shorthorns The 1908 Toronto grand champion, Royal Chief 65495, heads my herd. For sale are: 3 spring bulls and a few heifers, sired by him, and out of show cows. These are choice young things that are sure to please. R. F. DUNCAN, Carlisle P. O., Ont. Caledonia Station, G. T. R., or station 13 Hamilton and Brantford Electric Road.

WANTED-HERDSMAN Capable of taking charge of show and breeding herd. Apply, giving full particulars, to J. A. WATT, SALEM, ONT., ELORA STATION, G. T. R. AND C. P. R.

SHORTHORN BULLS Herd-heading quality and breeding. Also good ones at farmers' prices. Females for sale. Write for come and see. Farm adjoins town. H. SMITH, EXETER, ONTARIO.

CANADIAN PACIFIC HOMESEEKERS' EXCURSIONS TO Manitoba, Saskatchewan, Alberta Special Trains leave Toronto 2.00 p.m. on APRIL 6, 29 MAY 4, 18 JUNE 1, 15, 29 JULY 13, 27 AUG. 10, 24 SEPT. 7, 21 Second class tickets from Ontario stations to principal Northwest points at LOW ROUND-TRIP RATES Winnipeg and return \$32.00; Edmonton and return \$42.50, and to other points in proportion. Tickets good to return within 60 days from going date. TOURIST SLEEPING CARS on all excursions. Comfortable berths, fully equipped with bedding, can be secured at moderate rates through local agent. Early application must be made. ASK FOR HOMESEEKERS' PAMPHLET containing rates and full information. Apply to nearest C.P.R. Agent or to R. L. Thompson, Dist. Pass. Agt., Toronto. ONLY DIRECT LINE NO CHANGE OF CARS W. Fulton, Agent, London, Ont.

THE "MAPLES" HEREFORDS Canada's Greatest Show Herd. For Sale: 25 bulls from 6 to 18 months of age, bred from imported and show stock; also about the same number of heifers, none better. Prices right. W. H. HUNTER, Orangeville P.O. and Sta.

The Sunny Side Herefords. The herd that has the best of breeding and individual merit. For sale: Bargains in 2-year-old, yearling and bull calves. Some cows and heifers to spare. Write for prices. Long-distance phone. M. H. O'Neil, Southgate, Ont.

HOMESTEAD ABERDEEN-ANGUS A number of young cows with calves at foot, and heifers. Will sell right to make room. Come and see them. WM. ISCHE, Sebringville, Ont. Bell telephone.

Aberdeen-Angus Cattle For Sale: Cows, Heifers, Bulls. Good strains at reasonable prices. Apply to: Andrew Dinsmore, Manager, "Grape Grange" Farm, Clarksburg, Ont.

Aberdeen-Angus WALTER HALL, Washington, Ontario. Present offering: One bull 2 years old, and three choice yearling bulls, and anything in the female line. A choice lot and sold right. GEO. DAVIS & SONS, TON, ONT. Station, C. P. R.

Aberdeen-Angus CATTLE SUFFOLK DOWN SHEEP. If you require either of these breeds, write: JAMES BOWMAN, Elm Park, Guelph, Ont.

Black on this page.



**Think Only of Permanency**

When buying fencing FORGET about the NOW cost. Do as the railways. Think only of PERMANENCY. Select the fence with the quality, weight, stiffness and strength to give longest service. And three or four years from now you will shake hands with yourself because you were shrewd enough to see eye to eye with the railways and buy IDEAL woven Wire Fence.

This Lock makes "IDEAL" FENCE Strongest in Existence

No fence has a simpler lock than the IDEAL. Yet the railways have proven to their entire satisfaction that the IDEAL lock has the greatest gripping-tenacity. Other things being equal, the impossible-to-release grip of this simple lock makes IDEAL fence strongest in existence. But other things are not equal. IDEAL Woven Wire Fence has the best quality of hard drawn elastic steel wire laterals. It has the stiffest uprights. The galvanizing is the smoothest and heaviest—most rust-proof. The scales prove IDEAL the weightiest woven fence. What further reason do you need to prompt you to buy IDEAL fence? Well, here is another: IDEAL Fence will cost you no more than other fences that you will not buy if you think only of permanency. Our fence and gate booklet shows different styles for horses, cattle, hogs, etc. Write for your copy.

and increase your income. The weight, quality and strength of IDEAL fence make it easiest to sell.

**JOIN OUR STAFF OF AGENTS**

THE MCGREGOR-BANWELL FENCE CO., LIMITED, WALKERVILLE, ONT.

## GEO. AMOS & SON,

Moffat, Ontario.

For sale: Imp. Ben Lomond =45160= 80468, that grand stock bull, sire of first-prize calf herd at Toronto, 1908; and Augustus, a good Bruce Augusta bull calf; also females, various ages. Write, or come and see us. Farm 11 miles east of City of Guelph, on C. P. R.

## MR. A. I. HICKMAN,

Court Lodge, Egerton, Kent, England, EXPORTER OF PEDIGREE LIVE STOCK Of every description. During the summer months the export of show and breeding flocks of sheep will be a specialty. Who can do better for you than the man who lives on the spot? Mr. Hickman will be at the Bell Hotel, Gloucester, during the week of the Royal Show, and will be pleased to meet there all colonial and foreign visitors.

## ROBIN HILL FARM

SHORTHORNS AND CLYDESDALES.

We offer our stock bull, Merry Master (imp.) =45199=, for sale or exchange, also 4 two-year-old heifers and 2 yearling heifers. All got by Merry Master, and all in show condition. We also offer a few registered Clydesdale fillies and mares in foal. Wm. Ormiston & Sons, Columbus Ontario Brooklin, G. T. R.; Myrtle, C. P. R. Phone Brooklin Centre.

## Greengill Shorthorns!

Our present offering consists of 10 young bulls, from 8 to 20 months. All nice reds and roans. A number of them from imp. sire and dam. Prices right.

R. Mitchell & Sons, Nelson P. O., Ont. Burlington Jct. Sta.

FOR SALE: 2-YEAR-OLD BULL, SEA LION =66385=, He is got by Sittytton Marquis =55763=; his dam, Sea Lady (imp.) 70838, by Maxwell (84089). Sire bred by W. C. Edwards & Co., Rockland, Ont. Dam bred by John Marr, Cairnbrogie, Aberdeenshire, Scotland. CYRIL M. MOORE, MILLBROOK, ONT.

## JOHN GARDHOUSE & SONS

Always have for sale a number of first-class Shorthorns, Shires and Lincolns, of both sexes. Drop us a line, or better, come and see for yourself. HIGHFIELD P. O., ONTARIO.

Weston Sta., G. T. R. & C. P. R. Long-distance phone in house.

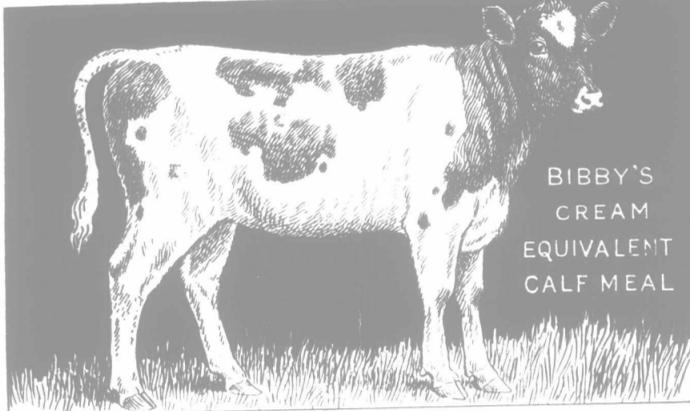
## SHORTHORNS!

Present offering: Choice young stock, either sex, by Golden Crescent =72325= and Nonpareil Victor 2nd =34534=. Prices reasonable. John Racey, Lennoxville, Que.

Stock Bull Trout Creek Sailor =59421= 247242, A. H. B., for sale; also roan show bull, fit for service. A. M. SHAVER, ANCASTER, ONT. Station 13, Brantford and Hamilton Electric Line; three minutes' walk from barns. Inspection invited. Priced right.

Shorthorn Bulls Ready for service. One will make a show bull. Also young things from Matchless, Crimson Flower, Miss Ramsden, Rosemary, Diamond and Lady Fanny dams, the get of Chancellor's Model. Prices to suit terms. Come and see. Israel Groff, Elmira, Ont.

Registered SHORTHORN Yearling Bull This is a bull of super or quality. Dark red. Sired by Bapton Chancellor (imp.), that noted sire of prize stock. Will be sold worth the money. James R. Wood, Preston, Ontario.



BIBBY'S CREAM EQUIVALENT CALF MEAL

## GOOD TO THE LAST DROP

There is no other calf food, save new milk itself, which contains so much nourishment as BIBBY'S CREAM EQUIVALENT MEAL. It is heartily relished by young stock, is practically predigested, and can be fed with perfect safety to the youngest animals. It is a perfect substitute for new milk, and contains the same elements of nutrition. Mixed with milk and water, separator milk, or water only, it makes a nutritious feed that cannot be equalled for bringing calves and young pig-ups to first-class condition, and preventing scouring and other ailments. BIBBY'S CREAM EQUIVALENT is in constant use by most of the leading and cost breeders of high-class stock. Calves relish it, and thrive well upon it; it is easy to prepare, and costs much less per meal than other preparations.

For sale by all dealers or direct from WM RENNIE CO., Ltd., Toronto, Montreal, Winnipeg, Vancouver.

## Shorthorn Cattle

AND LINCOLN SHEEP.

Females of all ages for sale of the thick-fleshed, low-down kind that have been raised naturally, neither stuffed nor starved. Twenty-five Lincoln ewes, bred to our best imported stud ram, also a few choice yearling rams. Prices very reasonable for quick sale.

J. T. GIBSON, DENFIELD, ONT.

## A. Edward Meyer,

P. O. Box 378, Guelph, Ontario,

Breeds SCOTCH SHORTHORNS Exclusively

Twelve of the most noted Scotch tribes have representatives in my herd. Herd bulls: Scottish Hero (imp.) =55042= (90065) 795765 A. H. B.; Gloster King =68703= 283804 A. H. B. Young stock for sale. Long-distance phone in house.

## 7 Imported Scotch Shorthorn Bulls 7

Six imported bull calves from 9 to 14 months old, 3 reds and 3 roans. They are of such noted families as Clara, Jilt, Roan Lady, Butterfly, Claret and Broadhooks. One imp. bull 2 years old, red; a most valuable sire. One bull 11 months old, roan, from imp. sire and dam; promising for a show bull. Two bulls 12 months old, from imp. sire and dam; suitable for pure-bred or grade herd. Also females all ages. Write for catalogue. Prices reasonable. Farm 1/4 mile from Burlington Junction station, G. T. R.

FRED. BARNETT, MANAGER.

J. F. MITCHELL, BURLINGTON, ONT.

## 1854 MAPLE LODGE STOCK FARM 1909

A few extra good young SHORTHORN bulls and heifers for sale.

LEICESTER ram lambs by the grand champion ram, "Sanford." Right good ones, and a few choice ewes.

A. W. SMITH, MAPLE LODGE P. O., ONT. Lucan Crossing Station, G. T. Ry.

## An Opportunity

MAPLE SHADE FARM.

Long-distance telephone

## SHORTHORNS

Nine bulls from 8 to 20 months old, reds and roans; 10 yearling heifers and a few cows. Will sell very cheap to make room in stables.

## CLYDESDALES

One pair of bay mares and one dark brown, heavy draft and two spring colts.

JAMES McARTHUR, Gobles, Ontario.

## PRINCE GLOSTER 40998

IS FOR SALE. Also four yearling bulls, and a few heifers. Shorthorns that will do good. Good breeding and show quality.

STATIONS: MYRTLE, C. P. R. BROOKLIN, G. T. R.

JOHN DRYDEN & SON, BROOKLIN, ONT.

## GOSSIP.

It is necessary to go back to March, 1908, to find a time when lambs sold higher than \$8.20 at Chicago. On March 25th, 1909, \$8.20 straight was realized for 318 89-lb. Idaho lambs, fed by W. W. Grigsby and F. H. Turner, both of Skidmore, Mo. These lambs had been on feed about five months, during which time they made a gain of 29 lbs. per head. They were bought on the South Omaha market at \$4.90. They were run in a waste cornfield the first two and a half months, and were on full feed the remainder of the time.

## GREAT IS SHEEP INDUSTRY.

"No other live-stock industry will show up with that of sheep, when it comes to great gains and improvement in handling them," says E. J. Huling, the well-known sheepman and wool dealer, of Trinidad, Colo., in the Chicago Live-stock Report. "In 1880 I engaged in the sheep and pelt business in New Mexico. That year, according to the records, the total number of sheep marketed in Chicago amounted to only 335,810. There was no other market in the West to speak of at that time. Last year the number received at the five large markets amounted to 9,359,000. Somebody has been educating the people in the United States to eating mutton, and the farm papers have been the most persistent workers for this end."

## REARING PET LAMBS.

A writer in the Farmers' Gazette, of Dublin, Ireland, writes: "For the past six years I have reared pet lambs, as my Suffolk ewes every season have yeaned a couple of sets of triplets and I find no trouble in rearing them. My plan is as follows: For the first four or five days the lamb gets a feeding-bottle of fresh cow's milk and boiled water, in equal parts, and a teaspoonful of treacle every three hours during the day and once at night. Then I gradually add fresh skim milk instead of water, and stop the night feed, and by the time the lamb is a fortnight old it is receiving four bottles in the day (6 a.m., 11 a.m., 5 p.m., 9 p.m.), and I find they make just as good lambs as those reared by the ewe. Their bowels must be regulated by the amount of treacle given."

Official records of 155 Holstein-Friesian cows were accepted by the American Holstein Association from March 5th to March 15th, 1909. This herd of 155 animals, of which about 42 per cent. were heifers with first or second calves, produced in seven consecutive days 61,531 lbs. of milk, containing 2,159,828 lbs. of butter-fat; thus showing an average of 3.51 per cent. fat. The average production for each animal was 397 lbs. of milk, containing 13,934 lbs. butter-fat, equivalent to 56.7 lbs. or 27 quarts of milk per day, and 16 1/2 lbs. of the best commercial butter per week. In this issue of the official reports, Blanche Lyons Netherland, 21,945 lbs. fat from 530.9 lbs. milk in 7 days, 89,764 lbs. fat from 2,405.8 lbs. milk in 30 days, leads the aged-cow class. In the senior four-year-old class, Johanna Vernon DeKol appears with the fine record of 22,878 lbs. fat, from 590.4 lbs. milk in 7 days, 90,763 lbs. fat from 2,396.1 lbs. milk in 30 days; while Tirania Hengerveld Burke, 20,418 lbs. fat from 524.4 lbs. milk, gains a place in the 20-lb. list. Meadow Brook Janet, 18,867 lbs. fat, from 442.7 lbs. milk, and Katharine Aukje, 16,521 lbs. fat from 480.9 lbs. milk in 7 days, 67,106 lbs. fat from 2,011.7 lbs. milk in 30 days, are at the head of the junior four-year-olds. The most prominent senior three-year-olds are Gracie DeKol Ormsby, 16,841 lbs. fat from 460.2 lbs. milk in 7 days, 70,466 lbs. fat from 2,195.5 lbs. milk in 30 days, and Kaatje Posch, 16,011 lbs. fat from 400.9 lbs. milk; while the same relative position among the junior threes are held by Ykema Wayne Mercedes DeKol, 16,531 lbs. fat from 445 lbs. milk, and Hengerveld Empress of the Elms, 15,065 lbs. fat from 378 lbs. milk. Leila Inka DeKol 2nd is far in the lead among the senior two-year-olds, and with the great record of 19,692 lbs. fat from 431.8 lbs. milk, gains second place in the senior two-year-old list; College Colantha Queen 2nd makes a good record of 16,015 lbs. fat from 426.8 lbs. milk.

QUESTIONS AND ANSWERS.  
Miscellaneous.

WANDERING GEESE.

1. This district is what we term "open." Cattle run the roads. Can geese, which go on the road, be stopped by law from entering fields through road fences?

2. Does owner of fields have to fence against them?

3. Would owner of geese be liable for any damages caused through ravages of geese on crops under above conditions, where fences are very open at bottom?

N. B.

Ans.—1 and 2. These matters are regulated by local statutes and by-laws; and it is possible that under some there may be provision made for impounding poultry when found at large, trespassing and doing damage.

3. We think so.

TRUMPET VINE.

I would like to know if the plant, or flower, called trumpet vine, is a dangerous plant for a farmer to grow. I have given my order for one to come this spring, and I have heard since that it will spread over a ten-acre field in a few years. Please give me some information about it.

READER.

Huron County.

Ans.—Although the trumpet vine (*Tecoma radicans*) sends up numerous shoots from its roots, there is little danger of a plant or two, used for ornamental purposes around a Canadian residence, over-running a farm, or even causing serious trouble, if judiciously cared for. It is, however, questionable if this is a desirable ornamental for your district. It is said to be hardy only as far north as Massachusetts, although shoots appear each season and give some bloom.

SAWDUST AS STABLE ABSORBENT.

Does sawdust make a good stable absorbent? Would it have a bad effect on our land, it being a sandy loam?

New Brunswick. A. B. C.

Ans.—Sawdust makes an excellent stable absorbent. Its effect on the land is usually beneficial, when applied with the manure in moderate amount, though on a very light sandy soil it might possibly have a deleterious effect in opening up the texture unduly. On the other hand, by its gradual, albeit somewhat slow decay, it will eventually add to the humus content of the soil. Rather than do without any stable absorbent at all, we would certainly employ sawdust under almost any circumstance.

BUTTER FROM CREAM.

How many pounds of butter would there be in 105 lbs. of cream, testing 24% butter-fat?

W. W. S.

Ans.—The amount of butter that may be made from a sample of cream will depend upon the thoroughness of the churning, amount of salt added, and the amount of moisture which the butter-maker succeeds in incorporating with the fat (though this should not exceed the legal limit of 16 per cent.). The rule of the dairy breed societies in calculating the amount of butter that may be made from a given amount of milk is to add one-sixth to the quantity of fat in the milk. On this basis 105 lbs. of cream, testing 24% fat, should churn 29.4 pounds of butter, though it may vary from this one way or the other.

ONLY CANADIAN CERTIFICATES RECOGNIZED BY OUR RAILWAYS.

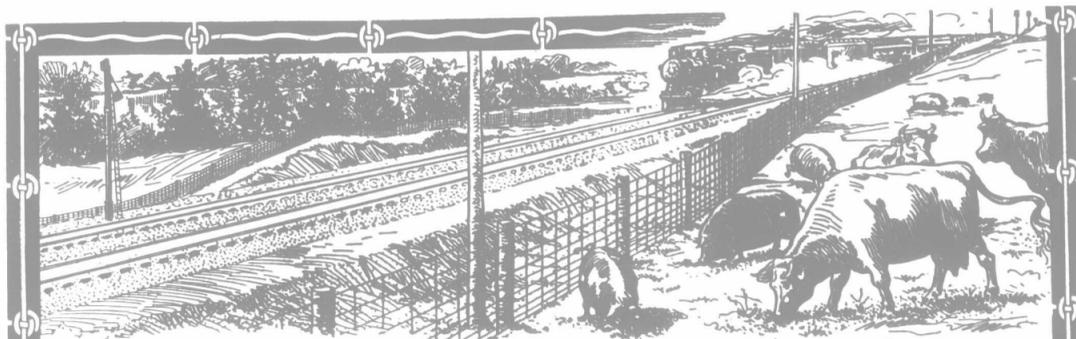
1. I am told that railroads will no longer recognize American Shropshire Association certificates in pure-bred shipments by freight. Is this true?

2. If this is so, have we got to get our sheep recorded in the National Records, that are already recorded in the American?

A HOPEFUL SHEPHERD.

Ans.—1. According to the latest tariff issued by the railroads relating to shipments of pure-bred live stock for breeding purposes, only Canadian Record Associations are recognized.

2. It would thus appear that your sheep recorded in the American Book will have to be entered in the Canadian Book before the reduced freight rate can be secured.



"Maritime" wire fences are stronger than ordinary wire fences. Made from High Carbon and Hard Drawn steel wire, specially imported, on account of its superior galvanizing, "Maritime" fences are from 75% to 100% stronger than common wire fences.

Sturdy enough and sufficiently high to hold the largest stock, "Maritime" wire fence is still woven small enough to keep in small animals.

The absolute regularity of the weaving, equally distributes any strain or pressure which may occur. "Maritime" wire fences are always taut.

Write for catalogue and price list.

NEW BRUNSWICK WIRE FENCE CO., Limited.  
MONCTON, N.B.

OIL CAKE

J. & J. Livingston Brand

The finest feed known for stock. Once a user, always a user. Sold either fine or coarse ground. Write:

DOMINION LINSEED OIL CO., LIMITED,  
BADEN, ONTARIO. 31 Mill St., MONTREAL, QUE.

The Maples Holstein Herd!

RECORD-OF-MERIT COWS. Headed by Lord Wayne Mechthilde Calamity. Nothing for sale at present but choice bull calves from Record of Merit dams; also a few good cows at reasonable prices.

WALBURN RIVERS, Folden's Corners, Ont.

DON'T Buy a HOLSTEIN BULL till you get my prices on choice goods from 14 months to 1 month old, from best producing strains. "Fairview Stock Farm." FRED ABBOTT, Harrietsville, Ont.

FAIRVIEW HERD

The greatest A. R. O. herd of in northern New York. Headed by Pontiac Korndyke, the greatest sire of the breed, having five daughters whose seven-day records average 29 1/4 pounds; the greatest seven-day record by Korndyke, out of Pontiac Rag Apple, 31.62 pounds butter in 7 days, and 126.56 pounds in 30 days, at 4 years old. Cows and heifers in calf to the above two bulls for sale, also young bulls sired by them out of large-record cows. Write, or come and inspect our herd. E. H. DOLLAR, Nevelton, St. Law. Co., N. Y., near Prescott, Ont.

HIGH PRICES PAID FOR HIDES, SHEEPSKINS, RAW FURS AND

GALFSKINS

Write for our COMPLETE PRICE LISTS, issued every little while.

E. T. CARTER & CO., 84 Front St., East, Toronto, Ont.

We pay FREIGHT and EXPRESS CHARGES PROMPT RETURNS.

Spring Brook Holsteins and Tamworths

Two choice bulls ready for service, one sired by Nanuet Pietertje Paul, whose three nearest dams average over 25 lbs. butter in one week; two bull calves by Count Posch Mechthilde, of high R. M. stock. A few females to offer. Tamworths of best imp. English Royal winners. Stock of all ages for sale. A. C. HALLMAN, Breslau, Ontario, Waterloo Co.

HOLSTEINS Two bull calves, two yearling heifers, two two-year-old heifers. Prices right for quick sale. White Rock and Buff Orpington eggs. Utility pens, \$1 per setting; exhibition pens, \$2 per setting. DAVID RIFE & SONS, Hespeler, Ont.

HOMWOOD HOLSTEINS

For Sale: Only thrifty bull calves from 4% R. O. M. cows; some will make great herd headers and show animals. Write for prices and description. Station on the place.

M. L. & M. H. HALEY, Springford, Ont.

Maple Hill Holstein-Friesians

Special Offer: I must sell in next 30 days two cows; one bred in Nov. to Prince Posch Pietertje C.; one fresh in Dec., just bred. One yearling bull fit for service.

G. W. CLEMONS, ST. GEORGE, ONT.

HOLSTEINS

We must sell at least 25 cows and heifers at once in order to make room for the increase of our large herd. This is a chance of a lifetime to buy good cattle at bargain prices. The best way: arrange to come and look the herd over. If you cannot, we will do our best for you by correspondence. Also a few young bulls. 100 head to select from. Imported Pontiac Hermes, son of Hengerveld De Kol, world's greatest sire, head of herd. All leading breeds represented.

Putnam station, near Ingersoll.

BUSINESS HOLSTEINS!

Over 60 head to select from. Milk yield from 60 to 85 lbs. a day, and from 35 to 47 lbs. a day for 2-yr.-olds. There are 10 2-yr.-old heifers, 8 1-yr.-olds, and a number of neifer calves. Bulls from 1-yr.-old down. Priced right. Truthfully described. W. HIGGINSON, Inkerman, Ont.

LAKEVIEW HOLSTEINS

We have for sale 4 young bulls ready for service, 2 of them by Brightest Canary, whose several nearest dams average 25 lbs., and whose B. F. test shows 4 1/2; the other 2 equally as well bred. We have also for sale a number of heavy-milking Holstein grades. All these will be priced right. LAKEVIEW FARM, BRONTE, ONTARIO. Long-distance phone. Write us for particulars. W. D. BRECKEN, Manager.

Does Twice the Work of a Hoe -10 Days Trial

"Buco" Hand Cultivator does twice the work of Hoe in less time, less labor, trouble; more thoroughness. Digs deeply, extracting weeds by roots. Adjusted to any width for working around vegetables, etc. 4 1/2 ft. hard-wood handle; thoroughly tempered best steel teeth. Simple, durable; lasts a lifetime; saves its own price many times first season. Sold by Hardware and Seed Stores. If dealer cannot supply you, send regular price, \$1.50, and "Buco" will be promptly sent you, express prepaid. Money refunded after 10 days trial if it is not satisfactory.



"Buco" Hand Cultivator. Bailey-Underwood Company, Ltd. New Glasgow, N.S., Canada.

SUMMER HILL HERD OF HOLSTEIN CATTLE

If you are thinking of buying a choice young cow or heifer in calf, come and see our herd. We want to sell. Will price anything, and guarantee it just as described. Our stock bull, Summer Hill Choice Goods, has 5 half-sisters that average 29 1/4 lbs. butter in 7 days, and one 4-yr.-old half-sister, Champion of the World, with 31.62 lbs. butter in 7 days. His dam gave over 18,000 lbs. milk in one year. Visitors cheerfully met at Hamilton by appointment.

D. C. FLATT & SON, MILLGROVE, ONT. Bell Phone in House: 2471 Hamilton.

Now

is the time to buy a bull for service next year, because we sell CHEAPER now than we do next spring. Why not write to us RIGHT AWAY for a BARGAIN in bulls from R. O. M. dams? Or better yet, call and see us.

E. & F. MALLORY, FRANKFORD, ONTARIO.

HOMESTEAD HOLSTEINS

For sale: Bull calves sired by the champion, Count Mercedes Posch, whose nearest dams' records average 25 lbs., and out of Advanced Registry dams.

G. & F. GRIFFIN, Burgessville, Ont. Oxford Co.

HOLSTEINS and YORKSHIRES FOR SALE

R. Honey, Brickley, Ontario, NORTHUMBERLAND COUNTY. Bulls fit for service, from cows with large records. Sows fit to mate, also young pigs, both sexes, of the very best bacon type. Prices reasonable.

Evergreen Stock Farm

Holsteins all sold. I have a valuable recipe for calf scours, which every dairyman should know. Have had 15 years' experience without a single loss. If you are troubled send at once, accompanied by \$1. F. E. Pettit, Burgessville, Ont.

## Bone Spavin

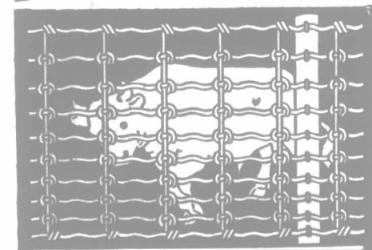
No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use

### Fleming's Spavin and Ringbone Paste

Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 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 Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.

**FLEMING BROS., Chemists**  
78 Church St., Toronto, Ontario



## Fence Friends

Every buyer of Peerless Fence becomes a friend of ours because Peerless fence saves him trouble, money and time. PEERLESS Woven Wire Fence is made of all No. 9 Steel Wire well galvanized. PEERLESS FENCE requires very few posts, and you save money on the net cost of your fence.

# PEERLESS

### The Fence That Saves Expense

One of the reasons why PEERLESS Woven Wire Fence is better than other fences is because of the PEERLESS lock. It holds securely and without damaging the wire, yet there is just enough elasticity to prevent snapping from sudden shocks, changes in temperature or from any other cause. Stock cannot get through it—under it or over it. There are so many advantages in buying PEERLESS Fence in preference to others that we have not room in this advertisement to tell you of them.

Your name on a postal brings you our new printed matter, containing much useful information in regard to fencing. Write for it today.

**The Banwell Hoxie Wire Fence Co. Ltd.,**  
Dept. B  
Hamilton, Ont. Winnipeg, Man.

## The "STAY THERE"

### Aluminum Ear Markers

are the best. Being made of aluminum they are brighter, lighter, stronger and more durable than any other. Fit any part of the ear. Nothing to catch on feed trough or other obstacle. Your name, address and any series of numbers on each tag. Sample tag, catalogue and prices mailed free. Ask for them. Address

**WILCOX & HARVEY MFG. CO.,**  
194 Lake St., Chicago, Ill.

### Sale of the Most Celebrated Herd of Ayrshires in the World.

Mr. Waller, Auctioneer, Castle Douglas, has received instructions from Mr. Andrew Mitchell, Bar-chesk e. Kirkcudbright, Scotland, to sell on

**THURSDAY, MAY 20th,**

his world-renowned herd of Ayrshires, consisting of over 300 head of the choicest cattle ever exposed to public auction, and on

**FRIDAY, MAY 21st,**

his celebrated stud of Clydesdales, consisting of 30 head, mostly Macgregor and Baron's Pride blood. Included in the sale will be the dam and full sister of the champion show and breeding horse, Baron's Gem, and the dam of Criterion; all sure in foal. Cattle bought for export under three years old to pass tuberculin test. Arrangements made with Donaldson Bros. for cheap fares to purchasers at this sale.

### CATTLE AND SHEEP LABELS

SIZE.	PRICE, DOZ.	50 TAGS.
Cattle	75c.	\$2 00
Light Cattle	60c.	1 50
Sheep or Hog	40c.	1 00

Postage paid. No duty to pay. Cattle labels with name and address and numbers; sheep or hog labels with name and numbers. Write for sample free.

**F. G. JAMES, BOWMANVILLE, ONTARIO.**

**Ayrshires from a Prizewinning Herd—** Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to **WM. STEWART & SON,** Campbellford St. **Menie P. O., Ont.**

**AYRSHIRES** Bull and heifer calves from producing dams. Right good ones. **Hickory Hill Stock Farm, N. DYMENT, Dundas Station and telegraph. Clappison, Ont**

### QUESTIONS AND ANSWERS.

#### Miscellaneous.

#### MISREPRESENTATION.

Bought a bull calf three months ago. Was told then that its dam was three out from an imported dam. Have not yet received the pedigree, but received a copy of it which shows dam of calf to be seven out from imported. Money was paid at time of buying. Do you think there should be any consideration? Should part of money be refunded?

ELGIN.

Ontario.

Ans.—If the purchaser, when buying, relied upon the representation in question, and did so to the knowledge of the vendor, making no independent investigation, the latter is liable in damages for the misrepresentation.

#### HIRING AND WAGES.

A hires to B for a year at \$235, A to board himself. B gets a contract from the Town Council road-making, the Council paying \$3 per day for man and team. B wishes to send A, with team, to work at this. Is A bound to go, and, in addition, do chores morning and evening, for his ordinary wages, i. e., 64c. per day, nothing being said about this at the time of hiring?

Ontario.

SUNNY JIM.

Ans.—A cannot claim any higher wages while the present contract subsists; but it is possible that he may properly decline to do this roadwork as being something which was not in contemplation at the time the contract was entered into.

#### BUGS.

A rents farm to B for one year. Before the year expires and B moves out, A finds out B has polluted the house on farm with bedbugs. Can A compel B to clean said house of said bugs before leaving said farm?

SUBSCRIBER.

Ontario.

Ans.—No; but if there is a written lease containing the usual statutory covenants, A would be entitled to damages from B, if, after notice to him to rid the house of the bugs, and to leave it in good condition generally, he should fail to do so; and even if there be no such lease, B would probably still be liable in damages, if it was owing to negligence on his part that the house became infested as described, and he should neglect to comply with the above-suggested notice.

#### WHITEWASH RECIPE.

What is a good recipe for making whitewash that will stand weather or friction indoors?

G. W. O. M.

Ans.—Take half a bushel of unslaked lime, slake with warm water; cover it during the process to keep in the steam, run the liquid through a fine sieve; add a peck of salt previously dissolved in warm water, three pounds of ground rice, boiled to a thin paste, and stir in boiling hot, half pound of powdered Spanish whiting and a pound of glue, which has been previously dissolved over a slow fire, and add five gallons of hot water to the mixture. Stir well and let it stand for a few days, covered securely to keep out dirt. It should be put on hot. One pint of the mixture will cover a square yard. This is one of the best washes for permanent work inside or out.

#### CANADA RED APPLES—LIGHTNING RODS.

1. I have an orchard just beginning to bear, in which are about two dozen Canada Red apple trees. Are they a desirable variety, or would it be advisable to graft to some better variety?

2. In putting up lightning rods, would two ground rods be sufficient for a barn 15 x 55, and how many points would be necessary on roof?

T. J. S.

Ans.—1. While Canada Red is an apple of fair quality, it is not recommended, because, in many cases the trees are shy bearers. Everything considered, it would be advisable to top graft to some of the high-class standard varieties now in demand unless your trees bear well, and you are in a position to market this variety at a good profit.

2. Yes, two ground rods are sufficient—one at each end of the barn—grounded into damp earth. Uprights about five feet long and not more than 20 feet apart on the roof-board are satisfactory.

## ERADICATES SCAB Won't Harm Trees

The wonderful feature of V1 Fluid is its absolute safety to user, to animals, to trees and shrubs.

V1 is a revelation in Fruit Culture. Kills the spores of Fungi, and all growths such as Moss, Black Knot Canker, etc.

V1 invigorates the growth of the trees and bushes—produces more fruit and fruit of finer quality and appearance.

V1 Fluid is non-poisonous. Sheep may eat grass under sprayed trees without fear of injury.

One gallon of V1 Fluid makes 100 gallons of spray.

### GIVEN AWAY

"The Eradication of Plant Pests" gives some facts for fruit growers that you ought to know. Sent free if you tell us the size of your orchard and mention this paper.

# V1 FLUID

## The Winter Spray

For sale by druggists and dealers generally or direct from **WM. COOPER & NEPHEWS, - - TORONTO.**



## Stoneycroft Ayrshires

Choice young bulls and heifers of the very best breeding, combining show and dairy quality.

Large Improved Yorkshire Pigs from imported sires and dams, now ready to ship.

Stoneycroft Stock Farm, Ste. Anne de Bellevue, Que.

## AYRSHIRES AND YORKSHIRES!

We will sell or exchange for a young cow our (imp.) 3-year-old bull. On hand: Young bulls fit for service (imp. or home-bred). Choice August and September, 1908, calves from imp sires, some imp. dams. One a grandson of Eva of Menie. Females any desired age. Bargains now, as we are crowded. We will only fill orders for 1909 importation. Young sows ready to breed. Phone Campbellford.



**ALEX. HUME & CO., MENIE, ONTARIO.**

HOARD'S STATION, G. T. R.

## A BETTER LOT OF AYRSHIRE Cows and Heifers

Were never to be seen before at **Stockwood**. Deep milkers, good teats; lots of size, just the kind for foundation stock. Young bulls from prizewinning dams; also heifers. Prices low. Terms to suit purchaser. All stock guaranteed before shipping.

**D. M. WATT, St. Louis Sta., Que.**

## Stonehouse Ayrshires.

36 head to select from. All imported or out of imported sire and dam. For sale: females of all ages. Am now booking orders for bull calves.

**HECTOR GORDON, Howick, Quebec.**

## Springhill Ayrshires

Present offering: A number of high-class bull calves, out of imp. sire and dams. Females all ages, imported and home-bred. Write your wants. Visitors always welcome. Phone connection.

**Robt. Hunter & Sons, Maxville, Ont.**

## TROUT RUN AYRSHIRES

Imported and Canadian-bred. Our herd of 30 Ayrshires are producers. We will sell six 2-yr-old heifers in calf to imported bull, twelve yearling heifers (imp. sire and dam), 1 imp. yearling bull, and one home-bred yearling bull. A choice lot. **Wm. Thorn, Lyndoch, Ont.**

## HOWGLEN AYRSHIRES!

For sale: 75 pure-bred registered Ayrshires, all ages; prizewinners; many imported. Apply to **ALLAN P. BLUE, Eustis, Quebec.**

## CHERRY BANK AYRSHIRES.

I am now offering young bulls and heifers true to type and high in quality. Some with imp. sire and dam; also will spare a few older females.

**P. D. McArthur, North Georgetown P. O., Que. Howick station, Que.**

## UTILITY GLENORA OF KELSO—15798—AYRSHIRES

at head of herd. For sale: Females of all ages, and several young bulls, some out of 11,000-lb. cows. Come and see, or address: **R. C. CLARK, Hammond, Ont.** Railway station, Hammond (G. T. R. and C. P. R.).

# Brampton Jerseys

Canada's premier herd. Dairy quality. Bulls all ages for sale, from best dairy and show cows in Canada, and by best sires. Our herd is 175 strong.

**B. H. BULL & SON,**

**BRAMPTON, ONT.**

## American Shropshire Registry Association.

**HENRY L. WARDWELL, PRESIDENT.**

Largest membership of any live-stock organization in the world. Vol. 21 of the Record published. Write for rules.

**Mortimer Levering, Sec., LaFayette, Indiana.**

## SOUTHDOWN AND COLLIES.

Long distance Telephone

Orders now solicited for especially-fitted sheep. Your choice of early lambs from imported and prizewinning Canadian-bred ewes, and by the sire of the Grand Champion wether at Chicago, 1907. Twenty ewes, the choice of last year's lamb crop, also for sale.

**ROBT. McEWEN, Byron, Ont. Ry. Stn., London, Ont.**

HAVE YOU EVER REALIZED THE RESULTS OF "ADVOCATE" ADS.?

# CONSTIPATION IRREGULARITY OF THE BOWELS

Any irregularity of the bowels is always dangerous, and should be at once attended to and corrected.

## MILBURN'S LAXA-LIVER PILLS

work on the bowels gently and naturally without weakening the body, but, on the contrary, toning it, and they will if persevered in relieve and cure the worst cases of constipation.

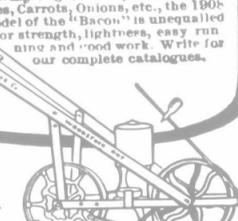
Mrs. James King, Cornwall, Ont., writes: "I was troubled with sick headaches, constipation and catarrh of the stomach. I could get nothing to do me any good until I got a vial of Milburn's Laxa-Liver Pills. They did me more good than anything else I ever tried. I have no headaches or constipation, and the catarrh of the stomach is entirely gone. I feel like a new woman, thanks to Milburn's Laxa-Liver Pills. I used in all about half a dozen vials."

Price 25 cents a vial, 5 for \$1.00, at all dealers or mailed direct by The T. Milburn Co., Limited, Toronto, Ont.

**The "BACON" Seed Drills and Cultivators**

The only Rear-Wheel Driven Seed Drill on the market. The feed in the "Bacon" handles seed without bruising or breaking, and seeds evenly to the last seed. Machine instantly converted from a regular seed sower into a hill dropper. Feed cut prevents waste of seed when turning rows.

For sowing Sugar Beets, Parsnips, Radishes, Carrots, Onions, etc., the 1907 model of the "Bacon" is unequalled for strength, lightness, easy running and good work. Write for our complete catalogues.



THE EUREKA PLANTER CO. Limited  
Woodstock, Ont. Z

**IF YOU'VE NEVER WORN  
TOWERS  
SLICKER**

you've yet to learn the bodily comfort it gives in the wettest weather

MADE FOR  
HARD SERVICE  
AND  
GUARANTEED  
WATERPROOF  
AT ALL GOOD STORES

TOWERS CANADIAN CO. TORONTO, CAN.



**CONTENTED LOSER.**

"Pat, I hear you lost five dollars in an election bet with McCarty."

"I did, sor, an' oi'm glad av it, be-gorra!"

"Glad of it?" Why are you glad of it, Pat?"

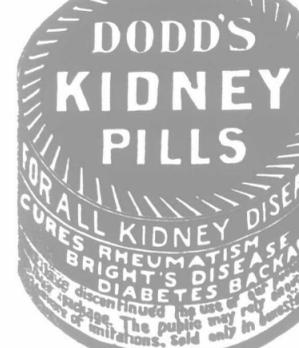
"Beccoz oi won twinty dollars from Flanagan in a bet thawt oi'd lose the five dollars oi bet wid McCarty."

**DODD'S  
KIDNEY  
PILLS**

**CURES ALL KIDNEY DISEASES**

RHEUMATISM  
BRIGHT'S DISEASE  
DIABETES  
BACKACHE

FOR ALL KIDNEY DISEASES



### QUESTIONS AND ANSWERS. Miscellaneous.

#### SCARLET FEVER.

A Beeton, Ont., correspondent writes, suggesting that, in view of Sec. 93 of the Public Health Act (R. S. O., 1907, Chap. 248), certain answers given in this journal recently to questions submitted by him regarding payment for services of a medical health officer, and his powers, may be incorrect. We would just say that in answering the questions the Act and Section thereof referred to were duly considered, and that the answers given are quite in keeping with the provisions of the Act on the one hand, and the facts of the case as set forth in the statement sent us, and published, on the other.

#### SOOT IN CHIMNEYS.

Can you tell me of a chemical used to put in stoves that will eat the soot out of chimneys? P. S. H.

Ans.—I know of no chemical that is used in the stove for the purpose of removing the soot from the chimney. I know it is a practice in some cases to use some very inflammable material which will cause the flame or partially burnt parts of carbon to get into the chimney and set fire to the soot there and thus burn it up. For instance, sometimes straw, large amounts of paper, or even fat, are placed in the stove, which, on burning, make sufficient heat to ignite the soot in the chimney. If the chimney is properly made, there should be no danger in burning the soot out, provided no particles are allowed to fall on the shingles of the roof. With a slate or iron roof, or at a time when the shingles are wet or covered with snow, there should be no danger in following this plan of cleaning the chimney. R. HARCOURT.

#### ROTATION—NUMBER OF COWS.

1. Can you suggest any improvement on the following five-year rotation: 1, clover; 2, grain (oats); 3, grain, barley and oats, mixed; 4, roots, corn and peas; 5, barley, seeded to clover. Any better arrangement of the above-mentioned five crops as a five-year rotation, with 3/5 of land in grain, 1/5 in clover and 1/5 in roots, will be very acceptable.

2. How many milk cows could be profitably fed with following available feeds: 17 acres, average permanent pasture; 10 acres, average alfalfa hay; 15 acres, corn and roots, and straw of 45 acres of grain, with additional meal necessary?

Dufferin Co., Ont. J. F. M.

Ans.—1. We are of opinion that, notwithstanding the fact that our inquirer has 17 acres permanent pasture and 10 acres of alfalfa, he is proposing to devote too large a proportion of his rotation acreage to grain. To obtain maximum yields of corn and roots they should follow sod; assuming, in the case of the roots, that the sod is a friable clover sod of one year's standing. Corn, especially, should follow sod. In fact, so important is this that we would be inclined to adhere to it even though it left the three grain crops to follow each other in succession. Obviously, however, it is not well to have three grain crops together, hence we would make a special effort so to arrange matters that the grain acreage might be diminished by at least a third. If, though, our inquirer is definitely decided to devote three-fifths of his acreage to grain, we would suggest first year clover, second year hoe crop, third year oats, fourth year peas or peas and oats, and fifth year barley, seeded down. If making any change in the above it would be to put peas after clover and hoe crop after peas. This might be advisable if the hoe crop consisted chiefly of roots.

2. A good deal will depend on the system of management. With a silo to utilize the corn crop, and with green crops, such as corn (or silage), alfalfa and mixed grain to help out the pasture, it should be easily possible to keep 25 cows under the conditions specified. With a three-year rotation of corn and roots, followed by grain, seeded to clover and left one year in meadow, it should be possible to better this considerably in course of time. One cow for every two acres is a moderate ideal, not beyond the ultimate reach of a first-class dairy farmer in the average section of Canada.

### Maplehurst Herd of Tamworth Swine. Bronze Turkeys, Toulouse Geese, Pekin Ducks, S. C. W. Leghorns.

Tamworths of excellent breeding and ideal bacon type. Herd won sweepstakes at Toronto and London, 1905-6-7-8; winnings at World's Fair, St. Louis, 1904.—sweepstakes aged and junior herd, and two grand championships. Apply to:

D. DOUGLAS & SONS, MITCHELL, ONTARIO.

**MAPLE LEAF BERKSHIRES**

For sale: Sows bred and ready to breed. Gulph winners among them. Boars all ages. The highest types of the breed. Imp. sires and dams. Pairs not akin. C.P.R. and G.T.R. Joshua Lawrence, Oxford Centre, Ontario.



**OHIO IMPROVED CHESTER WHITES.**—Largest strains. Oldest-established registered herd in Canada. Young sows in farrow. Choice pigs 4 weeks to 6 months old. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe delivery guaranteed. E. D. GEORGE Putnam, Ont.

### March Offering!

A choice lot of young **SOWS in pig.** **BOARS** ready for service.

A good lot of September and October pigs. Pairs supplied not akin. Orders taken for young pigs. Prices moderate. Write or call on:

H. J. DAVIS, WOODSTOCK, ONT.

**NEWCASTLE TAMWORTHS, SHORTHORNS AND CLYDESDALES.** Present offering: 1 registered Clydesdale mare due to foal April 30 to imp. Clyde stallion; 3 Shorthorn cows with heifer call at foot, 3, 4 and 5 months old respectively and bred again; a choice lot of Tamworth boars and sows from 6 weeks to 5 months old, also a few choice sows bred to farrow in April, May and June. A. A. COLWILL, NEWCASTLE, ONT.

**MONKLAND YORKSHIRES**

are the easily-fed, quick-maturing kind. The sort the farmers want. All ages for sale. 100 sows bred now.

JAMES WILSON & SONS, FERGUS, ONTARIO.



**SUNNYMOUNT BERKSHIRES**

Highest standard of type and quality. For sale: Sows of all ages, and 4 yearling boars. A grand good lot. Also younger ones. Pairs not akin. JOHN McLEOD, C.P.R. & G.T.R. Milton P.O., Ont.



**DUROC-JERSEY SWINE**

Imported and home-bred. Sows ready to breed. Boars fit for service, and younger ones either sex. Also Embden geese. MAC CAMPBELL & SONS, HARWICH, ONT.

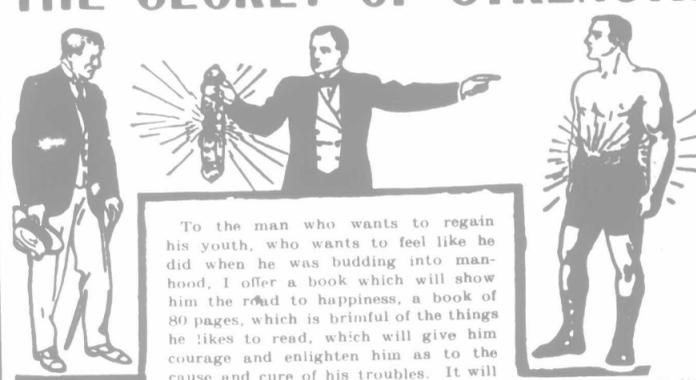
**ELMFIELD YORKSHIRES**

50 young pigs for sale, both sexes. Young sows bred to imported boar, also sows to Canadian-bred boar due to farrow about 1st October. S. B. Muma Agr. Ont. Avr. C.P.R.: Paris, G.T.R.

**CHESTER WHITE SWINE**

A choice lot of young stock. Write for prices. W. E. WRIGHT, SUNNYSIDE FARM, GLANWORTH, ONTARIO.

**THE SECRET OF STRENGTH**



To the man who wants to regain his youth, who wants to feel like he did when he was budding into manhood, I offer a book which will show him the road to happiness, a book of 80 pages, which is brimful of the things he likes to read, which will give him courage and enlighten him as to the cause and cure of his troubles. It will point out the pitfalls and guide him safely to a future of strength and vitality.

If you feel tired and stupid, with no ambition to get out and hustle; if you have spells of despondency and a desire to give up the fight, you need new energy. The race is to the strong. Show me a failure and I'll show you a weakling, lacking in courage, strength and ambition, three essentials to the make-up of a successful man.

I can take a man like that and pump new energy into his body while he sleeps, and in a few weeks' time transform him into a giant in strength and courage. It is proven that energy and electricity are one and the same thing. If you lack this energy you can get it only by filling your nerves with electricity. Dr. McLaughlin's Electric Belt does this. Wear it while you sleep. Feel its invigorating stream of electric life in your nerves, its vitalizing spark in your blood. You wake up in the morning full of new life, new energy, and courage enough to tackle anything.

The secret of strength, then, is plenty of electricity in the human body. Keep it full and every organ will do its duty; pain and weakness will disappear. My Electric Belt does this while you sleep. It pours a steady stream of soothing electricity into the nerves and organs all night long, and is taken up by them just as a sponge absorbs water. It restores strength to every part that is weak.

Do you doubt it? If so, any man or woman who will give me reasonable security can have my Belt, with all the necessary attachments suitable for your case, and

**YOU NEED NOT PAY UNTIL CURED.**

Dr. McLaughlin: Keewatin, Ont.

Dear Sir,—I have derived good results from the use of your Belt. My digestion is perfect; headaches and lassitude all disappeared after two months' use of your Belt. I am feeling stronger to-day than I have for the past eight years. I thank you for the Belt and advice, and will gladly answer all inquiries regarding my case. Yours truly, MRS. L. JONES.

You will never know what a grand power electricity is until you feel its genial, glowing warmth penetrating every vital part of your body from my Electric Belt.

**FREE BOOK.**—Cut out this coupon now and mail it. I'll send this book without delay, absolutely free. Call if you can. Consultation free.

**DR. M. S. McLAUGHLIN, 112 Yonge St., Toronto, Can.**

Dear Sir,—Please forward me one of your Books, as advertised.

NAME .....

ADDRESS .....

Office Hours—9 a.m. to 6 p.m. Wednesday & Saturday until 8.30 p.m. Write plainly.

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ADS. ?

## HA! HA! HA!

"Well, I'm blest! So this is one of those so-called metal roofing guarantees I've read about," laughs the Wise Man of Metal Town.

"It certainly is a good joke, for it doesn't really guarantee anything to anybody, and isn't legally binding. Ask your own lawyer and you'll find I'm right."

"Stripped of all its exceptions and provisions I don't see how anyone could be serious about it."

"I go by what I know has been done, not by what is promised. For instance, I know that 'Eastlake' Metallic shingles have been in use for twenty-five years right here in Toronto, where they're made, and that those same shingles are in perfect condition now."

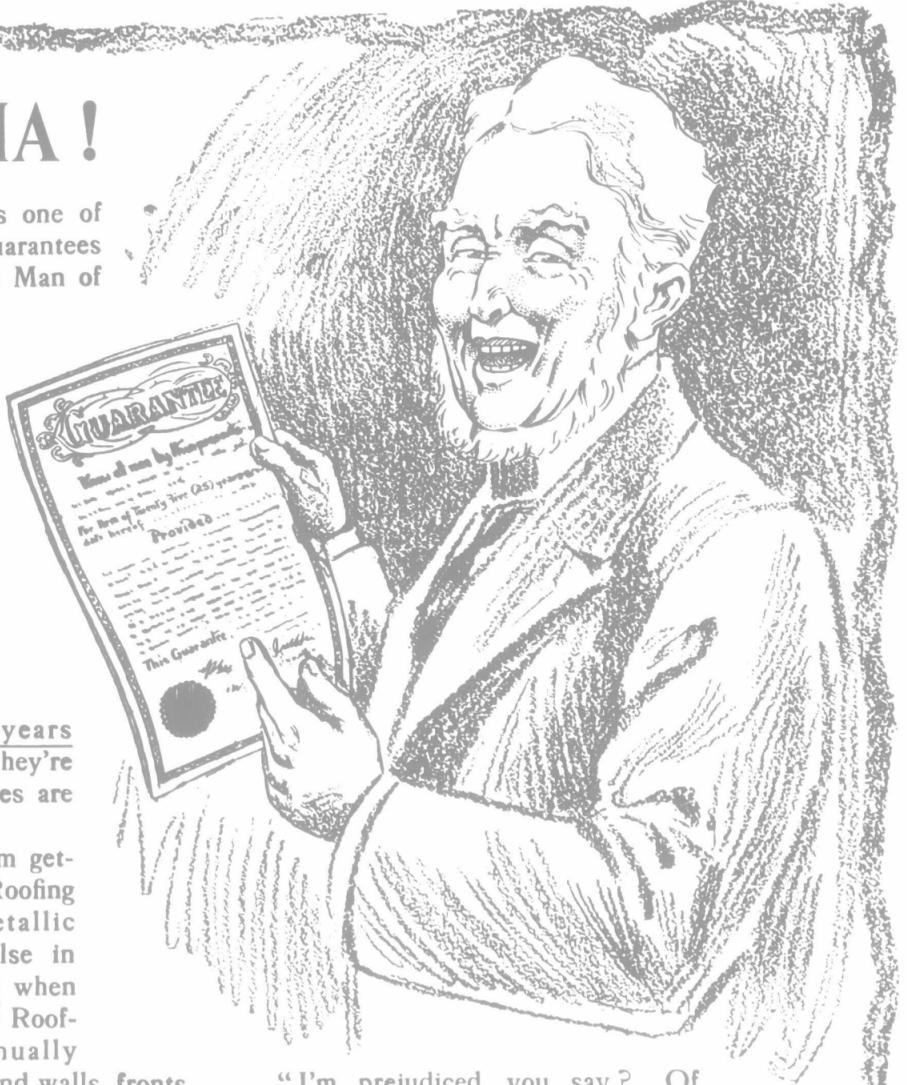
"Just listen here a minute. I'm getting serious now. The Metallic Roofing Company began to make metallic shingles years before anyone else in Canada. They were made right when they were first made. The Metallic Roofing Company have been continually making new designs for ceilings and walls, fronts and cornices, but as for shingles they have never seen an improvement on the 'Eastlake' steel shingles which have been made, laid and proven for twenty-five years."

"I've noticed that most metal shingle manufacturers change their pattern so frequently that I'm led to believe they, themselves, haven't much confidence in their own goods. Yes, they even change the name to cover up some weakness in a previous product."

### "TWO OTHER PERSONS' SAY-SO'S"

The Metallic Roofing Co., Limited,  
Toronto.  
Simcoe, Ont., April 9th, 1908.  
Dear Sirs:—"We have handled your 'Eastlake' Shingles for nearly a quarter of a century. They have been on the Court House, Free Library and other public buildings in this town for 18 years. We have used very large quantities during the past 25 years, and they have always given first-class satisfaction, and have never required any repairs."  
(Signed) MADDEN BROS.,  
Tinsmith and Hardware Merchants.

The Metallic Roofing Co., Limited,  
Toronto.  
Lucknow, Ont., April 9th, 1908.  
Dear Sirs:—"I take great pleasure in testifying to the good qualities of your 'Eastlake' Shingles. We put your painted shingles on our Town Hall here in 1883, 25 years ago, and although they have only been painted twice since that time they are in good condition yet. I consider the lock on the 'Eastlake' the very best, and believe that a roof covered with the galvanized 'Eastlake' will last for ever."  
(Signed) THOS. LAWRENCE,  
Hardware Merchant.



"I'm prejudiced, you say? Of course I'm prejudiced, but it's a prejudice founded on years of active use of the metallic goods made by The Metallic Roofing Co. It's an old man's prejudice based on a long experience."

"Write for booklet which tells more about 'Eastlake' Metallic Shingles. They are sure proof against fire, lightning, rust or weather in all climates. They are the easiest and quickest to put in place and the most durable when laid. If you send the measurement of any roof an accurate estimate of cost will be sent free."

—The Philosopher of Metal Town.

## The Metallic Roofing Co.

Limited

TORONTO and WINNIPEG

Agents wanted in some sections. Write for details, mentioning this paper.

### QUESTIONS AND ANSWERS. Miscellaneous.

#### DISEASED COW.

A farmer sells an apparently healthy cow to a drover, who sells it to a butcher in Montreal, and, on post-mortem examination by an inspector, is found to be infected with tuberculosis.

1. Can the butcher recover from the drover, and can the drover recover from the farmer, the price of the cow?

In case the law favors the farmer, can he recover money already paid in settlement?

Quebec.  
Ans.—1. We think not.  
2. Hardly.

#### SILO, MONOLITHIC STYLE.

I would like some information in regard to building a cement silo, monolithic style. We have no gravel, but can get broken stone and have plenty of sand. About how many yards of crushed stone would it take to build a silo about 15 by 32? Do you know of anyone who has the necessary outfit and would undertake the construction of a silo of this description?

Ans.—Clean, sharp gravel is superior to stone for silo construction, but if the stone is well crushed, and care is taken not to allow pieces of rock to lie too close to the surface, it will do fairly well along with the sand. For a silo 15 feet diameter and 32 feet high, with wall 10 inches at the bottom and 6 inches at the

top, you would require, approximately, 40 cubic yards of broken stone. Consult our advertising columns for those who have the necessary appliances.

#### WOOD PRESERVATIVES.

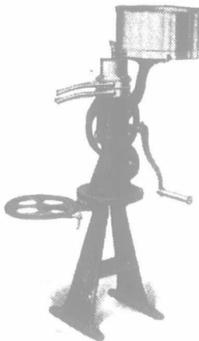
How would creosote paint last on a barn? Would it preserve the lumber? Would you advise using it, or what would be better?

Ans.—Creosote is a crude product distilled from coal tar at very low temperatures. While it preserves the wood, its effect is not lasting, and it is necessary to force the oil into the timber under pressure to make it of high value. A preparation made by special process known as Axonolite Tarbolean is very highly spoken of for preserving wood.

#### WARTS.

Is there anything that will take large seed warts off a heifer's neck? There are two about 1 1/2 inches in diameter, and some smaller ones just front of shoulders. She had them last fall when brought in from pasture. There is an offensive odor from them now.

Ans.—Such warts are sometimes successfully removed by tying a horse hair tightly around them, and renewing the figure as it slackens. They may also be removed by touching them once a day with a stick of caustic potash, or with butter of antimony applied with a feather. Any having slim necks, may be clipped off with shears, and the raw surface touched with either of the above remedies.



Frictionless Empire.

Do you know the difference between the cone and disc methods of cream separation? You should know the facts before choosing a separator.

There are two standard methods of cream separation—the cone and the disc. The cone is more suitable for one dairyman, while the disc is better for another. You can tell which is best for you when you know the difference between them. The Empire agent stands ready and willing to give you complete information.

It is to his advantage to tell you the truth about each method, because the Empire Line contains both cone and disc separators. His object is to help you select the method and the size you need require.

The object of the "one-method agent" is to sell you his single type of machine no matter what your needs may be.

Both Frictionless Empire (cone method) and Empire Disc are made of Empire-quality of materials. Complete line of sizes in each type.

The Frictionless Empire—the original cone separator—has such exclusive features as Ball Neck Bearing and 3-ball Bottom Bearing. No Closed Bearings on spindle where others have one, generally two. Easiest-to-turn, easiest-to-clean, closest skimmer—the peer of all cone separators.

The Empire Disc is in reality the leading disc machine of Europe, with addition of several Empire patented features. No other disc skims as closely as this improved European champion. None runs so easily, or so quickly and thoroughly cleaned.



Empire Disc.

**FREE Dairy Book**

Write for your copy. Explains both machines in detail. Tells about a guarantee that really guarantees, and a generous FREE TRIAL offer. EMPIRE CREAM SEPARATOR CO. OF CANADA, LTD. Western Office, Winnipeg, Head Office, Toronto.

**EMPIRE LINE OF Quality Cream Separators.**

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

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

Furthermore, "Frost" Gates have the distinction of being the first in which the frame is not weakened by having the "thread" cut half way into the pipe in order to join it to the coupling. No "threaded" ends—no couplings—in "Frost" Gates. Instead the pipe sections are WELDED together, making the part that was heretofore the weakest now the thickest and heaviest. And by welding, the tubing is made continuous—the gates are free from unsightly couplings.

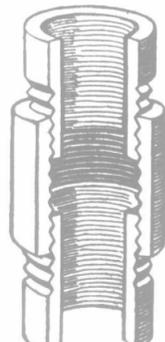
No extra charge is made for this wonderful welded improvement or for the more handsome and permanent finish—another reason why you should buy "Frost" quality in preference to other goods costing the same.

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



NEW WAY

Pipe Sections Welded Together



OLD WAY

Pipe Sections Threaded into Coupling.

FROST WIRE FENCE CO., LTD., HAMILTON, ONT.  
MANITOBA FROST WIRE FENCE CO., LIMITED, WINNIPEG, MANITOBA.

**"Frost" Gates**

**ROOFING FACTS AND FIGURES IN OUR FREE BOOK**



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

**J-M ASBESTOS ROOFING**

gives real fire protection, too. No other roofing made does this. Don't listen to "claims." Ask for the facts. Our facts prove our claims. Learn also why Asbestos Roofing keeps buildings warm in winter and cool in summer. Write to-day for Book No. 80 and samples. No matter what kind of roofing you want this book will help you choose wisely. The Canadian H. W. Johns-Manville Co., Ltd. 85-87 Wellington St., West, Toronto, Ont.

**POTASH**

has absolutely no substitute as an ingredient or a COMPLETE FERTILIZER for all Farm, Orchard and Garden crops.

This important "Plant Food" can be obtained from all leading fertilizer dealers and seedsmen in the highly-concentrated forms of

**SULPHATE OF POTASH AND MURIATE OF POTASH.**

Write for full particulars and copies of our free publications, including: "Fertilizing Orchard and Garden," "Potato Crop in Canada," "Fertilizing Root Crops and Vegetables," "Fertilizing Hay and Grain Crops," "Artificial Fertilizers: Their Nature and Use," etc., etc., etc., to

Dominion Agricultural Offices of the Potash Syndicate, 1102-1105 Temple Building, Toronto, Ont.



**The Up-To-Date Farmer**

Should see that his sheep are fed to best advantage, and use

**MOLASSINE MEAL**

which is the sheep food par excellence. It eradicates worms and prevents husk, hoose, gid and other complaints. Equally suitable for all animals. Not a condiment, but a food replacing other food stuffs. Write for booklet. Selling agents:

Walter Thomson & Son, Limited, Mitchell, Ont., or Andrew Watson, 91 Youville Square, Montreal.

**If you farm for profit, you need one of my scales**

ONLY my scales are sold direct from the one Canadian maker who has made good with the Canadian farmer on a straight business basis.



MANSON CAMPBELL.

**MANSON CAMPBELL, President.**

**I will make the price right and the terms easy**

You can't farm right without a scale; and you can't find a scale that is equal to those I make.

**EVERY Chatham Pitless Scale is sold with a Government Inspection Certificate that warrants its accuracy.**

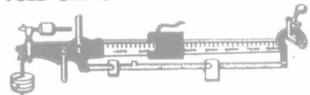
There is no extra charge for this warranty, signed by a resident Government Inspector, who tests every scale we make before it leaves the factory.

**This Scale is COMPLETE. Can't Get Out of Order.**

Any other scale comes to you as a few parts with a huge blue print, showing how you can build the rest of it; and you have to build it, too, before you do any weighing. This Chatham Pitless Scale is absolutely complete, built of heavy steel, staunchly bolted together, easily erected ready for use in a few hours. Read Mr. MacLean's letter below. It stands solidly on its broad steel feet, clear above ground, needing no fixed foundations. Move it readily anywhere. You cannot do that with a pit scale.

No check rods, no frail parts to get out of order. Compound beam, finely finished, fully tested, shows full tare on lower section,—easily read, no chance of error. Poise on top beam runs on roller bearings; notches lock the beam by a touch at each 200 lbs. Odd weights shown by small poise on lower beam. Weighs with absolute, warranted accuracy up to FIVE FULL TONS—ten thousand pounds. Nothing about it to go wrong—built so well, tested so carefully.

FULL CAPACITY COMPOUND BEAM.



It Can't Wear Out Because It's Steel.



**Chatham 5-Ton Pitless Scale.**

**Mr. W. F. MacLean, M. P. for East York, Says This About the Scale:**

DONLANDS FARM, ONT., July 2nd, 1908.

"Some days ago the Chatham 5-Ton Pitless Scale ordered from you came to hand. The farm foreman and another man went to work at it in the morning, and in the afternoon they had it all set up and were weighing on it before supper. The directions were so explicit, and the parts so simple that they had no trouble in putting the scale together and verifying the weighing capacity. As well as being useful for weighing hay and straw and things of that kind, it is very useful for weighing cattle and other live stock. One good way of selling horses is to be able to give their exact weight; and the way to get most for cattle and hogs is to know their weight before leaving the farm. Your scales are admirably adapted for every kind of work on the farm."

W. F. MACLEAN.

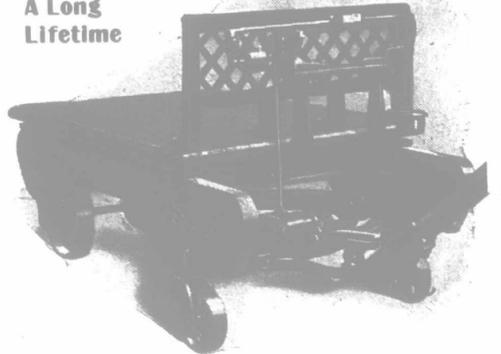
**Big Enough for Any Scale Use. Your Farm Needs Such a Scale.**

The Chatham's Platform is 8 x 14 feet—ample room for big load of hay, six fat steers, twelve hogs, etc. Platform can't sag, won't wobble, won't get sprung. Whole outfit built so it will last a lifetime and be good every minute. Sold for a fair price, on easy terms, and fully warranted in every way.

You ought to weigh all you buy, all you sell; ought to weigh your stock regularly; ought to keep track of your farm's yield—be a BUSINESS farmer. This scale makes it easy to do all this, and thus save its cost to you over and over—because you can't cheat yourself, nor can you be cheated with this on your farm.

**The Scale Every Farm Needs Weighs Up To 2,000 Lbs. Accurately.**

**Will Last A Long Lifetime**



**Chatham Portable Barn Scale**

is the handiest truck scale built,—compact, easily moved, readily turned short (front wheels and pole are swivelled). Certified by attached Government Inspection Certificate to be absolutely accurate and well made. Will weigh up to 2,000 lbs. with positive certainty. Warranted in every way. Priced low enough to suit you. Terms to suit you, too, if you wish credit.

**THE SAFEST SCALE TO BUY.**

No other scale is so fully worth your money. The Chatham levers are solid castings, extra staunch, can't spring a bit, strong enough to carry TWO tons. Main frame all one-piece solid casting. Bearings self-aligning, whole pivot rests on bearing loop,—so scale must weigh right even if not standing level. Chatham drop-lever principle spares weighing parts the jar of loads, thus bearings stay sharp fifty years or more. Send for description, prices, etc.

**You Can Afford This Scale.**



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