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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

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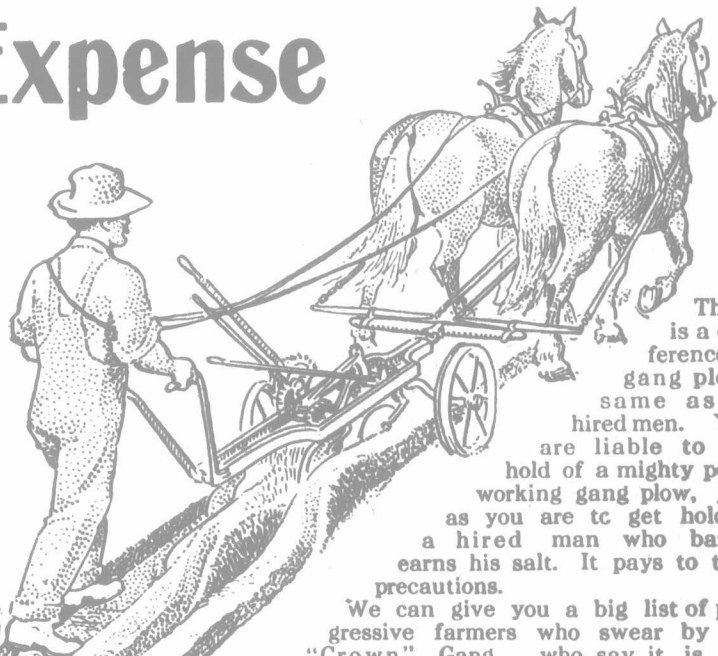
Saves Time, Labor and Expense Frost and Wood Crown Gang Plow

We urge you to do your plowing this season with the "Crown" Gang Plow instead of using single-furrow walking plows—or riding plows. The "Crown" turns two furrows where the ordinary walking plough turns one. It turns the furrows faster, cleaner, more evenly, too. You walk twice as far, and take more than twice as long, to do the same amount of work with a single-furrow plow as you can do with the "Crown" Gang.

But why walk at all? Why not use a riding plow, you say? Simply because it isn't good business to do so. When you use a riding plow you hitch on one more horse than the single-furrow plow needs. The extra horse is not to do the work faster. It is needed to pull your extra weight around the field. Now, can you afford the expense of that extra horse merely to enjoy the luxury of riding? Why not use the extra horse on the "Crown" Gang and break twice as much ground?

Just do a little figuring for yourself and you'll prove that the "Crown" Gang will pay for itself in one season in the time, labor and expense it will save you. If you would like your figures verified, send for booklet F 46 which shows how the "Crown" Gang will save you \$15 per week.

46



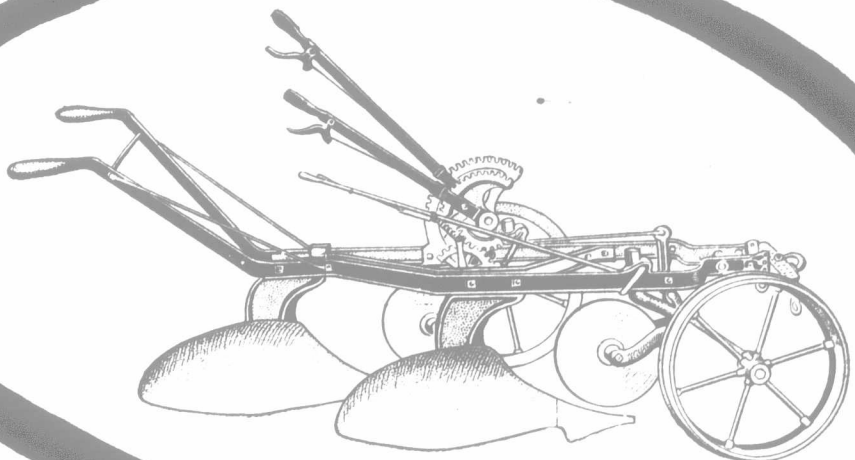
There is a difference in gang plows same as in hired men. You are liable to get hold of a mighty poor-working gang plow, just as you are to get hold of a hired man who barely earns his salt. It pays to take precautions.

We can give you a big list of progressive farmers who swear by the "Crown" Gang — who say it is the surest, steadiest, fastest-working plow they have ever seen or used. The "Crown" is not, like so many others, an old "failure" which has been rebuilt or remodelled. The "Crown" is a plow on which we spent a good long time, and no little cash, to perfect. It was not placed on the market until it had been tested many months under various soil conditions in different sections of the Dominion. We knew the "Crown" was a "success" before we made a single sale, and it has made a record we are proud of.

It's the perfect shape of the mouldboards that makes the "Crown" Gang turn the sod so easily and produce such clean-cut, beautifully even furrows. It's because they are made of soft-centre crucible steel and highly polished that they scour so quickly. The wheels are guaranteed dust-proof, too. And they have roller bearings—which lightens the work for the horses.

Once you set the plow you need not touch the easy-working, conveniently-located levers again. The "Crown" Gang will stay right down to its work and withstand the hard strains of plowing through heavy land. The "Crown" is so sturdily built that it will triumph where an ordinary plow will fail you. So just make up your mind you'll own a Frost & Wood "Crown" Gang Plow this season. You can purchase both sod and stubble Bottoms for the same frame. You can have either Straight or Rolling Coulters or Skimmers.

**Turns
Two Clean,
Even Furrows
in Same Time Single-
Furrow Plow Cuts One.**



Frost & Wood Company, Limited, Smith's Falls, Canada

THE Bay of Quinte DISTRICT

Is famous for its fertile farms and up-to-date farmers. This year they have grown a large crop of clean, well-colored

RED CLOVER

which will comply with the "Seed Control Act." I can save you money, because I buy from the grower and sell direct to you. Also good values in **Alfalfa, Alsike, Timothy** and all small seeds. Let me know your requirements, and you will receive samples and prices by return mail. **Special quotations to farmers' clubs.**

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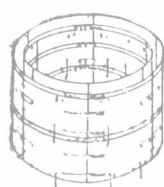
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160 Acres of Land for the Settlers

Large areas of rich agricultural lands, convenient to railways, are now available for settlement in Northern Ontario. The soil is rich and productive, and covered with valuable timber.

For full information regarding homestead regulations and special colonization rates to settlers, write :

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TORONTO.



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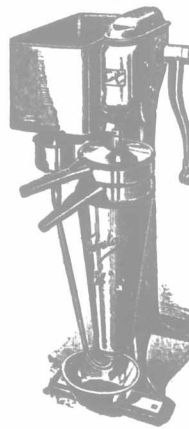
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INVENTIONS Thoroughly protected in all countries. **EGERTON R. CASE,** Registered U. S. Patent Attorney, DEPT. E, TEMPLE BUILDING, TORONTO. Booklet on Patents and Drawing Sheet on request.

THROWING OTHERS AWAY FOR SHARPLES TUBULAR CREAM SEPARATORS

All over Canada—all over the world—farmers are discarding common cream separators for Sharples Dairy Tubulars.



Why? Because the Tubular skims twice as clean as others—is guaranteed to save enough more butter fat, as compared to any other make, to pay at least ten per cent interest every year on the cost of the Tubular. No business-like farmer is overlooking a sure way to make ten per cent on his money. It is cheaper to throw away a common separator and buy a Tubular than to stand the loss caused by common machines.

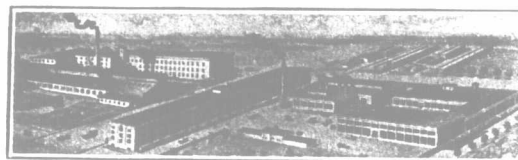
Here is another reason: Tubulars last a lifetime—are guaranteed forever by the oldest cream separator concern on this continent. No wonder that farmers are putting Tubulars in place of disk-filled and other complicated machines that are out of fix and in need of expensive repairs half the time.

Tubulars are later than, entirely different from, and vastly superior to all others. You can own and use a Tubular for less than any other make. Save yours! If the costly experience of others. Get a Tubular in the first place. Our local representative will show you a Tubular, inside and out. If you do not know him, ask us his name. When you can see a Tubular so easily—and own and use it for less than any other, and make more with it—how can you afford to waste time or money on a "peddler's" or any other inferior machine? The manufacture of Tubulars is one of Canada's leading industries. Write for catalogue No. 193.

THE SHARPLES SEPARATOR CO.,
Toronto, Ontario. Winnipeg, Manitoba.

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STATIONARY, MOUNTED AND TRACTION



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Write for your copy of our catalog of Fence, Gates, Lawn Fences. Agents wanted in unoccupied Territory.

The Empire Fence Export Co., Ltd., Walkerville, Can.
EVERY ROLL OF RELIANCE FENCE IS BUILT TO SELL ANOTHER!

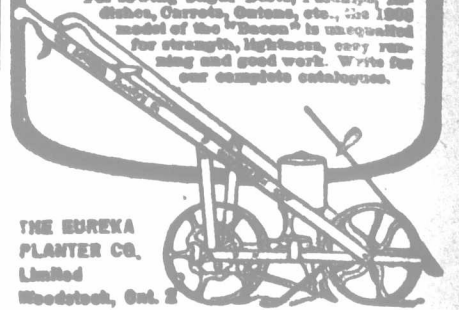
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You do not need reciprocity if you buy your drills direct from us, without selling expense. We manufacture the **IMPERIAL HORSE-LIFT DRILL.** Let us tell you why this drill is the best drill on the market to-day.

THE W. I. KEMP COMPANY, LIMITED
Stratford, Ontario.

The "BACON" Seed Drills and Cultivators

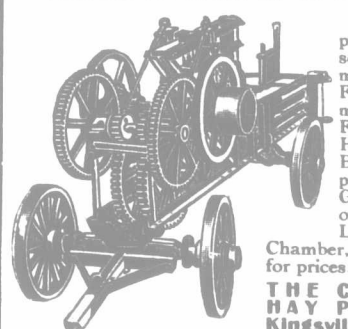
The only Rear-Wheel Driven seed drill on the market. The feed in the "Bacon" handles seed without bruising or breaking and seeds evenly to the last seed. Machine instantly converted from a regular seed sower into a hill dropper. Seed cut prevents waste of seed when turning rows. For sowing Sugar Beets, Potatoes, Beets, Onions, Carrots, etc., the 1909 model of the "Bacon" is unequalled for strength, lightness, easy running and good work. Write for our complete catalogue.



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The Columbia Hay Press

BAILED 68 TONS IN 10 HOURS.



It has the points that sell: Automatic Self Feeder, Automatic Safety Fly Wheel, Handiest Block-dropper, Double Gear through-out, Extra Long Tying Chamber, etc. Write for prices.

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GET SPECIAL PRICES FOR YOU

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100 Styles of Hay and Stock Scales

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THOUSANDS of farmers are reducing the cost of planting and increasing the production by using the **ASPINWALL POTATO PLANTER.** This machine does all the work automatically, requires no human aid other than the driver, and soon pays for itself out of the wages it saves. What the Aspinwall No. 3 Potato Planter has done for others it will do for you. Write for catalogue descriptive of our **POTATO CUTTERS, PLANTER, SPRAYERS AND SORTERS.** Address Dept. F.

Aspinwall Manufacturing Co.,
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GOES LIKE SIXTY SELLS LIKE SIXTY \$65

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For Pumping, Cream Separators, Churns, Wash Machines, etc. Free Trial. Ask for catalogue—all sizes.

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40 leading varieties. Sold at reasonable prices. Catalogue and price list free. 100 plants sent postpaid to any address in Canada for \$1.00.

Downham's Strawberry and Pheasant Farm,
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Corn that Will Grow

Canadian-grown seed corn. Your money back if not satisfied.

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Choice Seed Grain Grown, harvested, re-cleaned under our personal supervision. Guaranteed No. 1 Government standard. **Mandscheuri Barley,** per bush., 75c.; **Thousand-dollar Oats,** per bush., 60c.; **Improved Crown Peas,** per bush., \$1.10. Bags included. Free on board **Minesing, Foyston Bros., Minesing, Ont.**

HAVE YOUR BARN RIGHT INSIDE

When you build or remodel your dairy barn, make sure that you get the best results in interior arrangement for the comfort and health of your cows, as well as for your own convenience and profit. Our new Catalogue on Stable Equipment is just published. The new features described in it mark another long step towards perfection in comfort and cleanliness for the cows, convenience and time-saving in the stable work, and increased profits for the owner.

Good Equipment Pays.

Your dairymen who want increased profits from your milk production should look more to the arrangement and equipment of your barns.

The inside of your barn is of vital importance. Through the equipment alone, you may gain or lose hundreds, and even thousands, of dollars every year.

Dairy farming is like any manufacturing business. Your farm and stock represents your plant. As in any other business, one most important means of increasing profits is the cutting down of expenses. In dairy farming, this may be accomplished by correctly planning the barn, together with the use of the BT Sanitary Barn Equipment.

Correct planning of your barn, and the proper arrangement inside, will enable you to handle and store your feed more easily. It will enable you to care for more cows in the same-sized barn. It will save you and your men time and labor every day, by cutting in half the work in feeding and watering stock, in cleaning the stable, and in doing other barn work. It will help you protect your stock against disease, worry and accident, and many other advantages will be brought to light when you investigate every feature thoroughly.

Cows which are healthy and comfortable give bigger returns.

Exclusive Features on BT Stalls.

There are five exclusive patented features on BT Sanitary Stalls. Here they are:

The Raise-and-Lower Manger. (See cuts below.) Cuts the work of feeding in two. Makes unnecessary the cost of installing water bowls, and gives a better system.

The Alignment Device. (See Fig. 191.) It keeps the cows clean.

The Sure-Stop Device. It is impossible with BT Stalls for the cow to put her head anywhere but in the stanchion. See how this is done in our catalogue.

BT Stall Clamps. One heavy bolt does the work. Always holds, and can be set up four times as quickly as other clamps.

The BT Stanchion. It is always chosen when its merits are known. It is hung by a smooth-working swivel-connection above, so that it turns more freely and without the noise of a chain-hanging stanchion. It is two inches to four inches longer than others, giving more freedom to the cow. See our catalogue, and learn the reasons why it is always chosen.

Remember, you can get these features only on BT Stalls, as they are patented and used exclusively by us.

The Ideal Stall.

A short perusal of the BT Catalogue will convince anyone that the BT Stall is the ideal stall.

The saving on feed and labor made possible by adopting the exclusive features on BT Stalls will pay for the equipment in a year's time.

In addition, the perfect freedom and comfort given the cows and the greater cleanliness made possible, will increase the yield and improve the quality of the milk.

No other investment will pay as big dividends to the dairymen as the BT Barn Equipment.

When you install the BT Barn Equipment, you will note many other advantages and conveniences, and a greater protection to the cows. You will see how this equipment lessens abortion, and does away with the principal cause of big knees—ruined udders—and many other injuries; you will see how the individual mangers prevent overfeeding and underfeeding.

Our Catalogue is free, and will give you particulars.

It shows the proper measurements for cement mangers, the length the cattle stand should be for different breeds of cattle, the best size and shape for the gutter. Let us send it to you.

BT SANITARY BARN EQUIPMENT

with a good cement floor, is practically indestructible. Do not use an old-style construction that will soon rot out, that will mean more work, and will not be as comfortable for the cows. A few years from now you would regret it if you did. There is no doubt stringent laws in a few years will be passed by our cities regulating their milk supply. It has been done by the American cities. Now is the time to get your barn right, before some Milk Commission demands it. The cost of good equipment is not greater when everything is considered.

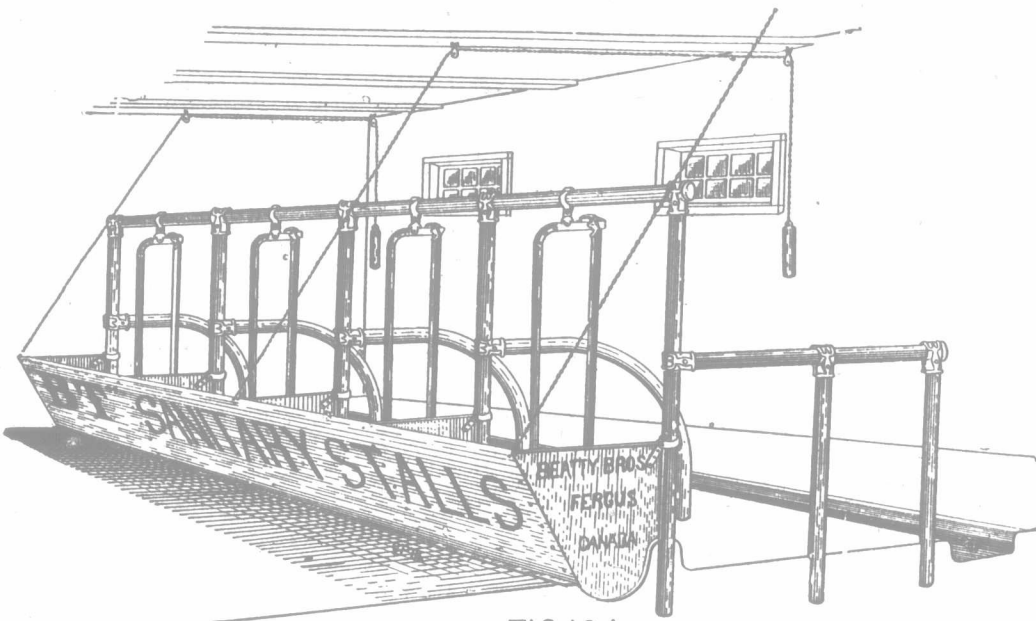


FIG.194

Fig. 194 shows the BT Steel Stalls with manger down ready to feed. Note the capacious manger, with partition between each cow. This manger can be made of either galvanized steel or wood.

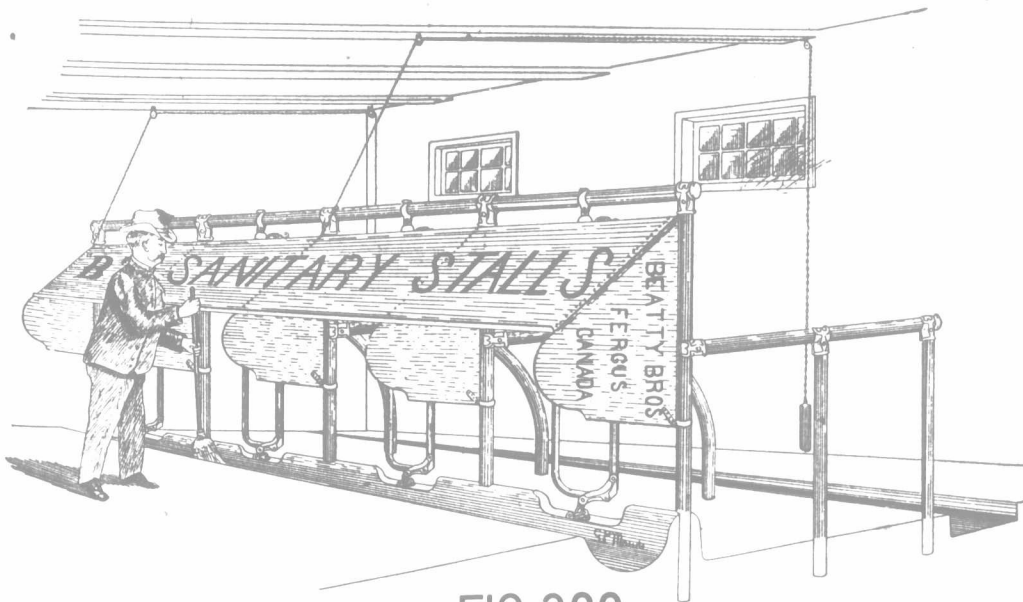


FIG.200

Fig. 200 shows the BT Steel Stall with manger turned up. Note the bottom of the manger is the cement floor. It is easy to clean this manger, and you can water right in the same trough. We furnish the stalls with or without the manger, or we will furnish the stanchion only, to be used with wood frame. Our catalogue describes fully each method of construction.

BEATTY BROS., Fergus, Ontario.

The demand for BT Stable Equipment is so large, that we are soon building an addition to our factory, 350 feet long by 80 feet wide, to take care of this branch of our business.

Remember that the BT Line also includes the BT Litter Carrier, and the broadest line of hay carriers in Canada. If you need these, let us know, and we will quote you on them at the same time.

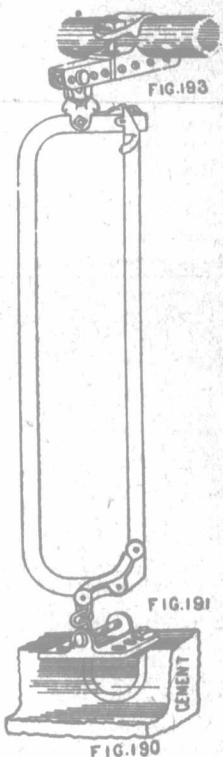


Fig. 191 shows the BT Alignment Stanchion. Cows are not all the same length, but with the BT Stanchion you can line them all up on the gutter, whether they are long or short. It keeps them clean.

Fill out this coupon, and mail it to-day, for FREE CATALOGUE AND INFORMATION ON STABLE CONSTRUCTION.

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Gentlemen,—Please send me free, as per offer, your catalogue and information on Stable Construction.

If you want a hay track or litter carrier, we will send you, as well, information and prices on these goods.

How many cows have you?

Do you contemplate remodeling?

If so, when?

What size of barn?

Will you want a hay track?

Will you want a litter-carrier?

NAME

POST OFFICE

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you secure one with the charming tone of a pipe organ, and at a price that will please you. Buy a Bell and get the best made. We are the only makers of the patent Pipe Tone Reed Cells. Send for free catalogue No. 40.

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THE FENCE MAN

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Sells his Crown Wire and Iron Fences and Gates at factory prices; also barbed, coiled and plain wire, fence tools, etc. Ask for free catalogue.

Agents are Coining Money

selling this Combination Tool. Sells at sight. Farmers, farmers' sons and others having time at their disposal this winter should write to-day for our Agents' offer.

MAY MFG. CO., ONTARIO.
ELORA,

You Won't Believe It.

There's no use *telling* you over and over again that the

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will actually save you one hundred per cent per year on your investment.

TRY IT FREE

Then you'll believe it

And looking back—won't you be sorry.

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The De Laval Separator Co.
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Test the **"BISSELL"** in a Field Competition with Other Out-Throws

To settle all doubt about which out-throw harrow has the greatest capacity and lightest draft, we ask you to test the "BISSELL" Out-Throw Harrow in a field competition with other out-throw harrows. We know the "BISSELL" will out-class the field, because it is so designed that the hitch is well back, the seat projects over the frame, and the arch is directly over the gangs. This construction removes all neck weight—enables horses to do more work. And because one gang is set slightly ahead of the other, the gangs cannot crowd or bump together. The "BISSELL" Out-Throw works fast and does clean work. Like the famous "BISSELL" In-Throw, it always wins in field trials. We also make Out-Throws and In-Throws with two levers for hilly work, and in 16-plate, wide-cut styles for the West. Send to Dept. W for "BISSELL" Harrow booklet. Remember, it isn't a genuine "BISSELL" unless the "BISSELL" name is stamped on the harrow.

T. E. BISSELL COMPANY, LIMITED, Elora, Ont.

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No better stock or value offered than at the old reliable CENTRAL NURSERIES. We ship direct to customer with satisfaction. Send for priced catalogue before placing your orders. It will pay. If you have not had good results from others, TRY OURS—31st YEAR.

The new hardy Hydrangea HILL of SNOW, a Beauty; the New Snow Queen Rose; Baby Rambler, in bloom all summer, by mail, 35c. each

Apple, Pear, Plum, Cherry, Peach and Ornamental Trees, Roses, Shrubs, Seed Potatoes, etc.

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OATS—Regenerated Abundance... \$ 1 00 bush.
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All F. O. B. Guelph. Bags extra @ 25c.

BARLEY, O. A. C. 21, Special price... \$ 1 10 bush.
Bags extra. Another new lot just arrived.

GOOSE WHEAT—Fancy... \$ 1 25 bush.
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RED CLOVER—Choice Government Standard... \$ 9 50 bush.

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TIMOTHY—Choice... \$ 7 00 bush.

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FERRY'S SEEDS

To grow the finest flowers and most luscious vegetables, plant the best seeds. Ferry's Seeds are best because they never fail in yield or quality. The best gardeners and farmers everywhere know Ferry's seeds to be the highest standard of quality yet attained. For sale everywhere.

FERRY'S 1911 Seed Annual
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D. M. FERRY & CO.,
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Make With An American Money SAW MILL

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

Free Catalogue lists all kinds of wood working machinery. Ask for it.

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

Strawberries!

For the home garden, William Belt and Meade are the finest flavored, and are beautiful berries in every way. To make a longer season, Gill (an extra early) and Nettie (a late berry) give you the earliest and the latest. For many other varieties, and a good collection of raspberries, send for catalogue.

C. P. NEWMAN,
BOX 51, LACHINE LOCKS, QUE.

NIAGARA BRAND LIME-SULPHUR

Combination Winter and Summer Spray

AS WINTER SPRAY it will control San Jose Scale, Oyster-shell Bark Louse, Blister Mite, Peach Curl, Aphids, and all sucking insects.

AS SUMMER SPRAY, combined with Arsenate of Lead, it will control Apple Scab, and other fungus diseases, Codling Moth and all chewing insects.

This spray is not an experiment. It was used by thousands of fruit-growers in Ontario in 1910 with excellent results.

Write for our book on "Sprays, and How to Use Them."

Every Fruit-grower Should Have an Hydrometer to Test His Spray. — We will mail to any address in Canada, on receipt of Soc., the Standard Hydrometer, Pennsylvania pattern, showing both Beume and specific gravity reading.

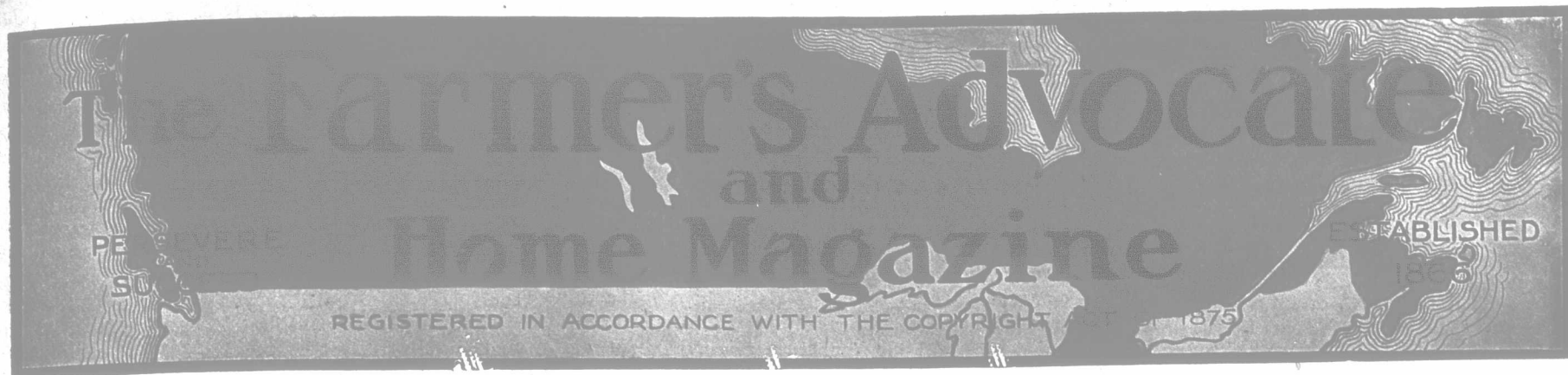
BEAN SPRAY PUMPS—Hand and power—Strong, durable and efficient. Built to wear and give large capacity with high pressure. Let us prove this to you. Send for illustrated catalogue.

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MEDFORD SPRAY CO., Medford, Ore.

NIAGARA BRAND SPRAY CO., LTD., Burlington, Ont.



Vol. XLVI.

LONDON, ONTARIO, MARCH 9, 1911

No. 963

EDITORIAL.

The sap season! Whoop! Hooray!

Don't forget to have the horses fit, the implements in condition, and the seed grain ready.

Have you tested your seed grain for germination and examined it for weeds? Important duty.

The interest of both producer and consumer is served by bringing them as close together as possible, eliminating needlessly expensive freight hauls and middlemen's charges.

What a glorious treat are these lengthening March days: sharp at night, crisp in the morning, brightening into genial forenoons. They start our pulses bounding, cheering everybody with the exhilaration of spring.

Of all the arguments put forth against reciprocity, this statement that Canadian farmers are already too prosperous, and should not have any wider markets opened to them, is the most insolent piece of arrogance we have yet observed.

"Every hillock in the Province of Quebec should have sheep grazing upon it, for the sheep are the greatest enemies of the weeds, and, in destroying them, they enrich the land to be later turned under by the plow."—[Hon. Sydney Fisher.

That's a very good article on cement tile, by Prof. Wm. H. Day, remarked a critical reader the other day, adding an unconscious pun, "It's as clear as day—Wm. H. Day," which is considerable daylight for an underground subject, we should say.

The existence of a Second Chamber not wholly responsible to the electorate is a travesty on the idea of responsible government. It becomes either a useless tool of the party that creates it, or else a bulwark of privilege, often both. Advocates of responsible government with a second-chamber brake, say, in effect: "Let the people rule, but not completely."

The benefit or injury of a certain tariff change can never be judged merely by its effect on the producers in a certain industry. The wider interest of the consumer must be considered. Yet there are American legislators who would deprive ninety million people of the boon of cheap fish for fear of jeopardizing the welfare of a New England fishing village. It is an extreme case of wanting to sacrifice the interests of the many for the few.

There are two interests in every trade negotiation. There is the interest of the producer who wants to sell dearly, and the interest of the consumer who wants to buy cheaply. Both are important, and neither should be neglected, but the ends of economy are most surely served by looking first and mainly to the interest of the consumer. And since every producer is a consumer of food, clothing and raw material, the cost of production is reduced to a minimum in all industries when the cost of living, raw material, fuel and implements is reduced to rock bottom.

A scathing arraignment of the Canadian branch-bank system and its effect on the business development of Canada appears in the February number of "Ourselves."

In submitting a Senate reform resolution in the Dominion House of Commons, the mover declared that the Second Chamber is composed of three classes, viz.: Those who value it as a respectable refuge for their declining years in ease, at the expense of the country; those who value it for social position and for advancing personal and business schemes; and those who give from long and useful experience much benefit to the country. A very considerate and moderate criticism, indeed!

Amid the variant views on the reciprocity question, with which the newspaper air has been filled, it has been pleasant to observe one note of harmony. Farmers and manufacturing interests both seem desirous of increase of trade along East-and-West lines, with special reference to trade with Britain. The former, or some of them, at least, suggest a means by which this may be brought about. They urge the Government to increase the British preference by 50 per cent. this year, and in the near future to have complete free trade between Canada and the mother country. That would certainly develop the East-and-West trade enormously, and, incidentally, would lower the cost to Canadian consumers of necessities, such as sugar, cottons, woollens, edge-tools, hardware, etc.

"This treaty puts the farmer on a free-trade basis for what he has to sell, a protection basis for what he has to buy. How long, do you think, is the farmer likely to stand for that?"

This sentence, from Hon. Clifford Sifton's speech, contains the germ of a large part of the city men's resistance to reciprocity in farm products. They realize, as the test approaches, that this talk, of which we have heard so much, about the benefit of protection to the farmer, will be proven to be anywhere from three-quarters to nine-tenths fallacy. They discern quite truly that when the farmer realizes this fact, the game will be up. He will demand, not, we hope, the elimination of duties, but a very radical scaling down. The manufacturers see only too clearly that high protection is doomed by the logic of results. They want to avert the first step towards freer and fairer trade.

One of the most satisfactory developments in the seed business is the trade that is being worked up among our farmers through the seed fairs, through the medium of our advertising columns, and otherwise. No fewer than a dozen farmers offered seed grain, corn and seed potatoes through our columns last week. At the very low rate of three cents a word charged for insertion in the "Want and for Sale" column, the revenue to us is inconsiderable, scarcely sufficient, in fact, to pay for the space and trouble, but we rejoice because the interest of our readers is served by thus bringing a supply of choice seed grain of superior varieties within reach of the general farmer at the very modest prices which elimination of the retailer permits. If you have a good supply of good clean grain of choice varieties, let fellow farmers know about it. A small advertisement in the "Want and for Sale" column, at three cents a word, will only cost seventy-five cents to a dollar, and will astonish you with the results, especially if repeated a few times.

Unneighborly Townships.

What with the many herrings being drawn across the trail of the reciprocity issue, there are some few farmers actually becoming convinced that the throwing down of duties on farm products entering Canada will prove a disadvantage, seeing it is accompanied by such a small reduction in the tariff on manufactured goods and other things the farmer has to buy. They hear of some line of farm produce which is, or at some time has been, lower in the United States than in Canada, and are startled to think what would happen if our market were thrown open to American farmers. Now, the fact of the matter is that, while just at the moment the reaction from a speculative craze has slumped prices of eggs and dairy produce on the American market, yet, taking the average of recent years, United States prices of general farm produce have ruled rather higher, we believe, than Canadian prices of similar commodities, so that under reciprocity the Canadian farmer stands to gain more than his American neighbor.

But the fundamental point we wish to emphasize is that, supposing prices averaged about the same on both sides the line, reciprocity would still be a boon. To appreciate the principle of mutual benefit, let us consider an easily-comprehended example: Two villages, A and B, are situated side by side in two neighboring townships, C and D. Suppose there was a law passed in each municipality preventing either village, under penalty of a fine, from buying anything outside the township in which it was situated. Suppose some year there was a partial failure of the fruit crop in township C, so that it could not produce enough to feed its village, A. What would be the result? Fruit would go up to a price that would restrict consumption in village A, thus imposing great hardship on the inhabitants, while the farmers in township C would not benefit much, because they would have so little to sell. Across the townline, the farmers in township D have plenty of fruit, but have to send their surplus to a market twelve hundred miles away. On the other hand, the hens in township D are not laying enough eggs to supply village B. So the price of eggs goes up in village B to a point where people will buy just as few as they can get along with. And the busy hens in township C are laying eggs to be shipped three thousand miles away, to a market where they will net five or ten cents a dozen less than if they could be marketed freely in B. So it goes with one product and another, year after year, high prices restricting production, followed by low prices in times of large supply, and these periods occurring frequently, though not by any means simultaneously, in both townships.

Now, any clear-headed person can see that those municipal by-laws are not only vexatious, but costly; and that if both villages were allowed to buy when they pleased and where they pleased, it would tend to steady prices and enlarge the aggregate demand. Thus it would not only advantage consumers, but would provide the farmers in each township with the widest possible market, at the highest possible level of prices. Especially would it improve the prices for either township in a year of heavy production in that locality, with a short crop in the other. And bear in mind that an extra cent a basket, or a pound, means so much more in the aggregate on a large than on a short crop.

Just as it pays the farmers of a township and the buyers of a village to have the widest possible market in which to sell or buy, so it pays

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries 12s.; in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrearages must be made as required by law.
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11. CHANGE OF ADDRESS.—Subscribers when ordering a change of address should give the old as well as the new P.O. address.
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13. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

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

the people of a nation to extend their commerce on broad lines. A village is a better market than a single family, with its irregular and whimsical demands; a county is better than a township, a province than a county, a nation than a province, a continent than a nation, and the whole world is better than any restricted number of nations. The whole is greater than its part. The wider the zone of reciprocal free trade, the better for producer and consumer, both.

Planting the First Tree.

"I am going to plant six acres of hardwood trees this spring," writes a correspondent. "Do you think I could get Mr. Sifton, of the Conservation Commission, the Minister of Agriculture, or Dean Fernow, to plant the first tree? If I dared, I would invite a bishop to do it." We suspect that our correspondent is joking, but his joke has the root of the matter in it. The man who plants trees is performing a public service, as well as engaging in a private enterprise. A plot of perfect woodland, with its native beauty, wild flowers and specimens of wild life, is of as much use to a civilized community as a public library. It is a gallery of nature's masterpieces and a storehouse of useful knowledge. To the lover of beauty and the student of nature, it is a priceless boon. On the other hand, it is a good investment for the farmer who plants and cares for it, and a permanent asset to the whole community. The thriving wood-lots help to regulate the flow of streams and maintain the balance of nature. Our forefathers of blessed memory did not understand this, and in their rage to clear the land for the plow they cleared many areas that should have been left in their native state. To borrow a couple of expressive country phrases, they cleared stretches of drifting sand "that not even a mortgage can keep within the line fences," and land that is so hilly "that a squirrel can't cross it without wearing breechings." This land is now useless, and, as the Department of Agriculture is willing to supply enough trees to plant two acres each year, there is no excuse for hav-

ing it lying waste. We are learning to give much well-deserved praise to the pioneers who cleared the land, but the day may come when people will give more praise to the pioneers of re-planting. The citizen of the future will certainly take more pride in pointing to a fine wood-lot, and saying, "My grandfather planted that," than we can in pointing to a waste and saying, "My grandfather cleared it." The man who plants trees in Ontario to-day is not only doing a good work, and providing wisely for future generations, but he is building for himself a monument more enduring than brass. Our public men should give the work every encouragement. To plant the first tree in what is to be a permanent wood-lot is surely as honorable an act as laying the corner-stone of a new jail or turning the first sod for the construction of a jerkwater railway. Our correspondent might do worse than to send his invitation in all seriousness to Mr. Sifton, Mr. Fisher, Mr. Duff, or Dean Fernow. None of these gentlemen could be better employed than in giving this kind of encouragement to such a work as he has in hand.

Agriculture the Corner Stone.

Some Canadian newspapers are quoting from an article in "Farm Machinery," a journal published at St. Louis, Mo., a few paragraphs to the effect that manufacturers in Moline—in all the tri-State cities, in fact—had waited with a flutter of anticipation for the presentation to the public of the Canadian reciprocity agreement. It was immediately brought to their attention, owing to the fact that a good part of these cities' implement output goes to Canadian Provinces.

"They had arrived at the place where they knew there must be expansion, in order to handle the growing Canadian trade, and THEY WANTED TO FIND OUT WHETHER THE NEW TARIFF WOULD NECESSITATE BRANCH PLANTS IN CANADA, OR ENLARGEMENT OF THE HOME PLANTS HERE. . . . It is safe to say that the new Canadian-American tariff agreement, as proposed, will be pleasing to Moline. The opinion is that the lower duty on implements into Canada will mean an increase in business, with resultant benefit to the tri-cities, and discard of the embryo plans for branch establishments across the northern border line."

If a twenty-per-cent. duty on implements is necessary to bring those Moline factories to Canada, we had better let them stay in Moline. Every time an American firm ships a thousand dollars' worth of machinery into Canada, paying a twenty-per-cent. duty, two hundred dollars is paid into the Dominion treasury in the form of public taxes. Attract that industry to Canada, and it will in all probability continue to charge the same price to consumers, but, instead of any part of it going to the Federal exchequer, that \$200 goes as an excessive profit to the new factory, or, worse yet, is sunk into the morass of economic waste, or, more probably still, is partly excess profit and partly waste. Canadian agriculture is helping to support enough non-self-supporting industries. We have no objection to making some sacrifice for the sake of establishing in the country large industries that promise soon to be able to stand on their own feet, but any business that needs a protection of 17½ or 20 per cent. had better be allowed to do business elsewhere, until conditions become more favorable to it. Industries, like experience, are a good thing if they don't cost too much; but an increasing number of consumers are becoming averse to paying high duties to establish industries for which the country is not ready.

It is a great mistake, anyway, to assume that we could have little or no manufacturing in Canada without a protective tariff. The manufacture of cream separators in this country has grown tremendously, notwithstanding that cream separators are on the free list, while the making of them is handicapped by the abnormal cost of manufacture that must necessarily obtain in a protectionist country. Under conditions of freer imports, with lowered cost of labor and supplies, those lines of manufacturing for which Canada is naturally best adapted would grow rapidly. Many of them would, no doubt, find it more profitable to manufacture in Canada than across the line. One of the reasons assigned by Elbert Hubbard for the Oliver Plow Works establishing a plant at Hamilton was that they could

thence cater more advantageously to foreign trade, partly because the high-tariff policy of the United States had been met with reprisals by foreign countries, and also because the United States had no important merchant marine; thanks, again, very largely to its high-tariff policy. It is reassuring to note that the announcement of reciprocity has caused no change in the plans of the Oliver Plow Works for building at Hamilton.

And not only will the lowered cost of living and supplies directly benefit manufacturing industries in Canada, but the development of our foundation industry, agriculture, will expand the home market of the Canadian manufacturer, thus making conditions even more favorable for a complex industrial development, without artificial aid.

We hear much about the effect of tariffs in bringing capital into the country. Instances like the Oliver Plow Works show how a high-tariff policy, inducing retaliation by foreign countries, drives capital out. Furthermore, we again beg leave to draw attention to the fact that, while something like \$170,000,000 of American capital were said to have been invested in Canadian manufacturing plants in a ten-year period recently passed, American settlers are estimated to have brought \$100,000,000 into the country in a single year. The fastest way to bring capital into Canada is to make agriculture prosperous. Give the foundation industry a chance to develop freely, and other industries, finding conditions favorable, will flock in, with little or no further encouragement. The way to build a large factory is to lay a deep, wide, solid foundation. The chief corner-stone of Canadian industry is agriculture.

Rural Life Reviving.

"A Brighter Look at the Country Churches," is the appropriate title of an optimistic article in "The Continent," of Chicago (a continuance of "The Interior" and "The Westminster"), which, by the way, is vindicating its adoption of the broader name by its unshackled and reinvigorated policies in religious journalism. Looking over the American field, the writer notes the springing up of new and beautiful churches in place of the old, and here and there the formation of new ones where formerly none existed. And surrounding them are prosperous farming communities, for they seem to go hand in hand with a reviving agriculture and a renewed appreciation of country life. An auto tour of many miles, observes this writer, will reveal one rural church after another showing unmistakable signs of prosperity. "So the country church is doing well, and is on the road to better things. The people are again taking pride in the 'city set on a hill,' and the religious, social and intellectual light streaming from these beautiful little edifices is again illuminating the rural homes, and making the country a good place in which to live. The country has always supplied the city with its best blood and brains, and it would be a sorry day if the churches fell into decay, as they once threatened to do. But the crisis is past, and the country is coming to its own again."

The country church and the country minister have a large place to play in making the life of the nation, and one of these days some of the younger men, whose yearning ears are said to be so often to the ground, hearkening for a "call" to a city pastorate, with its multifarious distractions and undreamed-of burdens, will re-awaken to the greater possibilities and opportunities latent in the rural lives and conditions about them. The task of pulpit-ministry to the rural congregation is not always simple. Including persons who have more time for reading and reflection, they require a higher grade of discourse than a group of town business people; and yet, the great majority being usually alert, young people, sermons need be illustrative and adapted to this habit of thought. Sermons may be profound, without being prosy, awakening without pulpit-pounding, and bright without being juvenile. Furthermore, the rural minister strengthens his hold for good who keeps abreast of agricultural thought, acquainted with the processes and operations of the farm, and manifesting a genuine appreciation of the importance of farming and the farm home.

What will Canada Gain by Reciprocity?

Editor "The Farmer's Advocate":

While perusing the columns of recent copies of "The Farmer's Advocate," my attention has been frequently directed to editorial comments regarding the recent reciprocity arrangements with the United States, which comments have been of much surprise to me, owing to their undisguised friendliness to such political negotiations. How any paper that stands as an ardent advocate of the interests of the Canadian farmer can support such an arrangement, is an enigma to me.

In short, what will Canada gain by this reciprocity arrangement? If we were to sum up in one column what she will gain, and in another what she will lose, I am convinced that the latter column will be overwhelmingly prodigious in comparison. For instance, supposing we take the horse-breeding industry of Ontario and the Eastern Provinces. Think of the thousands of dollars that have passed into the hands of the farmers of these Provinces through this one particular industry. Would "The Farmer's Advocate" and other reciprocists strike it in the head by giving away our market? I say the Canadian West, because, has it not been the West that has raised the price of agricultural horses, those bred by the bulk of the farmers, from one hundred to one hundred and fifty per cent. in the last eight or ten years, and placed the business on a paying basis. Only ten years ago we purchased an excellent light-draft mare, which weighed about 1,500 pounds, for \$100 cash. The mare was eight years old—just in her prime. To-day we could not buy such a mare for less than \$250. Only a week ago, I saw a small, general-purpose farm horse, weighing not more than 1,100 pounds, 21 years old, sell for the round sum of \$100. What would such a horse have sold for ten years ago, or, better still, what would it sell for a few years hence, if the tariff will be thrown down and the Americans are allowed to dump their surplus horse product into our Western prairies, where exists the greatest horse market the world over. Oh, but some will say, there will be a market opened up in the Eastern States. Absurd! A market to be looked for in States older, or as old, as the Provinces in which we live? At any rate, how long will such a market last? The market which we have at present is good for years to come, as enormous areas of our virgin-soiled prairies are yet to be subjected to the refining influence of the soil tiller, and the great cities to be builded upon their bosom will also tend to stiffen prices, particularly for the heavy horse. Only a short time ago I noticed an article by someone in "The Farmer's Advocate," deprecating the farmer who claimed there was no money in breeding horses, yet this same paper now supports a scheme which, if carried through, will, we are afraid, give us all an opportunity to endorse this farmer's opinion.

Then, let us consider the fruit situation. Secretary Wilson, in answer to the American Grange, suggested that the Canadian market would be of untold advantage to American orchardists, while free-traders in Canada are trying to make us believe that the American market will be of untold advantage to our orchardists. Extraordinary, isn't it? Apples that have been shipped all the way from the Pacific seaboard States are now selling in Essex County, in competition with our home-grown fruits, after the long transportation charge, along with the usual customs duty, has been paid. The Americans see a splendid market looming up in our Prairie Provinces, where fruits can scarcely be grown, and we can only congratulate them upon knowing a good thing when they see it.

As for other staples, just so long as the United States produces more wheat than they can consume, just so long will the market be controlled by Liverpool. And, regarding beef cattle, there is a British preference of about 1/4 of a cent for American steers over Canadian steers, so little is to be gained in this respect; while our hog market is, on an average, as strong as the American market, and is liable to be stronger in times of an American glut, if the tariff be not changed. Did we not notice in last week's market report that a consignment of eggs from Chicago had slumped the Montreal market, in spite of the existing customs duty? And yet we are told that this reciprocity scheme will be of incalculable advantage to us.

Surely the farmers of this fair Dominion are satisfied with the present market conditions, unsurpassed by those of any other country. With our incomparable horse market and our prospec-

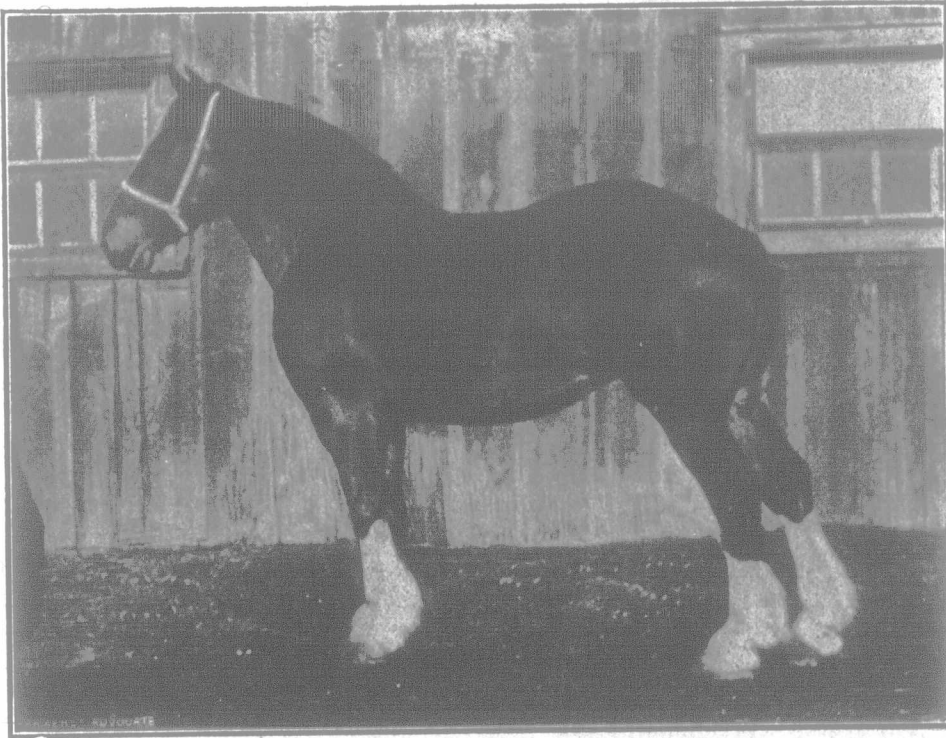
tive fruit market, now in vigorous infancy, but bidding fair to develop into a strapping grown-up, and the equal outlets abroad for our other surplus products, surely it is well enough.

Through the last few decades we have watched the growth and expansion of our country, relying upon our own strength and independence. We have turned our faces from the cotton fields of sunny Alabama to make homes for ourselves on the rugged bosom of New Ontario. With the emerald cornfields of Iowa and Arkansas before us, we have turned our eyes northward to behold a richer glow from the gold of our western steppe. Turning again from the luring banana groves of pleasant California, we have dug our way into the rocks of British Columbia, and have had a taste of its incalculable mineral wealth, and then the world suddenly wakes up to call us a nation.

LAWRENCE SCRATCH.

Essex Co., Ont.

[Note.—Practically all our friend's points have been or are elsewhere answered in "The Farmer's Advocate." Horse values are rising in the United States, as well as in Canada, and an immensely greater number of horses are used across the line than in the Canadian West. Most apple-growers recognize that the opening of the American market to their fruit will prove of advantage to them in the average season. Jas. E. Johnson, Manager of the Norfolk Co-operative Fruit-growers' Ass'n., has stated that, even in 1910, in the face of a 75-cent duty, their association shipped 6,000 barrels of apples to the United States, and he further declared that, had there been free trade in apples, their association could have sold its whole crop 50 cents a barrel better than they did. It is true that some Western apples have been sold in Canada this past winter, but that is because a partial failure of the apple crop in Eastern Canada sent prices up to famine figures, which restricted consumption. In such seasons there certainly should be reciprocity in the interest of the consumer. Incidentally, it may be remarked that grocers this past winter have experienced very little call for apples, consumers having made up their minds that this wholesome fruit was out of reach. With a more plentiful supply and moderate prices, consumption would have been immensely greater.—Editor.]



Moncreiffe-Duchess (imp.) [22690] (24214).

Clydesdale mare; brown; foaled 1904. First in class and champion at Winter Fair, Ottawa, and second at Guelph. Exhibited by Graham-Renfrew Co., Bedford Park, Ontario.

Government-built Silos.

Good progress is being made in Victoria, Australia, in the construction of silos. Owing to drouth and the want of suitable fodders, disaster overtook farmers there in 1902, and, to prevent its recurrence, the practical answer was found to be "Silage." The wooden silo was unsuited, owing to dry weather warping and shrinking the staves, and brick and concrete were too expensive. So a combined silo of galvanized iron and wood was devised by the Director of Agriculture, T. Cherry, M. D., M. S.; and the Government, realizing how vital silage was to the prosperity of farmers, undertook to build silos for them on the time-payment plan. The terms were one-third cash, and one-third each on 12 and 24 months' promissory notes. The number so built was 227, and the amount involved £8,372. Repayments up to date of annual report, £6,642, with a practical certainty of all payments being met as the notes came due. In 1906, only 160 farmers in Victoria had silos, the quantity of silage being 7,240 tons. In 1910, these figures had increased to 520 farmers, and 27,000 tons. The

cost of these silos is said to be lower than by any other system in Australia. The only objection to this style of silo is said to be the liability of the galvanized iron to rust, if neglected, but this may be overcome completely, it is claimed, by a lime wash, applied before filling, and afterwards as emptied. The Director feels strongly on the subject, for he declares that to the Australian farmer and to the prosperity of the whole Commonwealth the question of silage is more important than any other one factor. Prosperity is bound up absolutely with the number of live stock that can be carried, and the only effective means of overcoming the effects of the recurrence of drouth is a reserve of silage. Dry fodder does not meet the emergency, for that involves malnutrition in large numbers of animals, because of lack of succulence. In rearing the annual crops of calves and lambs, silage has been found particularly useful, and its importance is even greater where the production of milk is involved. There has been a noticeable increase in the number of 100-ton silos erected. Large numbers were built independently of the Government, which gave demonstrations in silo construction, exhibited models at the fairs, and issued instructions. In some cases special crops were grown, so that the silo could be filled twice per year. In Canada and the United States, silo-building has not been taken so seriously by the Governments as in Australia, which have confined themselves to the distribution of literature on the subject, but steady progress, nevertheless, is being made, and 1911 will probably witness more new Canadian silos erected than in any prior year.

Saving the Clippings.

Editor "The Farmer's Advocate":

Some readers of the good old "Farmer's Advocate" do not care to keep every copy entire, and clip out such articles that may interest them, or may be of use at some future time. These clippings are carefully laid away in some place for safe-keeping, and how often you forget where you put them or they become lost. To help overcome this difficulty, I offer two suggestions as to keeping your clippings in good shape, so as to have them at hand when wanted.

The first method is by using an ordinary scrap-book of suitable size, and putting an index down the edge of the leaves, and then pasting in each article clipped from the paper under its proper heading. You can then easily locate anything you may want in a moment.

Another method that is used by a large number is to simply use envelopes. Secure twenty-six envelopes, one for each letter of the alphabet, and mark the letter in one corner of the envelope. Each clipping is merely placed in its proper envelope. A small box or case of suitable size should be provided to hold your envelopes, which should be placed in proper order.

This system has some advantages over using a book. One is that if the advice, etc., contained in a clipping does not prove satisfactory, or something better comes along, you have merely to discard it, whereas, if it were pasted in a book, you would have to mark it over, or try and get something else to paste over it. Of course, the advice given through "The Farmer's Advocate" is generally found to be correct. C. H. R.

[Note.—An improvement on the latter suggestion is to have one envelope for each subject, with the topic written on the upper left-hand corner, thus:

- "Aberdeen-Angus cattle—white marks on."
- "Cement tile."
- "Ringbone."
- "Lymphangitis."

The envelopes are stood on edge, packed one against another, in alphabetical order, in an ordinary cardboard or other box. This system is very convenient. If all our readers used it, we would be saved the repetition of many simple prescriptions.—Editor.]

HORSES.

\$40 to Ship Horses West.

In "The Farmer's Advocate" of Feb. 16th appeared an item giving an estimate of the cost of shipping horses from London to the West, in which the average to Winnipeg was figured out to about \$13.00 per head in car lots. This estimate, however, did not make allowance for risk of death or injury, nor did it allow anything for depreciation en route. A more striking estimate has been furnished us by S. Haggerty, of Belle Plaine, near Moose Jaw, Sask. Mr. Haggerty is a native of Middlesex County, and has been in the East this winter picking up a carload of horses, principally for his own use. He farms 640 acres of land, and uses about fourteen work horses. In addition, he has some colts coming on. He has obtained eighteen horses, averaging about 1,300 pounds apiece, at a price which figures out to a little less than \$200 per head. Incidentally, he considers that he has secured better value than he could have done if purchasing on the Toronto market. All these eighteen horses were shipped in one car, capacity 20,000 pounds, at 97 cents per cwt., with extra charge for extra weight, so that the cost of freight for this carload will be about \$200. Adding other expenses of transport, the horses will cost him about \$17 to lay down in Moose Jaw. But this is not all. To insure against death en route would cost 3 per cent. for ten days' insurance. This, on a \$200 horse, would come to \$6.00, but would not allow anything for risk of accidents or sickness not resulting in fatalities. Asked what he would estimate the risk at, Mr. Haggerty stated that last spring he had some horses sent to him from the East, and was glad to let the shipper take the risk at \$15 per head. Even this does not tell the whole story, because horses lose about 100 pounds in weight while making the journey. Footing everything up, therefore, it is considered that a horse should be worth \$50 more in Moose Jaw than the purchase price in Ontario. This, of course, allows a small profit to the dealer, but Mr. Haggerty says that, if able to buy horses in Moose Jaw for \$40 more than they were purchased for in equal condition in Ontario, he would not be bothered trying to buy horses for himself. This \$40, then, may be taken as a horseman's estimate of the cost and loss of laying horses down in the West, and putting them into as good condition as when purchased in the East.

Questioned as to what would be the difference in cost, if buying in Chicago, he stated that he had never bought any there, but would judge that the difference in cost and loss would be probably about \$15 in favor of Chicago. Assuming, then, that, under reciprocity, Ontario would lose the whole of the Western horse market, without gaining a compensating market anywhere else, it would mean that Western buyers would be advantaged to a much greater extent than Eastern horsemen would lose. However, there is no reason to think that Eastern horsemen would suffer any serious loss. So good a protectionist as William Smith, of Columbus, is candid enough to admit that he has, for two or three years past, been watching a developing market in the Eastern States. Certainly, if reciprocity would eliminate any part of the expense of \$40, which results from attempting to ship horses from Ontario to Moose Jaw, it would be a benefit to the country at large. Any measure which will enable Western farmers to supply their wants cheaply, and produce economically, is vastly better on economic grounds than paying heavy subsidies of money or land to transcontinental railways and other public-service corporations.

National questions must be looked at from a national standpoint. The best interests of all will never be secured unless each is willing, for the sake of a great good, to sustain, if necessary, a slight personal loss. A warring conflict of Provincial interests is fatal to the best interests of all. We would favor reciprocity if, while reducing horses ten dollars a head to the Eastern seller, it cheapened them twenty-five dollars a head to the Western purchaser. But we are by no means convinced that it would reduce prices obtained by Eastern sellers. If part of the more distant Canadian market is supplied by horses raised in the Western States, that will leave a keener demand to be satisfied in the Eastern States, and this should be Eastern Canada's special opportunity. The folly of compelling the shipment of horses from Ontario to Saskatchewan, and from the Western States to New England, is too apparent to need any elaboration. It is even possible—though we do not make this statement as a prediction—that, under reciprocity, prices to Ontario horse-raisers would average better than at present. The demand in the New England cities must be enormous and growing. Furthermore, prices for horses of a given quality appear to average pretty well up on both sides the International Boundary. Western delegates to the live-stock meetings this winter reported they had seen unsound horses selling in Chicago repositories almost as high as sound ones in Toronto.

This may have been rather overdrawn. We notice, though, that the 1910 annual report of the Union Stock-yard and Transit Co., Chicago, where 14,601,825 horses changed hands in 1910, gives the average price of all heavy-draft horses as \$200; carriage pairs, \$473; drivers, \$172; bus-sers and trammers, \$161; and saddlers, \$177. The prices in all classes but carriage pairs were higher than in any time for the past seven years, showing plainly an upward trend across the line, as well as here.

Again, read this from the Chicago market report of the Breeders' Gazette, Feb. 22nd, 1911: "Several large orders for mares with a \$250 limit are awaiting execution. Inquiry for expressers costing around \$225 is also heard. Big drafters in the \$300 class are wanted, but few are available. . . . Farm stuff sells at a range of \$75 for plugs, to \$250 for draft-bred mares."

Such quotations make it look rather dubious whether the Western farmer would get very much cheaper work horses from Chicago than from Ontario, but the quotations are quite reassuring from the standpoint of the Eastern Canadian horsemen. One thing certain, under reciprocity the average interest of both buyer and seller will be better served than under a condition of artificial trade obstruction which compels the shipment of horses from Ontario to Saskatchewan, at a combined cost and loss of \$40 per head. No economist or business man can get around that forty dollars. The best interest of all is served when buyers are allowed to buy, and sellers to sell, in the best and most convenient market. This example of the horse trade illustrates the grounds on which we advocate reciprocity in farm products; it will prevent or reduce the economic waste resulting from needlessly long hauls; also, it will not unlikely tend to reduce transportation rates, and improve transportation service.

Feeding the Work Horses.

The work horses at the Central Experimental Farm, Ottawa, are fed by one man. Each teamster is responsible for cleaning of his horses and harness, but has nothing to do with the feed. Generally speaking, the horses are fed on mixed hay, given long; oats and bran, about 5 parts of whole oats to 2 parts of bran. These two are mixed and fed dry. On Saturday nights, a bran mash of 5 or 6 pounds per horse takes the place of the



Weighing Puppy.

regular oat-and-bran mixture. When horses are on very heavy work, the ratio between oats and bran is usually changed to 5 of oats and 1 of bran. The horses receive from 1 to 1½ pounds of the oat-and-bran mixture, and about 1 pound of hay a day for each 100 pounds of their weight. That is to say, a 1,600-pound horse would get from 16 to 20 pounds of grain mixture and about 16 pounds of hay each day. The amount of grain or grain mixture fed depends upon the work being performed. The harder the work, the larger the amount of meal fed; that is, of course, subject to change, according to the health of the animals and various other minor considerations, such as degree of fatigue at night, temperature, etc. The feeding of the horses follows regular lines, and is done at regular hours. The first feed for the day is given about 5 a. m. It consists of about three-eighths of the total amount of meal or grain mixture to be fed during the day, and about one-quarter of the hay. The noon feed is about the same thing. The evening feed consists of about one-quarter or two-eighths of the meal or grain mixture for the day, and about one-half the hay. Water is given between 6 and 7 in the morning, at noon, at 6 o'clock, or as the horses come in from work, and in winter at about 8 p. m. The water is given at 8 o'clock at night in the winter, for the reason that the horses come in an hour earlier at night, and go out an hour later in the morning.

Clipping Horses.

Great differences of opinion exist as to the advisability of clipping horses in the fall. A little observation will convince a person of this fact. If we note the horses on the street, we will observe that some are wholly clipped, others are all clipped but their breasts, others have their bodies clipped and their legs as nature made them, while others' legs are clipped and their bodies untouched. Some people consider it cruel to deprive an animal of his natural covering during cold weather, and, unless a clipped horse is fortunate in having a humane driver and attendant, he must of necessity suffer considerable bodily discomfort, although it may not be sufficient to cause disease; but if he be clothed when standing even for a short time, kept comfortably blanketed when in the stable, he will look better and feel better than his mate that is not clipped. Provided the team is daily used for hard or fast work, as under ordinary conditions, the hair becomes long in cold weather; and if the horse be driven fast or worked hard, he perspires freely, and, on account of the length and thickness of hair, he does not dry off readily, hence is not as comfortable while either in or out of harness as his mate with a short coat. At the same time, if the clipped horse be left standing in the cold, and especially a cold wind, even for a few minutes, after a smart drive, and be not comfortably clothed, he suffers acutely, and is liable to a serious attack of illness. Hence, the advisability of clipping horses in the fall must depend somewhat upon the nature of the work they will have to perform, and the individuality of the man who will attend to and drive them. In all cases, the clipping should be done before the growth of hair is complete, say from the 1st to the 15th of November. When clipped at this time, the hair will grow somewhat, and the horse will not be entirely without covering during the winter. If clipping be much later than the middle of November, practically no growth of hair occurs, and this leaves the horse too much exposed, and the sudden change from a heavy coat to none, after the weather has become cold, is dangerous. If clipped much before November 1st, the hair will continue to grow until he practically has a full coat, with which he must put in the winter or be again clipped, and this time in cold weather.

The advisability of clipping in the spring will not admit of so much difference of opinions. This applies especially to farm horses that have done little work and secured little grooming during the winter. Under these conditions, the coat is usually long and thick, and does not shed as early as that of horses that have been regularly worked and groomed. These horses, when working in the field or on the road, perspire very easily on account of the weight of coat and their being unused to labor. It is not at all unusual to put a team in the stable wet with perspiration in the evening, and find them still wet in the morning. Hence, it is quite impossible to groom them properly. It is also practically impossible for the teamster to groom or rub them in the evening until they become dry, as it would require several hours' work. Horses cannot do well under such conditions, and clipping them is the only method by which conditions can be improved. The danger of chills or congestion does not exist now—not, at least, to any great extent—as the weather is not severe. Of course, a little greater care is required in this respect than with the unclipped horse, especially when the weather becomes cool and raw, as it sometimes does in April, and even in May. The clipping should not be done until such time as the horses are required for work, say, about the middle of April, or, in exceptional seasons, the first of the month. Those who have experimented in this line have observed that the horse that is clipped in the spring performs his work with greater satisfaction, looks better, and feels better, than his unclipped mate working under the same conditions. There can be no question about the advisability of clipping a long-coated horse that is required to do steady work in the spring, provided the teamster has ordinary intelligence, and observes reasonable precautions. "WHIP."

High Horse Prices Not an Unqualified Advantage.

Without denying that it is to the interest of Eastern Canada to have horse prices ruling high, it is, nevertheless, in order to point out that the advantage may easily be overestimated, unless the disadvantage is also taken into account. All farmers use horses, and when the horse stock of a farm is worth \$1,000, instead of \$500, there is an extra \$500 value to pay interest on, to carry the risk of and to sustain annual depreciation upon. To those who raise their own horses, it makes little difference whether they are valued high or low. For those who buy it is desirable to have prices low. Of course, every one who breeds horses for sale is benefited by having them high—the higher, the better—but it is only on the surplus raised and sold, over and above farm re-

quirements, that there is any advantage in having prices rule high.

This article is not an argument against the desirability of high values for horses from the Eastern farmer's standpoint. It is merely to point out that there is another side to the question, which may have escaped consideration. Our business is to set forth all the facts.

LIVE STOCK.

Origin of the Holstein-Friesian.

Address by Prof. H. H. Dean, Ontario Agricultural College, delivered at the Holstein-Friesian Banquet, Toronto, February 8th, 1911.

"History repeats itself." The people of Holland are noted for their thrift, progressiveness and wealth—being the wealthiest country per head of population of any country. This happy condition has been brought about largely through the influence of the Holstein-Friesian cow upon the agriculture of Holland. This influence is not of recent origin, else it had not been so potent. We read that the Friesian people have dwelt upon the shores of the North Sea since three hundred years before the Christian era. It is supposed that these people came originally from India, bringing with them herds of pure white cattle, and sought the shores of the North Sea as a pasturing ground for their stock. Two hundred years later a German tribe came from the upper Rhine district and also settled on the shores of the North Sea, near the Friesians. They also brought their cattle with them—a black race of animals. It is further supposed that the white cattle of the Friesians and the black cattle of the Germans became crossed, and thus laid the foundation of the present Holstein-Friesian breed of cattle, and also the foundations of the dairy industry in Holland. The cattle have spread to America, where more and better cattle of this breed are found than in their native country. The conditions in Canada and the United States are favorable for breeding large numbers and for developing the breed to their highest capacity. Our large areas of land and immense stocks of food are favorable natural conditions for developing the hereditary tendencies of the breed, while our wide-awake breeders have been quick to see the possibilities of animals of black-and-white color in milk production, and have developed these with all the shrewdness characteristic of the race dwelling in North America, not the least important of whom dwell in the country called Canada.

OFFICIAL TESTS A CONTRIBUTION TO DAIRY SCIENCE.

If we wish to single out one man to whom credit belongs more than any other for developing the milking capacity of Holsteins in America, that man is Solomon Hoxie, of the State of New York, who, so far as we know, conceived and carried out the idea of "Advanced Registry" some 26 years ago. The American Advanced Registry was established in 1885. Mr. Hoxie, in the first volume of the American Advanced Registry, said: "This system is also a slight offering to science (Mr. Hoxie was altogether too modest, as it was one of the greatest offerings to dairy science). There is yet to be a science of cattle selection and cattle-breeding. But such a science can never be established without a multitude of observations such as this system records. Finally, it may be said that it is a step in the direction in which all progressive breeders and thinkers upon cattle subjects are looking. It destroys no institution to take its place. It is simply a step forward into an unoccupied field." For many years, Mr. Hoxie was superintendent of "Advanced Registry" in the United States, and a great deal of credit belongs to him for directing the attention of breeders of this race of cattle to the importance of knowing the actual performance of cows, rather than depending upon external points which may or may not have a relation to milk-producing capacity. The systems of "Advanced Registry" in the United States, and of "Records of Merit" and "Performance" in Canada, have been the main factors in placing the Holstein cow in her pre-eminent position which she occupies in relation to the dairy industry of Canada and the United States. I should like, however, permission to say that there is an element of danger in placing too much stress upon tests for a short time, and at a time when a cow is in condition to do her best—in some cases after long periods of rest. Someone has said that pie-crust and records are made to be broken, but we need to be careful that suspicion as to methods adopted in breaking records does not rise to a point where discredit, rather than credit, will result. I should also like to say that yearly records and records of eight months after calving ought, possibly, to be emphasized more than is the case at present. We have faith enough in the breeders of Holstein cattle to believe that they will adopt whatever is for the permanent, best interests of the breed. Let us have 7-day, 30-day, and 365-day tests. We cannot have too many. The only point to guard against is an unreliable test.

TOO MUCH EMPHASIS ON FAT.

One other phase of the testing question may be referred to, viz., public tests, at which the Holstein cow has always distinguished herself and brought honor to her owner, and this in spite of a serious handicap. I have no wish to criticize adversely those in charge of the various fairs of the country, where public tests of cows are made, and prizes awarded on the basis of a scale of points. These men are living up to the light they have, but, in my judgment, too many points are allowed for the milk-fat in practically all the scales which have been adopted. The milk-fat is the most variable constituent of milk, is most easily influenced by external and internal conditions of the cow, has a more restricted use as a food than other constituents of the milk, is more liable to cause disorder to the user of milk when in excess—then, why place so much emphasis upon it? The only explanation we can offer is that people have gone "fat crazy." It is possible that the public have confused "fad" and "fat," as the former is so popular in these modern times. We would not minimize the value of milk-fat for buttermaking, or when in proper proportion to other constituents of the milk, but a continual use of an excessive amount of milk-fat is disastrous to the human system.

RAISE CATTLE.

It is related of Frederick the Great that, after the cruel Seven Years' War, in which Prussia was almost ruined financially and otherwise, this great king and warrior went about among his people, more particularly farmers, loaning or giving them money to make a fresh start, offering advice and help wherever needed, that he invariably advised the farmers to go in for cattle-raising. A man would come to him and say, "I don't like cattle, I prefer horses," or some other line of farming, but the scarred warrior would reply, "Take my advice and raise cattle; they will restore your soil fertility, and pay dividends from the first." Fortunately, the Prussian farmer profited by this advice, and we have in the German Empire a forceful example of what cattle-raising can do to restore the fortunes of a practically bankrupt nation in the eighteenth century.

What was good advice at that time, is good advice to-day in Canada, and everywhere that nations are making a beginning. Breeders of Holsteins can help very much in national prosperity by selling pure-bred bull calves to the average or ordinary dairy farmer at a reasonable price. We have heard men say that if they could not get their price for a bull, they would sell him to the butcher, rather than take a lower price. This is a great mistake. The ordinary farmer is inclined to be somewhat skeptical of the value of pure-bred stock. A good animal, sold in a locality formerly inclined to undervalue pedigreed stock, would be bound to win favor, and in the end would result in increased demand for pure-bred males, and consequently increase the profits of breeders in the long run.

CO-OPERATIVE BREEDING.

What is a fair price for a pure-bred bull calf, say a month old? This is a difficult question to answer, but, judging from the views of correspondents, I should say that the average farmer considers twenty-five dollars a good price for such a calf. This, of course, would be considered a very low price by breeders of "fancy" stock, but it strikes me that there is a profitable trade to be worked up with dairy farmers who cannot afford to pay high prices. If the plan of co-operative or community breeding were adopted, whereby a number of farmers in a locality would purchase a pure-bred bull for their use, it would enable them to secure the service of a first-class male at a comparatively low cost; but where this is not practicable, and the individual farmer on a rented or mortgaged farm has to buy a bull, then loan him to all his neighbors free of cost, he cannot afford to pay a very high price for an improver of his dairy cattle.

MILK FROM CHEAP ROUGHAGE.

The Holstein cow is characterized by her ability to change cheap roughage into valuable milk. The future of the Province of Ontario, so far as farming is concerned, lies largely along the line of milk production, for town and city trade, for condensed milk, for buttermaking and cheesemaking, and in side-lines of dairying, such as bacon, and poultry, together with the growing of fruit. With the opening of the American market for our concentrated farm produce, dairying is likely to advance more than it has been able to do in the past five years, during which time it has largely been in a state of "as you were."

You may not agree with all the views as set forth in the foregoing, but the dairy teacher must ever set before his hearers what he believes to be the truth. Nothing less than this will satisfy the thinking, progressive members of this Association or of any other body of do-better dairymen. Someone has said that great men are the result of genius and opportunity. Lacking either of these, great men in any walk of life cannot be produced. It looks to me as if this were the

opportunity for breeders of Holsteins to forward their own and the dairy interests of Canada. I am sure that their genius will rise to the occasion.

Grow Clover Hay and Turnips for Sheep.

T. R. Arkell, B. S. A., Animal Husbandman at the New Hampshire Experiment Station, summarizes the result of an experiment in feeding sheep and lambs as follows:

1. Clover hay, as a feed for sheep, is decidedly more profitable and more economical in mutton production than native hay.

2. The native hay contained large quantities of timothy and other grasses that the sheep did not relish. Timothy hay is not a palatable feed for sheep.

3. The relative difference in price between timothy or native hay and clover hay is such that the sheep-raiser in New Hampshire, who is not growing clover, can profitably sell the former and purchase the latter, or, better still, alfalfa, for his sheep.

4. So long as the market price of hay continues high in New Hampshire, with the comparatively low price of grain, when the greater feeding value of the latter is considered, the sheep-feeder can well afford to feed grain in the winter ration.

5. Turnips in the winter ration reduce the cost of mutton production.

6. Turnips, owing to their watery nature, render the ration more palatable, and are distinctly useful, when fed in moderate quantities in conjunction with hay and grain, in preventing constipation and other resultant ills, which so frequently occur when sheep are changed from pasture to dry feed.

7. The chief danger with turnips lies in heavily overfeeding or attempting to make them constitute the bulk of the ration, when they are liable to make a ration too laxative, and produce scouring.

8. Turnips are well adapted to New Hampshire soils and climate.

9. They can be raised and stored at a cost low enough to compete with silage, and in many cases supplant silage for sheep-feeding.

10. Turnips or other roots offer a partial solution to the problem of securing a substitute for high-priced grain.

Sheep-raising in New Hampshire, it might be added, is fast becoming an important phase of the live-stock industry. Its development, or, rather, re-development, within recent years has been rapid, and every year shows a consistent and satisfactory increase in numbers. Farmers are beginning to realize how profitable, when pursued upon a systematic basis, sheep-raising is. Attention is being paid, not only to general sheep-raising, but to that more intensive form of it—winter or "hothouse" lamb production. Early lamb-raising yields large returns, owing to the proximity and easy access to the Boston and New York markets, where the highest prices in America prevail for this product.

Cook Pork Well.

DANGER OF TRICHINOSIS FROM EATING RAW OR IMPERFECTLY-COOKED PORK.

Cases of illness sometimes occur from eating uncooked or insufficiently-cooked pork which is infested with a microscopic parasite commonly known as trichina or flesh-worm, the scientific name being *Trichinella spiralis*. An average of one or two per cent. of the hogs slaughtered in the United States are infested with this parasite. When transmitted to human beings, trichinae may cause serious illness, sometimes resulting in death. Out of about 15,000 cases of trichinosis recorded in medical literature, most of which occurred in Europe, 830 resulted fatally.

No method of inspection has yet been devised by which the presence or absence of trichinae in pork can be determined with certainty, and the Government meat inspection does not include inspection for this parasite. All persons are accordingly warned by the United States Department of Agriculture not to eat pork, or sausage containing pork, whether or not it has been inspected by Federal, State or municipal authorities, until after it has been properly cooked.

A temperature of about 160 degrees Fahrenheit kills the parasite; therefore, pork, when properly cooked, may be eaten without any danger of infection. Fresh pork should be cooked until it becomes white and is no longer red in color in all portions of the piece, at the center, as well as near the surface. Dry salt pork, pickled pork, and smoked pork previously salted or pickled, providing the curing is thorough, are practically safe as far as trichinosis is concerned, but as the thoroughness of the curing is not always certain, such meat should always be cooked before it is eaten.

A pamphlet giving information on the subject is published by the United States Department of Agriculture, Washington, D. C.

Satisfied Carbolic Acid is Effective.

Editor "The Farmer's Advocate":

Replying to Dr. Atkinson's criticism (January 26th issue) of my letter in "The Farmer's Advocate" of January 12th, I will, with your permission, give Dr. Atkinson my reasons for believing the cows had contagious abortion. Early last spring I got the use of one of the finest Holsteins in the Province for three weeks. I had fourteen cows in calf to this bull; six aborted, and eight calved about Christmas and New Year's. In past years, when I had my own bull, there were no abortions, except the Jersey grade, and she was bred to some bull I don't know. I gave the cows carbolic acid after they aborted, some of them twice; all in calf; fifteen will calve in the spring; no abortions. Dr. Atkinson, I know, is not satisfied. I can't help it; I ought to be. He gave me a good scratching. I have no desire to cast reflection upon the veterinary profession as a profession. I am sure they are a grand army of jolly good fellows, and they do prevent and alleviate an enormous amount of untold suffering in this suffering world.

Now, as to the pregnant heifer referred to in connection with the heading, "Curative Measures," 70 drachms of carbolic acid was given in her feed, 17½ drachms was injected into the blood before she aborted. In the name of common sense, what else could the poor little thing do but abort or die from blood poison? Doctors prescribe strychnine in a great many cases. Where is the doctor who would dare inject strychnine into the blood? You give us a great many ideas—some of them mistaken ideas. The cow's tender and sensitive mouth was not poisoned, and I did taste the 1-in-15 before I gave it to the Jersey cow; it has a rather sweet and not unpleasant taste. The effect on the mouth is very little; on the brain, great, giving a heavy, sleepy and soothing feeling. Dr. Atkinson's last idea struck the keynote, and sounded the whole truth. Here it is: "In all probability, Mr. Medd's cows have received some poison acting on the generative organs, resulting in abortion." Yes, the bull was the guilty lad. It is well to have something that will transform a diseased and repulsive fetus into a beautiful and healthy calf. Don't try to strangle the good angel. One might as well try to cast his shadow on the sun.

WILLIAM MEDD.

New Westminster, B. C.

THE FARM.

Canadians Score at National Grain Exposition.

Editor "The Farmer's Advocate":

It will doubtless be of interest to your readers to learn of the success of Western farmers who exhibited at the fourth annual National Grain Exposition, held this year at Columbus, Ohio, from January 30th to February 11th. In addition to other prizes and trophies, there was offered the Colorado Silver Trophy, valued at \$1,500, for the champion peck of oats, any variety. A number of Western farmers entered exhibits, and J. C. Hill & Sons, of Lakeside Farm, Lloydminster, Sask., won first prize and captured the trophy, a photograph of which is herewith enclosed. Norman Cherry, of Davis, Sask., took first prize on wheat. G. H. Hutton, of Lacombe, Alta., got second prize on both wheat and oats.

The Colorado oat trophy was presented by the State of Colorado, to be competed for during the five-year period, 1909-13, inclusive, at the annual National Grain Exposition, under the following conditions:

1. Competition to be open to the world, barring no State, Province, or nation.
2. Fifteen pounds of oats, to be grown by an individual exhibitor during the crop year in which the grain is exhibited.
3. The winner of trophy three times in five years to retain it permanently.

As the trophy will be competed for again at the end of this year, or the beginning of next, grain-growers interested in the competition are invited to keep in touch with the matter by writing to me. I will be pleased to inform those interested of the date of the next Exposition, and will also arrange about having exhibits placed in position, and looked after. W. W. SCOTT,
Ottawa. Superintendent of Immigration.

Driveway at Barn Door.

The earth at the driveway to our barn doors was every now and then settling down, and it also rotted the plank. So we dug out the earth about two feet deep and two feet wide, and then filled up with cement concrete and small stones, finishing nice and smooth and even with the plank of barn floor, and we find it a very great improvement. There is no far going in at the barn door with the loaded wagon, and the cement is always in its place. It is worth a good deal.

D. L.

A Farmer's Experiments.

Editor "The Farmer's Advocate":

As you kindly published last year the results of our experiment in field selection of seed barley, which gave such splendid results, I would ask you again to give to your wide circle of readers some results from our last season's experimental plots. While our experimental farms are doing splendid work, and the results published we believe to be thoroughly reliable, yet there is room for all interested workers in that line, and the more, the better. Indeed, every farmer should have an experimental plot, to find out what varieties of grain and roots do best on his own farm. We recommend our plan, which is simple and practical, to your readers, and we promise them a lot of pleasure in the work, besides large profits from the knowledge obtained. Our plan is to leave a strip one rod wide the whole length of our root field, manured and plowed in the fall previous. It is then ready to be cultivated, harrowed and sown in the spring. Sow all the varieties of grain from one end, and the roots, corn, beans, etc., from the other end, leaving a 12-foot break between grain and roots for turning with the root scuttler. We leave a space of three feet between each variety experimented with. We sow all the grains in rows twelve inches apart, giving 15 rows to the rod, and the roots 35 inches, which gives five rows to the rod. Our reason for this is to cultivate the soil and to walk amongst the grain without breaking any down as we weed out any mixtures. One thing

selected 360 plump kernels of each, planting them about an inch apart in rows a rod long. At harvest we counted the heads of each, and found that the sandy-land seed produced 834 heads yielding 3 pounds ¼ ounce of grain, and the clay-land seed produced 970 heads, yielding 3 pounds 6 ounces. This, figured out, made a difference of 5.35 bushels per acre in favor of the clay-land seed.

Another experiment, in connection with the Experimental Union, was testing four varieties of corn for husking, 50 hills of each, occupying two square rods each. The varieties and yields were: Canada Yellow, 3,227 pounds dry fodder and 25 bushels shelled grain per acre; King Philip, 4,000 pounds fodder and 16.16 bushels grain; Little Dent, 2,400 pounds fodder and 24 bushels grain; Genesee Valley, 1,950 pounds fodder and 13 bushels grain. These yields are all poor. One reason for it was the cows got at it, and I was compelled to cut it too soon to save it. Our general crop was fully one-third better than the best, which shows how profitable even an inferior crop of corn is. Taking an average of two tons of dry fodder per acre, valuing it at half the price of timothy hay, will make it worth \$10. Then add the value of, say, 25 bushels of shelled corn, at 70 cents (the price here), that is \$17.50. This gives us a net value of \$27.50 per acre. We must also remember that this is a cleaning crop, and leaves the land in splendid condition for a barley crop and for seeding to clover. In this locality, where bad varieties of weeds have such a hold, this is a method of successfully fighting them by a crop that will pay all the expenses of the labor. By not plowing the land for the next crop, but simply cultivating to form a seed-bed, no fresh seeds are brought to the surface; then, if the land is seeded to clover, to stand for two years, millions of weed seeds will have perished; then, by growing roots again, or barley crop, it will be easy to hand weed the grain crop, and so get the upper hand. It has become a question now for many, Which is to be the master? The weeds must be subdued, or the farmer must get out.

Simcoe Co., Ont.

FOYSTON BROS.

Sow Clean Seed.

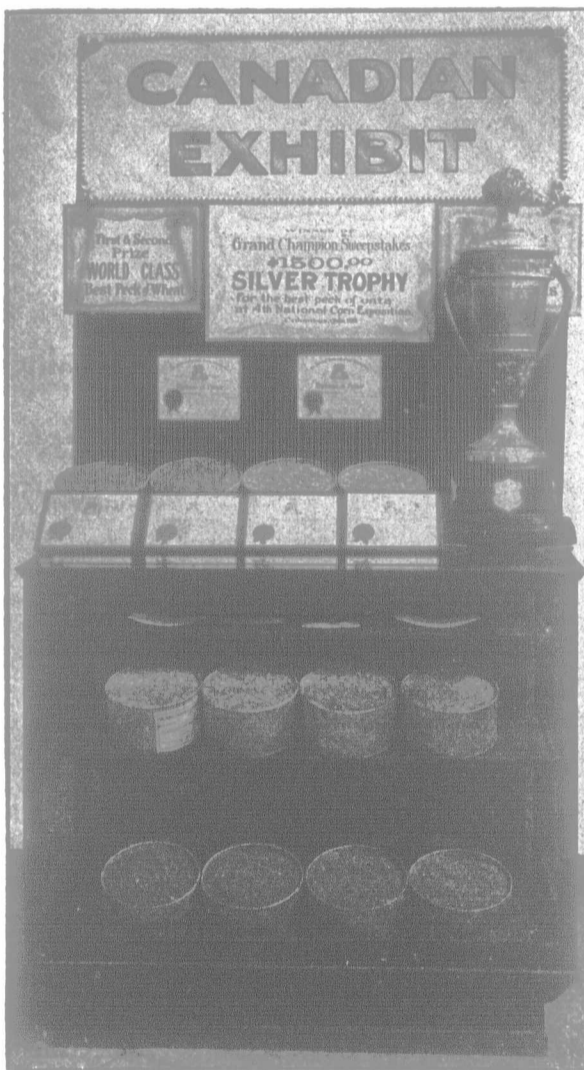
Farmers who are catering to supply pure seed grain should command at least 5 to 10 cents more than the market price for commercial seeds. There are some farmers whose seed has behind it the value of several years' selection, who are able to get almost double the price of commercial seed for what they offer for sale. No farmer who takes special pains in cleaning his seed grain for market, and keeps it pure not only from weed seeds, but other varieties of grain, should take less than 25 cents per bushel in advance of commercial prices. If he has done justice to his seed, he will have removed fully 20 per cent. to 25 per cent. as chaff, dirt, small seed, etc. It is a satisfaction to learn that from nearly all parts of the Dominion the demand for good pure seed is on the increase.

In the case of small seeds, most farmers have something to learn about their purity. So many are careless as to what they sow. In some localities where ribgrass and ragweed are common, many farmers are so accustomed to them that they really do not consider them as anything serious, and are willing to sow such weed seeds in quantity; and, what is more amazing, they are willing, unwittingly, it may be, to pay clover-seed prices for them in very many cases. This is true also of foxtail. For samples which might contain anywhere from 5 to 40 per cent. of foxtail farmers often pay within 25 or 50 cents as much per bushel as for comparatively clean seed. When will we learn wisdom on these points? Pure, well-developed, plump seed is worth very much more per pound than seed with weed seeds in, and where more or less of the seed is brown, shrunken or dead-looking. Yet there is not often more difference than 1 cent per pound in price between them. In actual value, there is 5 cents per pound difference, at least. The best grades are the cheapest buying.

When a farmer is not a good judge of seeds, and cannot distinguish the weed-seed impurities, you would think he would avail himself of the opportunity which the Seed Branch, Department of Agriculture, Ottawa, provides him in testing his seeds free of charge. It need not even cost him the price of a postage stamp to send his ounce of representative small seed down for a purity report.

Where a farmer is growing seeds for the market, one would think he couldn't take too much care to see that his seed supply was pure to start with, and that the ground he was going to sow the seeds on was reasonably clean, as on hoe-crop ground, where the plow had not been allowed to disturb the weed seeds, which, so to speak, have gone to sleep after the previous plowing.

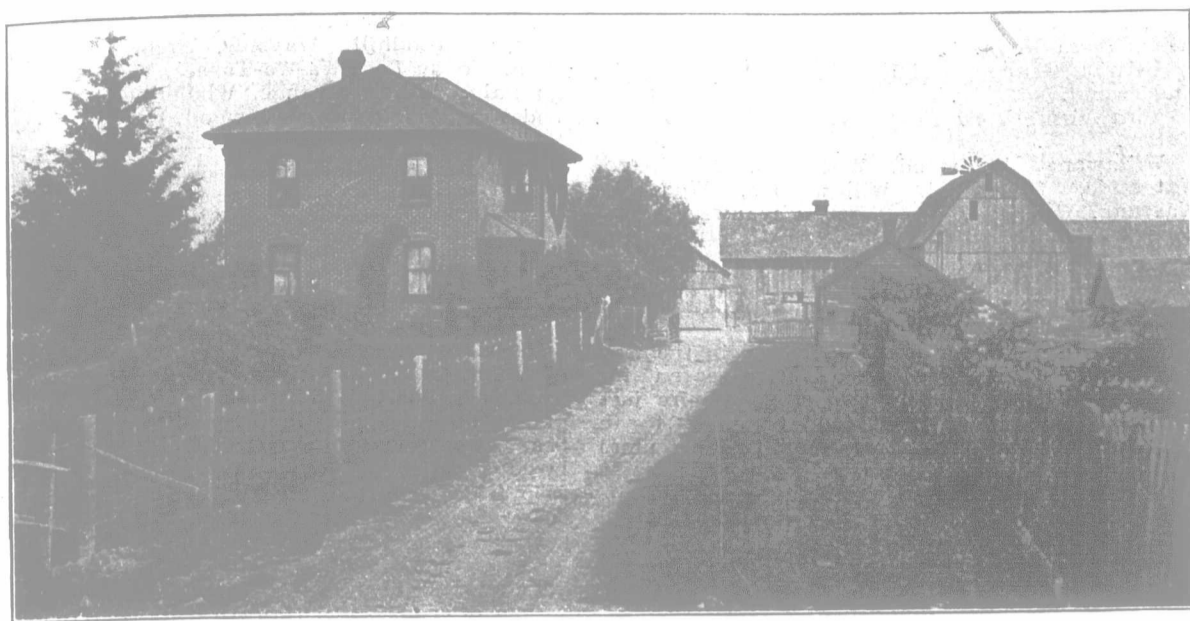
In districts where certain weed seeds are prevalent, as ribgrass or buckhorn, ragweed, catchfly, or sticky cockle, false flax, curled dock, or, last but not least, bladder campion, would it not be well to fight shy of all such seed for seeding purposes? The prospect is that plenty of clean red-clover seed may be had this season at reasonable



we have learned from this wide drilling is that it does not diminish the yield, and that it stands better. If labor was more plentiful, it would pay handsomely to wheel-hoe all the grain crops. We have hoed an acre in three hours, but reckoning two acres for a day's work, the cost would be below \$1 per acre, while the yield would be increased, and weeds subdued.

Last spring set in very early; we began seeding on April 4th, and finished on the 16th. Before our plots were sown, wet weather set in, and the land was not fit for seeding again until May 7th. This affected our yield, especially in peas, of which we had three varieties under test. We tried hand-selecting in peas, choosing vines which bore eight or more pods to the vine, where the average was about 5 pods. Our object was to find out whether the yield of pods would be kept up, as we believed it would. Unfortunately, the late sowing brought the blooming period during a hot spell; then a brown-spotted rust struck the vines, and the result was an inferior yield of 13 bushels per acre, when the same variety in our field crop, sown three weeks earlier, yielded upward of 30 bushels per acre—over double the yield of the late sowing.

Another interesting experiment tried was testing seed barley, grown on sandy and clay soil, to see whether there was any difference in the vitality of the seed germ, as we believed there would be in favor of the seed grown on clay soil. We



A Norfolk County Homestead.
The old home and the new—old log cabin at right of lane.

prices. It is a great boon to the country that we have cheap clover seed. Farmers should consult the Farmers' Weed Bulletin in their rural school or public library, and become familiar with the weeds that infest their crops, and learn how to eradicate them. T. G. RAYNOR.

Economy in Field Work.

The Agriculturist of the Central Experimental Farm, Ottawa, reports the following suggestive data showing the economies to be effected by using three instead of two horse implements, two-furrow instead of single plows, etc.:

Plowing.	
Plowing one acre with simple plow cost.....	\$2.00
Plowing one acre with two-furrow gang cost	1.25
Disk Harrowing.	
Disking one acre with small disk (3 cuts necessary)	0.90
Disking one acre with large disk (2 cuts necessary)	0.80
Disking one acre with cutaway (1 cut necessary)	0.45
Cost of Seeding.	
Seeding one acre, two-horse seeder, cost...	0.22½
Seeding one acre, three-horse seeder, cost...	0.18
Space Between Rows of Grain.	
One acre, sown with 6-inch markers, single disk drill, yielded 15,779 pounds of grain (oats), 21,586 pounds straw.	
One acre, sown with 7-inch markers, yielded 16,079 pounds grain, 26,896 pounds straw.	
Cost of Cutting Hay.	
Cutting one acre of hay with 4½-foot cutting bar	0.31
Cutting one acre of hay with 6-foot cutting bar	0.20
Cutting one acre of hay with 7-foot cutting bar	0.18
Cost of Cutting Grain.	
Cutting one acre of grain with 6-foot binder, cost	0.28
Cutting one acre of grain with 8-foot binder, cost	0.20
(Three horses used on each machine.)	
Man versus Machine for Cutting Corn.	
It required 12 hours' time of man to cut one acre of corn in hills (3x3). It required two hours' time of (three-horse team) harvester to cut one acre of corn in rows 3½ feet apart.	
Sowing Corn.	
After land was prepared, it cost 64 cents to mark and hand plant in hills (3x3) one acre of corn. After land was prepared, it cost 20 cents to sow one acre with large seeders, in rows 3½ feet apart.	
Cultivating Roots.	
It cost 62 cents per acre to cultivate roots with single cultivator (once over). It cost 45 cents per acre to cultivate roots with double cultivator (once over).	
Methods of Sowing Turnips.	
Turnips sown on the flat yielded 61,640 pounds per acre. Turnips sown on drills yielded 55,392 pounds per acre. Turnips sown 2 feet apart in rows yielded 56,008 pounds per acre. Turnips sown 2½ feet apart in rows yielded 61,024 pounds per acre.	

Christen the Farm.

"The Farmer's Advocate and Home Journal," of Winnipeg, Man., recently closed a popular contest for the best list of names suitable for a farm. Over 200 lists were submitted up to the date of closing the competition, and every mail was still bringing them in.

Every farm should have a name, one in some way descriptive of its appearance, situation or characteristics, and embodying an ideal of its owner. It should be a name expressing individuality and dignity, one that the children of the home may be proud of and cheered with. Having selected a suitable name, have your printer print or emboss the name on your writing paper and envelopes, and always use it in your correspondence. Very many of the competitors kindly suggested in their lists "The Farmer's Advocate" as one of the most appropriate names for a farm. We trust no Eastern readers will select that name, as it is already applied to our own estate. From the lists sent in, it would be possible to select thousands of names, but we have chosen several hundred, arranged alphabetically, from which our readers may pick a name for their farm (or, better still, a suggestion for an original name), if it has not already been christened. Having given the place a name, then live up to it. Here is the list:

Alderside, Alfalfadale, Ashonhurst, Allendale, Aldersyde, Altamount, Avondale, Abbotsford, Assini-Glen (stony glen), Aldendeich, Agawam, Airdrie, Ashcroft, Balgreggan, Berridale, Beaver Dam, Branksome, Bughrig, Belvedere, Briery Bank, Broadlands, Bonnie View, Bankhead, Barley-Rigs, Big Timber, Business, Breeze Lawn, Bonniebank, Broad Meadow, Belleview, Braeburn, Banner, Balclune, Balconie, Barnslie, Bishophill, Blindwell, Balneadownside, Borland, Broadshade, Birnam, Bachelor Dale, Bushview, Beechwood, Birch, Beaver, Blythefield, Brookdale, Bush Glen, Balmoral, Bonnie Doone, Balmoral, Buena Vista, Briar Home, Beautiful Valley, Bridgewater, Craigalea, Cherry Grove, Catawaba, Creekside, Carmunock, Campsie, Cedar Hill, Clearview, Cragmuir, Caledonia, Chelsea, Craigieburn, Chippewa, Crocus Hill, Craigside, Cherry Croft, Court Lodge, Cedar Row, Crescent Park, Crystal Brook, City

View, Cloverdale, Camlachie, Claymore, Cameron, Clear View, Comfortside, Collynie.

Delany Grange, Deerfield, Donahona, Dunara, Daisydell, Dundallie, Dungarvin, Daimeny, Deer Lodge, Dorenelea, Duncraggan, Dullom Lea, Dingley Bell, Deepdale, Deep Valley, Dinniekyle, Daybreak Hill, Dawn Valley, Downfield.

Evergreen, Ellesmere, Excelsior, Exmoor, Edgewood, Elmendorf, Echo Grove, Earncliffe, Elmcroft, Eastview, Eden Valley, Edgemont, Eddyside.

Fairhaven, Fenwood, Fairbank, Forest Home, Fairfield, Fairmede, Falconhurst, Forest Hill, Farview, Fernleigh, Fyfe, Ferry, Fairy Glen, Fruit Dale, Fallowfield.

Garway Manor, Garland, Glenalpine, Greenwood, Grassmere, Glenora, Glencourse, Glengarry, Glenhaven, Grandview, Gadshill, Garden Slope, Glenwold, Golden West, Green Lawns, Gladshiem (abode of gladness), Grigalach, Good Cheer, Grassy Slope, Golden Acres, Green Bank, Green Meadow, Gap View, Glen Forest.

Hill Top, Hedgerow, Huntsholm, Homewood, Hazel, Hopewell, Hillsdale, Homestead, Holly Bourne, Hurona, Hawarden, Hollywood, Horspath, Hazeldean, Haughmond, Happy Hollow, Hawthorn Bank, Hawthornden, Harlem, Highwood, Hillhouse, Hillside, High Bluff, Hill Park, Hazelhurst.

Idlewild, Ingledene, Indian Lawn, Ivanhoe, Ivy Bank, Ingle Nook, Irongate.

Juniper, Jargomyre.

Kilmallie, Kamus Baine, Kirkland, Keystone, Kenilworth, Kensington, Knollwood, Keehewin, Killiecrankie, Killmarran, Kelvingrove, Keewadin (north-west wind), Kennels.

Lakeside, Ladybank, Longwood, Lamoure, Luckyridge, Lebanon, Lone Tree, Laughing Water, Lodge Hill, Lammermuir, Lindisfern, Linwood, Lindisfarne, Langleddale, Largscarty, Lindisdale, Lookout Point, Laurel, Langlewyld, Langmere, Leaside, Lakewood.

Maplehurst, Myrtle Mere, Montrose, Moorland, Mazewood, Mattawan, Mohawk, Minnehaha, (laughing water), Managua, Meadowlea, Mayumba, Moosiel, Mallowmay, Mantiwooc, Mississuga, Marchmont, Ministik, Mushkodosa-Dell (the grouse dell), Mudjekeewis (west wind), Marshland, Meadow Brook, Meadow Lawn, Massy More, Mishe-Mok-Wa-Glen (the glen of the bear), Meenahga-Muskoday (the meadow of the blue berry), Melgund, Moss Bank, Massawippi (sleeping water), Miramichi (happy retreat), Morton Mains, Mountain View, Mountside, Mornington, Milestone, Maxwellton, Manhabbe'zee (the swan), Modamin (Indian corn).

Norton Grange, Northfield, Niptitasso, Northend.

Osborne, Outlook, Orloff, Onondago, Ottaway, Orley Farm, Orchard Place, Olathe (beautiful), Osawatomie, Oaklawn, Oakland, Ormsby, Oberon, Otterburn, Oldfield, Ocean View, Opechee (the robin), Overlea.

Parkview, Primrose, Peaksdale, Poulaskino, Parkdale, Prospect Grange, Pinehurst, Plain View, Pondexter Manor, Pinewood, Paramount, Pioneer, Prairie Villa, Peerless Park, Pretty View, Pleasant Valley.

Quarrington Manor, Quiet Vale.

Rumbough Grange, Riverview, Rosedale, Roadway, Rosdene, Runnymede, Running River, Ridgewood, Richmond, Ralston Mede, Restholme, Ravenlea, Raskymains, Ravenswood, Rockwood, Riverdale, Ravensworth, Riverside, Roaring Water, River Nook.

Spruce Grove, Swatawa, Stonfernan, Shamrock, Sylvania, Stone House, Segwun (spring), Sah-sah-ii-wun (rapids), Sunnbrae, Sunnymede, Stubbannan, Stonholme, Strathclyde, Stornawav, Sandringham, Silverglade, Shady Grove, Stony Wood, Summerwood, Shawnee, Sin-



Cultivating for Spring Wheat.

issippi, Spring Creek, Sunset, Sedgeley, Silver Heights, Shady Dell, Shawondasee Dell (the dell where the south wind plays), Strath-Garney, Spring Creek, Stillwater, Stonehenge, Stockwell, Sylvan Nook, Stoneleigh, Shrubland, Sunny Ridge, Sandy Knoll, Seven Oaks, Shaganappi (harness).

Thorny Croft, The Firs, Twin Elms, The Heights, The Oaks, The Beeches, Teighton, Tonawanda, Thirlestane, Tullibardine, The Hermi-

tage, Thanopsis, The Wolds, The Gap, Trout Run, Turfhill, Treesbank, Treasure Land, Three Hills, Terra Nova.

Ullwick Grange, Unimak, Uppingham, Utopia, Underwood.

Vira Vosa, View Point, Valley View, Verdant Valley.

Willawana, Wildwood, Woodbine, Winnibago, Waterside, Wheatland, Willowgrove, Woodslea, Wascana, Whinicha, Wynehurst, Weyanwega, Wau-

kesha, Wadena, Wiomosa, Winnemak, Woodlawn, Waburn, Waw-Bewawa-Dell (the dell of the white goose), Woodhill, Wayside, Wood Dale, Willow Glen, Woody Lea, Wa-Wa-Tashee, Wa-Wa-Dell, Willis Dale, Willow Grange, Windermere, Wideacres, Wideview, Woodland, Wildwood, Waw'beck (rocky), Wabasso (north), Wonderland, Wah-wah-taysee (fire fly).

Yarrow.

Zalmunna, Zephyr.

THE VITAL PROBLEMS OF THE SEEDING SEASON.

With the approach of another spring, the purpose and plan of every farmer ought to be to make the crops of 1911 surpass those of every previous year. Is not this possible in so far as results depend upon seed and tillage? As farmers, experience has taught us many things; observation and reading, others. Will it not pay us to take stock of the knowledge gained? Here are a few plain questions to talk over in "The Farmer's Advocate," for mutual benefit:

1. To what extent do improvements in yield and quality of grain, including corn, depend upon (a) change of seed, irrespective of variety; (b) the introduction of new varieties; (c) selection of seed on the farm? Examples may be cited of marked benefits arising from any of these means.

2. Moisture being the conveyer of food in the soil to growing plants, what part, compared with the above means, does tillage play in crop improvement; and what implements, new or old, have proved of most distinct advantage?

3. What plan has been found best to secure supplies of seed corn and grain pure and free from weed seeds?

4. Under what circumstances, if any, may the same crop be grown in succession on the same land, and how often?

Doubling Grain Crops.

Editor "The Farmer's Advocate":

I am pleased to see that the farmers of our country are taking such an interest in discussing through your valuable paper important questions concerning farming operations.

As to the extent in improving yield and quality of grain on the average farm, thorough tillage, the careful selection of seed and variety, and painstaking preparation of same, our grain crops might be doubled, or nearly so. For one who has a good variety of grain, and is careful in every detail, no benefit is derived from changing seed, unless he is sure of getting something better than he has. Unless new varieties have been well tested and have proved superior to the old, the average farmer had better leave them alone. But, on the other hand, it is well to be on the outlook for new and better varieties, and secure them without delay. If they prove satisfactory, he may be able to dispose of good seed grain to his neighbors at a price that will well repay him for the first outlay and extra work. The question is often asked, "How am I going to keep up the standard of my seed after obtaining it?" Be very thorough in preparing your seed. Clean it as often as is required to save only the large, plump kernels. Then, at harvest time, select the field or part of the field that is the best, and save that for seed. Often after a hoe-crop we get good clean grain that is good for seed, and, if mowed away so that it can be threshed and kept separate from the rest, and this is kept up from year to year, there will be no running out of seed or need of a change.

Now, after time and labor have been spent in securing good seed, let us look at the tillage, which, after all, plays a most important part in growing grain; in fact, is it not the most important part? We may have good seed and good land, but if that land is not well worked and the seed put in in good condition, how can we expect a good harvest? A man may have a well-bred calf and plenty of good feed to give it, but unless he prepares that food so that it will be in the best possible condition for the growing of that calf, he cannot expect to raise a good animal. A man with any knowledge of his work can prepare a good seed-bed with a plow, harrows, cultivator and seed drill. Land having been worked after harvest, plowed in the fall, then cultivated in the spring with a broad-toothed cultivator, and brought into good tilth with the harrows, should be in a condition to receive the seed and produce an abundant harvest, if weather conditions are at all favorable.

We have always bought our seed corn on the cob from corn-growers in Essex, and in so doing have had good satisfaction. We nearly always sow our own seed grain. If at any time we purchase any, it is generally from some farmer who has been successful in winning prizes in the field-crop competition, and received a good score for being free from weeds.

We do not approve of growing the same crop in succession on the same field, if it can possibly be avoided, although it is sometimes done. Occasionally we take two crops of oats off the same

field, but only when something comes in the way to interfere with our rotation. Our reason for not doing this is that no two crops require just the same amount of plant food to grow them; and if you grow the same crop two or more years in succession, there will not be the same amount of plant food in the land to sustain it. Be thorough in all your seeding operations, and at harvest time you will reap the benefit. "As a man soweth, so shall he reap." W. H. A. Bruce Co., Ont.

Eight Rules for Big Crops.

Editor "The Farmer's Advocate":

With regard to changing seed, I would not advise the purchase of large quantities of any kind of unknown varieties of seeds. Seeds that suit one kind of soil and climate may not suit another. The introduction of new varieties in small quantities is essential. Test them two or three years; give them field conditions. If worthy of a place, grow them. If not, cast them out and try again. Selection of seed on the farm is one of the best methods of increasing our crops, both in quantity and quality. First, hand select from the standing crop; secondly, hand select from the shock; thirdly, a fanning mill is one of the very best investments on the farm, when properly used. No grain should be sown without first putting it through a fanning mill two or three times. By means of thoroughly cleaned grain, with heavy, large, plump seeds, 10 bushels per acre can be secured over the uncleaned seed, to say nothing of the weed seeds in the uncleaned grain. Of corn for husking, 10 to 20 bushels per acre have been secured by selection of the best cobs and planting the best seed from the center of the cobs. Of corn for ensilage, two to three tons per acre more have been gained by the same method; and, of roots, two to three tons per acre by recleaning the seed and sowing the best.

Conservation of moisture is accomplished by after-harvest cultivation, thorough stirring of the soil particles to absorb all rainfall during summer, autumn and spring for the future crop; thorough plowing in the autumn (October preferred); the deeper, the better, but do not bring up any of the subsoil. Loosen the subsoil at the time of plowing several inches deep; the deeper the subsoil is loosened early in autumn, the greater will be its capacity for holding moisture, and the roots of plants will find a much freer and deeper feeding-ground. The old-time plow, with the old-time plowman, who was never afraid to appear at one of the best educational features, the plowing-match, can be used in the foregoing process to most distinct advantage. The subsoil plow should be used in the autumn only. This implement is old, and yet unknown to the majority of farmers. If most soils were subsoiled once in four years, or once in the rotation, there would be very much less anxiety for showers during the growing season, as the subsoiled land will hold tons more moisture than land not subsoiled. The deeper the cultivation—always in the autumn—keeping the plant food on the surface—the greater will be the harvest. Spring cultivation should be very shallow, but thorough.

Having secured a variety of seed corn grown for grain that will ripen and give a good yield, we select fresh seed from the very best cobs. Of seed corn for ensilage, usually the early dent varieties are used, those coming well to the glazing state, or riper, if possible. The seed is generally purchased on the cob, the best cobs selected from the bulk, and thoroughly sized with the fanning mill. In case of field grains, by growing one's own seed, selecting, AND BY THE THOROUGH USE OF THE FANNING MILL, we obtain the best.

A systematic rotation of crops should be adopted, as far as possible, on every farm, as it is not good farming to sow grain on the same soil two years in succession. When this is done, the soil becomes exhausted of plant food upon which that particular crop feeds. When different crops are grown, it economizes the natural supplies of fertility contained in the soil, as different crops feed upon different soil ingredients, or, at least, they require these ingredients in varying quantities. A proper succession of crops bring all the elements of plant food into use, and hence prevents any of these from lying idle and being wasted. Rotation improves the mechanical condition of the soil. In every well chosen scheme,

sod-surfaces or green crops are turned under. It also tends to the enrichment of the surface soil. This is owing to the variety of modes in which plants obtain their food. Some, like clover, beans, peas, and other nitrogen-gatherers, draw large supplies of plant food from the air, and also from deep down in the subsoil, and by the decay of rootlets and their consequent change to soil.

The greatest success will come to the farmer who adopts the following: (1) A systematic rotation of crops; (2) thorough after-harvest cultivation; (3) keeping the plant food on the surface; (4) deep, autumn cultivation, especially with the subsoil plow; (5) spring cultivation, shallow, but thorough; (6) selecting the very best seed grown on one's own farm, after it has proved itself good; (7) growing clover with every crop of grain, excepting peas; and (8) turning under the green, fresh clover sod not later than the second season. Big crops cannot help but follow.

JOHN FIXTER.

Good Seed and Proper Preparation

Editor "The Farmer's Advocate":

I take it as quite a high compliment that you should request me to discuss the important matters of improved seed and preparation of seed-bed through the columns of "The Farmer's Advocate."

Every farmer should steadily endeavor to so manage his operations to improve the conditions of his soil, so that the seed sown this present year will have a distinct advantage in its chances of success over that of any previous year.

It is cheering to note that each year shows a growing interest manifested by farmers generally in the splendid work of the Seed-growers' Association, in standing-crop competitions, and in the various exhibits of seed grain which are held throughout the country.

It is safe to say that anyone who will give careful and intelligent thought to the choice of seed grain, who is willing to pay a reasonable premium for high quality, who will get in touch with some of the men who are paying especial attention to seed improvement, who will place his order early—and who will do that other thing—can easily add 50 per cent. to his profits.

A few years ago I got a quantity of Dawson's Golden Chaff wheat from a prominent member of the Seed-growers' Association, residing in the neighboring county of Waterloo, and the results were exceedingly gratifying. I tried to make a hand selection from this pedigree grain, but found that I lacked the necessary time, skill, patience, judgment, keen sight and observation required to obtain satisfactory results, so I have decided that my wisest course is to use, to the fullest extent possible, the labors and experience of men more competent to deal with this matter of selection.

Last fall I placed my second order with my Waterloo friend for enough pedigree seed wheat to sow 30 acres, from which I hope for satisfactory results next summer.

It would be easy to cite other instances in my own experience, and in that of many of my neighbors, most of whom are wide awake to the advantages of seed grain of superior quality.

Having decided that a certain variety is worth growing at all, I like to get enough of that particular seed to sow all the ground I have; and so it doesn't get mixed with other grain in the rush of harvest and threshing.

Now that other thing, "Tillage"—proper preparation of the seed-bed.

A well-known hotelkeeper had a favorite saying, "Drink light and often, boys." "Light and often" should be the farmer's watchword in the tilling of the soil.

With us, the frequent use of the two-furrow plow has proved the most beneficial factor in conserving moisture, in destroying weeds, and in preparing a fine seed-bed. We plow the ground for fall wheat in July, and work it down with cultivator, disk and harrow, and then plow again early in September.

For spring grain, we plow immediately after harvest, work it all we can during the fall months, and plow again before winter comes on.

For roots and corn, we have followed the above plan in the fall, manured during winter, and plowed twice again in the spring. It doesn't take long to turn over a field with a good three-horse team, and it saves a lot of strenuous work later on in killing weeds.

This year, however, we departed from that

course. Having a pretty clean field, well prepared for oats, we sowed a bushel of Mammoth clover seed, which came away splendidly, and furnished a nice lot of pasture after the oats were cut. We have manured this ground, and intend to let the clover grow as long as possible before plowing for roots this spring. Two acres intended for mangels we manured and plowed last fall.

I think I will not take up the matter of rotation, except to strongly commend it. My letter has grown to considerable length, and I prefer to write "light and often."

Brant Co., Ont. DAVID PATTON.

Newfoundland's Awakening from Its Agricultural Snail's Pace.

Editor "The Farmer's Advocate":

I.

The dramatist, Boucicault, said it took seven weeks to saturate London with a fact. Though our fogs are less dense, and our men of affairs not so preoccupied as those in the seat of Empire, yet it takes several hundred weeks to get the idea into the mind of this "Most Ancient Colony" that agriculture was, is, or ever can be, one of its principal sources of wealth or earning power. At best, it is regarded by the great majority, at least, merely as a side line.

The Fishing Admirals, Surrogates and Naval Governors for hundreds of years believed that Newfoundland was simply a fish-flake in mid-Atlantic Ocean. Colonization—the building up of prosperous communities in nearly every other part of the continent was promoted; in Newfoundland, agriculture—in fact, settlement of any sort—was discouraged. Immigrants did come, however, but the penal laws were enforced against them, and not until A. D. 1784 was religious toleration granted. "It is not in the interest of Great Britain," wrote Governor Milbanke, A. D. 1789. "to encourage people to winter in Newfoundland."

Sir Richard Keates, the last of the migratory governors, issued grants of land, A. D. 1813, which encouraged agriculture. Governor Cochrane, A. D. 1825, and other governors, followed his example, but, owing to the bitterness of the struggle for constitutional or representative government, the failure from time to time of the seal and cod fisheries, the ravages of wood-hauling, sheep-killing dogs, and the devastations of fire, the progress of colonization was retarded, showing, if proof be needed, the necessity of Home Rule, common-sense toleration, variety of industries, and proper safeguards for the protection of property.

II.

About seventy years ago, A. D. 1841, when the Governor of that period, Sir John Harvey, at a public meeting held in the Mechanics' Hall, spoke of the advantages of devoting some attention to the cultivation of the land, he was derided; most, if not all, of those present thinking that the fisheries afforded a better, if not the only way of earning a livelihood. Under the difficulties with which the early settlers and their descendants had to struggle, it is little wonder that the belief became widespread that no part of this Island—larger than Ireland—was fit for human habitation, outside a few fishing villages, towns or outposts fringing along thousands of miles of coast line. Sir John persevered, and an agricultural society was formed, and some progress made. On leaving the colony, he was presented with an address to the effect that, "under the influence of his continued encouragement and support, the society steadily advanced in the diffusion of a desire for agricultural knowledge, and succeeded not only in introducing great improvements in the practice of agriculture, but in developing some of the natural resources of the colony, which were previously imperfectly known."

Other societies from time to time were established, but their cruse of energy soon became exhausted. An onward move was made A. D. 1869, when the first general agricultural exhibition was held in St. John's, through the exertions of the late Archdeacon Botwood. Not until the agricultural settlement in St. George's District, and especially the Codroy Valley, took root, with the good counsel and example of the late Monsignor Sears, and his successors in the West Coast Diocese, Monsignor Howley, now the Archbishop of St. John's, and Bishop McNeill, now Archbishop of Vancouver, not forgetting the efforts of Bishop McDonald and others in the Diocese of Harbor Grace, and the clearing of land in different parts of the colony, under the encouragement of the Bond Land Bonus Act, was the fact generally recognized that farming could be made a paying and flourishing industry in Newfoundland. As an illustration of the "Snail's Pace" which agriculture, horticulture and other kindred industries up to this time were making, we may mention the circumstance that Bannerman Park, adjoining the Colonial Building, and within a stone's throw of the gubernatorial residence, was allowed to remain a dumping-ground for refuse, tin cans and

empty bottles (dead soldiers), which had done contingency committee service for both Honorable Houses. Those who made an effort, through the establishment of an Arbor Society or Home Industrial Movement, to have the place improved or converted into a public park or children's playground, and who saved it from being divided into building lots, were said to be "planting gum-trees to climb into social life." At an overflow meeting held to promote the object, a popular orator declared they "could do without parks, as their fathers did before them."

III.

The great fire of 1892, and the money and energy required to rebuild St. John's, were, no doubt, reasons why greater progress has not been made in recent years in the direction we are writing about. Education, however, is spreading; newer methods are being tried; times are changing, and we are changing with them. But no project or movement will ever get out of the Snail's Pace if it is merely partizan, and not national. Petty envy and jealousy, fearing "the other fellow" might get some credit or undue political advantage, oftentimes has nearly as much to do with thwarting necessary improvements as crass ignorance or incredulity about the capabilities of the soil, or the climate for growing crops, fruit, or stock-raising. The man who evinces any earnestness or enthusiasm is generally regarded as a fool, or worse, and the genius who never steps outside the beaten track or the old ruts is the wisacre who deserves and receives the public plums; nevertheless, there must be some truth in what Ruskin says, that, "The world's best work is done by men who receive no recognition for their services, at least in this sublunary sphere."

IV.

Not until the epoch-making speech of the late Sir William V. Whiteway, A. D. 1898, was any Government of the Colony committed to a policy of agricultural settlement. One of the resolutions moved by him, and adopted by the "Committee of the House," declared that a survey "should be made for a line of road connecting Bay of Islands with Notre Dame Bay, via Humber Valley, and also for a line of road into the Gander and Grand Lake districts, with a view of opening up and settling the agricultural lands in those districts."

Why the heavy expenditure for railway construction has not realized "the great expectations" of its promoters in the way of agricultural settlement, it is not our present purpose to inquire. We feel disposed, rather, to aim at encouraging, or inciting renewed, persistent efforts to get out of the Snail's Pace, than to indulge in captious criticism. Such arable land as the colony possesses, we admit, was not accessible for settlement until within the past decade or so, nor are considerable portions of it yet, for want of good highways, or an improved system of public roads—a matter to which the Government of this Colony must devote attention on the lines now considered necessary by the Government of Quebec for the promotion of agriculture in that Province. Those in trade were deeply engrossed in other business directions, and public men had to grapple with serious political problems or international treaty complications which "cribb'd, cabin'd and confin'd" the progress and national aspirations of the New-found-land.

The agricultural and manufacturers' exhibitions were all, or nearly all, that could be expected or desired; and the agricultural exhibits, the textile fabrics, the horse, cattle and poultry show; the earnestness of the speeches; the skill and attention to detail of the managers; the keen interests of thousands of visitors; the good-feeling and strict order that prevailed, afford proof that an advance has been made, and give reasonable assurance that much more can be accomplished in the near future.

The usefulness of a Board of Agriculture will scarcely, after this, be called in question, nor the appropriation of \$40,000 be considered too much out of a revenue of \$3,500,000, for improved stock and kindred objects, when judiciously expended.

V.

It is confidently trusted that farming will soon rank as an earning power next to our great staple industry, the cod fishery. The census of A. D. 1901 estimated the agricultural products at \$2,449,500, and the census of next year, A. D. 1911, will probably show an increase of 25 per cent., making a total of \$3,124,375.

But effort in the promotion of local industries should be increased twofold, else the expense of the exhibitions above mentioned would be money and energy misdirected. "The game," so to speak, "would not be worth the candle," or great display of electric bulbs. The time is opportune to make a more determined, energetic effort all along the line of agricultural, manufacturing, and every other industrial pursuit. Why, because the taxes to pay the interest on the public debt to the Caesars of Lombard Street, London, the rentals of absentee landlords, and other

drains, require retrenchment in the administration of public affairs, thrift in private living, and, particularly, greater earning power, in order to preserve what has been eloquently described as "the splendid charter of our Legislative independence." Not only is the time opportune, we repeat, for planning and promoting agricultural settlement, it is imperative. To become a really great self-governing country—the Belgium, Sweden or Norway of the New World—under the aegis of Imperial Britain, what is left of our 42,200 square miles of territory must, where suitable, be put under agricultural cultivation, and with that will spring up a number of manufacturing industries, such as woollen manufactures.

VI.

The incentives to prosecute local industries, especially agriculture, are strong, because, apart from sentiment of amor patria, there is an almost illimitable English market for farm products, nearer to us than to Canada or the United States, besides which the home cash market would of itself require all that could be raised here for many years to come, as the following customs returns of imports for the financial year, A. D. 1910, prove:

Animals, oxen, etc., \$142,982; sheep, \$11,793; butter, \$89,691; bacon, hams (smoked), \$15,115; beef in barrels, \$410,185; bacon, hams (dry-salted), \$6,138; cabbages, \$8,914; cheese, \$40,736; Indian corn, \$12,548; cattle feed, \$96,046; eggs, \$6,941; feathers, \$1,420; hay, \$40,302; hides, \$14,431; lard, \$5,025; meats (canned), \$31,558; fresh meats, \$39,165; salted meats, \$6,138; meal, \$1,574; oats, \$172,894; oatmeal, \$22,746; onions, squash, cucumbers, tomatoes, \$15,985; pigs' hocks, \$27,543; pigs' jowls, \$11,159; pork (family), \$451,240; ham and mess pork, \$21,029; potatoes, \$27,554; poultry (alive), \$408; poultry and game, \$17,582; peas, \$39,772; sausages, \$7,220; straw, \$767; turnips, beets, etc., \$3,396; trees, shrubs, plants and trees, \$13,495; wheat, \$26. Total, \$1,848,503. That is exclusive of flour, the greater portion of which is imported from Canada and the United States, \$2,257,715.

We are getting out of the agricultural "Snail's Pace," it is true; but is it not time? We have skating, rolling and curling rinks, golf links and lawn-tennis courts, and billiard rooms galore, but not one Farmers' Institute or public library; no decent local fresh-fish market, or a country produce market. "Men of the Rake," like Jocelyn, Martin, Neville, Cowan, Lawlor, and others, are seldom met with nowadays, but the cigarette fiend is encountered at every turn.

VII.

As this article is sufficiently lengthy for a somewhat dull subject, but on which the writer has some practical experience, and reads considerably, we will defer further observations for another occasion. In concluding, then, for the present, may we not ask, "Shall fair Terra Nova keep in the background, while other parts of the world are vigorously marching on in the way of agricultural development?" What if mistakes have been made in the past, did not a master mind (Carlyle) say: "Our very walking is only stumbling ahead."

Without belittling the importance, in truth glorying in the "mainstay of the Colony"—the fisheries—and taking just pride in the progress of our manufacturing and similar enterprises, may we not correctly assert that the occupation of the farmer affords remunerative returns for his labor. His crop seldom or never fails; the price of his products scarcely ever fluctuates; his property steadily increases in value, and becomes an heirloom to his family. He is not exposed to many of the risks, perils, hardships or vicissitudes of others. Procrastination, waste, inertia, find no place in his daily routine. Thrift, frugality, industry, the joys of comfortable home, are his, and seldom or never the Poor Asylum or the pauper's dole. Does not the prosecution of an industry like this deserve the earnest thought and prompt action of the general public, irrespective of party? When this will have been manifested, accompanied by moral and intellectual worth, some millionaire, like Sir William Macdonald, who commenced his successful business career here, may become inspired to endow an agricultural college, which would keep us from relapsing into the "Snail's Pace," and save the country, once for all, from being what Lord Salisbury aptly described, "The sport of historic misfortune."

St. John's, Newfoundland. P. R. BOWERS.

The Drainage Law.

Editor "The Farmer's Advocate":

I was very much pleased to see that article of W. J. Way's on "Drainage Repairs and Taxes." He has manifested the desire to relieve the farmers of Ontario, to some extent, of the heavy tax inflicted by the present drainage system, which is keenly felt by all who have had any experience with it. He has given some very practical suggestions. But we can never have our land properly drained, at a reasonable cost, under the present system of drainage. I would suggest that

we adopt our old original law, which we had 40 years ago, with some amendments. I would like to know what "Fritz" thinks of it. He has shown rare ability in his criticisms of Mr. Way's suggestions, and some knowledge of drainage, so I expect to hear from him again.

Dundas Co., Ont.

"SPITZ."

Dominion Experimental Farm Crop Yields.

The results of the trial plots of grain, fodder corn, field roots and potatoes, on the Dominion Experimental Farms, are given by the Cerealist, Dr. Chas. E. Saunders, in Bulletin No. 66. These experiments have been going on for 16 years, with seed supplied at the outset from a common stock. So far as possible, the varieties are reported according to their average yield for the last five years. In the notes on spring wheats, White Fife is ranked with Red Fife in hardness and flour strength, and is deservedly popular in the Eastern Provinces of Canada. White Russian is a somewhat soft wheat that could be advantageously replaced by better bread-making sorts. Preston and Huron (bearded) are commended where early frosts are feared, but, for bread-making, are not equal to the Fifes. Stanley (beardless) resembles Preston and Huron, but produces paler flour. Marquis (beardless) is reported the most important early-ripening sort yet introduced, much like Red Fife, yielding flour of the same excellent qualities, and worthy of a trial in most districts.

Of the winter wheats, Turkey Red is a strong bread-making flour, recommended for Southern Alberta, but does not yield well in Southern Ontario. Egyptian Amber, Imperial Amber and Tasmania Red (bearded) give good crop in Southern Ontario, and yield a strong flour desirable for bread-making; not enough attention is paid to them. Dawson's Golden Chaff holds place as an excellent field variety, good for pastry, but not desirable for bread-making. Below are given the five highest-yielding varieties, grown for five years on sixteenth-acre plots, with average yields in each case:

CENTRAL EXPERIMENTAL FARM RESULTS.

Spring Wheat.—Chelsea, 35 bush. 22 pounds; Preston, 32 bush. 46 pounds; Bishop, 32 bush. 14 pounds; Pringle's Champlain, 32 bush. 2 pounds; Huron Selected, 31 bush. 34 pounds. In 1910, Chelsea yielded 46 bush. 30 pounds.

Oats.—Thousand Dollar (white), 74 bush. 16 pounds; Gold Rain (yellow), 73 bush. 18 pounds; Improved American (w), 72 bush. 20 pounds; Danish Island (w), 72 bush. 18 pounds; Swedish Select (w), 72 bush. Daubeney Selected ranks seventh, with 70 bush. 28 pounds; Siberian, eleventh, 69 bush. 2 pounds; Garton's Abundance, twelfth, 68 bush. 32 pounds; Banner, thirteenth, 68 bush. 18 pounds. The 1910 average of 24 varieties of oats tested for five years was 68 bush. 8 pounds per acre.

Barley (six-row).—Manchurian, 59 bush. 8 pounds; Odessa, 58 bush. 46 pounds; Mandcheuri, 58 bush. 36 pounds; Albert, 56 bush. 26 pounds; Nugent, 54 bush. 42 pounds. Mensury yielded 53 bush. 32 pounds.

Barley (two-row).—Hannchen, 54 bush. 6 pounds; Canadian Thorpe, 46 bush. 30 pounds; Swan's Neck, 45 bush. 10 pounds; Clifford, 45 bush. 8 pounds; Standwell, 45 bush. 4 pounds.

The average crop of 1910 for 14 kinds of two-row barley, tested for five years, was 41 bush. 18 pounds per acre; and of six-row, 68 bush. 21 pounds. The former suffered most from the dry June and July weather.

Peas.—Prussian Blue, 40 bush.; Prince, 36 bush. 46 pounds; English Grey, 36 bush. 34 pounds; Wisconsin Blue, 36 bush. 20 pounds; White Marrowfat, 36 bush. 14 pounds.

Indian Corn.—Sown in rows 3 feet apart, and plants thinned out to six or eight inches in the rows; sown May 17th; cut green for ensilage Sept. 17th: Eureka, 21 tons 1,868 pounds; Superior Fodder, 20 tons 1,536 pounds; Wood's Northern Dent, 20 tons 190 pounds; Selected Leaming, 18 tons 1,862 pounds; Early Mastodon, 18 tons 1,356 pounds. Compton's Early gave 17 tons 870 pounds, and Longfellow, 15 tons 1,680 pounds. Five varieties gave an average yield in 1910 of 29 tons 288 pounds.

Turnips (Swedes).—Good Luck, 31 tons 1,770 pounds; Hall's Westbury, 28 tons 1,850 pounds; Magnum Bonum, 28 tons 1,170 pounds; Hartley's Bronze, 28 tons 80 pounds; Jumbo, 27 tons 1,310 pounds. Drills were two feet apart, and plants thinned to 7 inches in the rows. Average yield of ten varieties in 1910, 31 tons 565 pounds, sowed May 12th, pulled October 25th.

Mangels.—Selected Yellow Globe, 36 tons, 1,720 pounds; Giant Yellow Intermediate, 35 tons

570 pounds; Yellow Intermediate, 33 tons 1,470 pounds; Half Sugar White, 32 tons 1,840 pounds; Prize Mammoth Long Red, 32 tons 660 pounds. In drills 2 feet apart, thinned to 7 inches in rows; sowed May 12th, pulled October 26th. The average yield of seven varieties in 1910 was 56 tons 57 pounds, the Selected Yellow Globe yielding 70 tons 200 pounds.

Carrots.—Sowed in drills 2 feet apart, and thinned to five inches. Best yielding varieties: Improved Short White, Ontario Champion, Mammoth White Intermediate, Half-long Chantenay, and White Belgian, ranging from 26 tons 1,520 pounds, to 19 tons 1,560 pounds.

Sugar Beets.—French Very Rich, 22 tons 400 pounds; Vilmorin's Improved, 21 tons 1,500 pounds; Klein Wanzleben, 20 tons 640 pounds.

Potatoes (reported by W. T. Macoun, Horticulturist).—Dalmeny Beauty, 276 bush 19 pounds; Hard to Beat, 196 bush. 41 pounds; Carman No. 1, 228 bush. 22 pounds; Gold Coin, 178 bush. 38 pounds; Late Puritan, 178 bush. 12 pounds. Some sorts yielded over 400 bushels per acre in 1910, and the 12 sorts highest in the five-year period averaged 309 bush. 50 pounds in 1910. For planting, the potatoes were cut into pieces having at least three eyes in each, and planted in rows 2½ ft. apart, and 1 ft. apart in the rows. One row 66 ft. long was planted of each variety. They were planted May 17th, and dug October 13th and 14th.

At the Nappan, Nova Scotia, Farm, White Fife headed the list of spring wheats, 36 bush. 12 pounds, on one-fortieth-acre plots.

The best-yielding oats were Golden Beauty, Banner, Siberian, White Giant, and Danish Island. Yields, 65 bush. 26 pounds, to 63 bush. 2 pounds. In 1910, sixteen varieties averaged 82 bushels per acre.

In six-row barleys, Stella, 46 bush. 28 pounds, topped the list, with Mensury, Odessa, Oderbruch and Nugent following. Two-row—French, Danish and Swedish Chevaliers were first in order, Beaver and Clifford following; yields, from 51 bush. 19 pounds to 43 bush. 24 pounds.

Peas.—Pictou, White Marrowfat, Daniel O'Rourke, Paragon and Mackay were the toppers, yields ranging from 27 bush. 56 pounds, to 22 bush. 12 pounds.

Ensilage Corn.—Angel of Midnight, 19 tons 280 pounds; Eureka, 18 tons 1,552 pounds; Early Mastodon, 18 tons 960 pounds; Selected Leaming, 17 tons 1,794 pounds; Longfellow, 17 tons 980 pounds.

Hall's Westbury, 30 tons 254 pounds, was the top Swede turnip; Yellow Intermediate Mangel, 29 tons 1,268 pounds. Ontario Champion was the highest-yielding carrot; Vilmorin's Improved the top sugar beet.

The five highest-yielding sorts of potatoes at Nappan were: Vic's Extra Early, Gold Coin, Rochester Rose, Everett, and Ashleaf Kidney, varying from 454 bush. 58 pounds, to 421 bush. 57 pounds.

At the Prince Edward Island Experimental Farm, in spring wheat, Chelsea headed the list, with a yield of 48 bush. 49 pounds.

The five highest oats were: Abundance, Irish Victor, Garton's Regenerated Abundance, Thousand Dollar, and Wide Awake, with an average yield of 121 bushels 29 pounds per acre, but the test plots were one-hundredth of an acre each. Six-rowed Barley.—Albert, Claude, Mensury, Nugent and Mansfield were at the top, and Invincible headed the list of two-rowed sorts.

The Arthur was the highest-yielding pea.

Corn.—Compton's Early, Wood's Northern Dent, Longfellow, Eureka and Early Mastodon, with fodder yields of from 30 tons 60 pounds to 24 tons 1,940 pounds.

Hartley's Bronze was the top Swede turnip; Yellow Intermediate the top mangel; Mammoth White Intermediate the top carrot; French Very Rich, the top sugar beet.

The five highest-yielding potatoes were: Burbank's Seedling, American Wonder, Everett, Empire State, and McIntyre; yields from 328 bush. 54 pounds, to 302 bush. 30 pounds.

At the British Columbia Farm, Agassiz, the highest-yielding sorts in the different grains, etc., were as follows: Spring wheat—Stanley, 26 bush. 32 pounds. Oats—Improved American, 76 bush. 31 pounds; Abundance, 76 bush. 28 pounds; White Giant, 75 bush. 28 pounds; Lincoln, 72 bush. 30 pounds; Irish Victor 71 bush. 33 pounds. The old Banner holds 6th place, with 71 bush. 26 pounds. Barley (six-row). Mensury; (two-row) Danish Chevalier. Peas—Golden Vine, 14 bush. 10 pounds. Corn—Superior Fodder, Compton's Early, Wood's Northern Dent, Longfellow, and Angel of Midnight; from 18 tons 102 pounds, to 15 tons 1,594 pounds. Turnips—Jumbo, 28 tons 1,701 pounds. Mangels—Yellow Intermediate 23 tons 927 pounds. Carrots—Improved Short White, 32 tons 139 pounds. Sugar Beets—Vilmorin's Improved, 14 tons 589 pounds. The five highest-yielding potatoes were: Late Puritan, American Wonder, Gold Coin, Dreeer's Standard, and Morgan's Seedling, the yields being 402 bush. 42 pounds, to 388 bush. 7 pounds. The 1910 average of 14 varieties was 295 bush. 31 pounds.

Chimney Queries.

1. Would the draft of a stove be affected by attaching another stove to same pipe by a T elbow, say one or two pipe lengths from chimney?

2. Would it be as good as having two pipe-holes in chimney, one on each side?

3. In making two holes in chimney, would it be better to have one higher than the other; or would two chimneys be better?

4. How would glazed sewer pipe do for chimney, and what size for an ordinary-sized stove-pipe?

5. Is it better for a chimney to be larger than the pipe leading from the stove?

6. What depth would a cistern 4 feet square need to be to hold as much as a round cistern 6 feet in diameter and 6 feet deep?

7. Would it be all right to let the earth form the outside mold in building a cistern of cement? What thickness and strength should walls be for one the size asked in question 6?

Ans.—1. Yes. The draft would be as good in the stove after an extra one had been attached to the same pipe by a T. The proportion of the stovepipe above the T will carry a certain amount of air, and with two stoves to draw from, part would come from each stove. With this, neither one would have as good draft as if there was just one stove on the line.

2. If the chimney is larger than the pipe, it would be better to make two holes in the chimney.

3. It is better to make the two holes in the chimney side by side. If they are one above the other, then the stove attached to the upper one has a better draft than the other. This could be somewhat counterbalanced by attaching the shorter pipe to the lower hole. Two chimneys will give better results than two holes in the one chimney, even though they are side by side.

4 and 5. Glazed sewer tile would be all right, but glazed chimney pipe is better, as it has no flange like sewer tile, and, consequently, does not require so much brickwork. The chimney tile for an ordinary stove should be 9 inches in diameter. An 8-inch one will do in a pinch, but it does not give as good results.

6. 10.6 feet.

7. Yes, the earth would form the outside of the mould. This is often done. The wall should be from 4 to 6 inches thick. Five or six to one would do for the body of the wall, with a stronger coating on the outside, so as to make it as near watertight as possible. WM. H. DAY.

THE DAIRY.

Watering Milk Through Cow.

During the past year, reports appeared in the newspapers that dairymen had been convicted in French courts for selling adulterated milk, on the assumption that it is possible to water milk either by feeding watery food or causing them to drink large quantities of water before being milked. Accordingly, the British Board of Agriculture conducted an experiment with seven cows to test these points, causing them to drink by excessive salting. The result of the experiment appeared to show that periodical doses of common salt, administered to cows, even to the extent of purging them, do not necessarily cause them to consume excessive quantities of water, and that the amount of water consumed by cows has no direct bearing on the composition of their milk yield.

Prepare for Summer Feeding.

At the Central Experimental Farm, the milking herd last year consisted of 65 cows, with only a fourteen-acre field available for the pasturage of 50 head. The field was seeded the previous year with the following mixture: Red clover, 5 pounds; alfalfa, 7 pounds; timothy, 10 pounds. The seeding made such strong growth that half of it was fenced off for soiling. The chief dependence was not pasture, but soiling and silage, which latter was the chief feed in August. Soiling crops are reckoned the cheapest feeds for July and August. J. H. Gridale, the agriculturist, and Dr. Wm. Saunders, the Director, join in again recommending to dairymen to prepare and feed somewhat as follows for each ten cows of their herds:

1. Clover, 1 acre—To have been sown with the mixture of peas and oats the previous year, as described below.

Feed off June 20th to July 15th.

2. Peas and oats, ½ acre—Sow 1 bushel peas, 1½ bushels oats, and 5 pounds red clover seed, on one-half acre of land about the first week in May, or earlier, if possible.

Feed off July 15th to 31st.

3. Peas and oats, ¼ acre—Sow same mixture on another half acre about third week in May.

Feed off August 1st to 15th.

4. Corn, ¼ acre—Sow 10 pounds Longfellow corn (or other small variety) in hills 3 feet apart each way. Sow third week in May, or as early

as possible. Sow on well-drained land, clover sod manured at rate of 20 loads (tons) per acre. Feed off August 15th to 30th.

5. Corn, $\frac{1}{2}$ acre.—Sow 12 pounds Leaming (or other medium variety) same way as above. Feed off in September.

It is not necessary to fence off special areas for this purpose. Portions of regular field crops might be utilized for the purpose.

Selecting a Dairy Cow.

In selecting a dairy cow, attention should be given to what is generally accepted as desirable and ideal dairy form; that is, the head should be clean-cut, the nostrils wide, the lips strong and thick, the eye large and bright, and shoulders reasonably thin and not heavily meated, the ribs well sprung and deep, the hooks broad, and the hind quarters long, level and wide, thus giving the wedge shape to the body from rear to front. But, approved conformation alone is not a reliable indication of a high-class milker. The shape, size and quality of the udder and teats counts for quite as much, or more. The udder should be well balanced, running well forward and backward, and hung high up on the twist or buttocks; and the teats should be of fair size and placed well apart. A cow having all these desirable qualities may not prove a satisfactory milker, and should be milked personally by the intending purchaser, if practicable, or he should see her milked, so that he may judge of her disposition and production. If the strand or stream of milk is thin, the cow is not desirable, as she is hard to milk, and requires more time in milking; but if it is thick, she may be more easily milked and expected to do well, other things being satisfactory. The desirable milker, as a rule, has a thick teat, blunt at the point. After seeing that she milks out well, and her udder is not fleshy, but loose and in folds, find out if she has a good touch; that is, that her skin is soft and springy, and the hair fine and fur-like, which indicates a good feeder and a good milker, which the cow with a tight, hard-handling hide and wiry hair rarely proves to be.

Size is an interesting question in the study of dairy cattle, and, while size, to some extent, indicates capacity for consuming large quantities of food and turning it into milk and butter, the large cow costs more to keep, and hence is not always the most profitable, as the big animal requires more food in order to keep up maintenance, before she can set about manufacturing milk. To be equally profitable, therefore, she must give more milk than a small one.

There is always more or less risk in buying cows, for the reason that, as a rule, the best cows are not offered for sale, the owner knowing that they are the most profitable and satisfactory to keep. For this and other good reasons, there is wisdom in breeding and raising one's own cows, by keeping the heifer calves from the best-milking cows in the herd, and using a bull bred from a good-milking family of cows. And it should be hardly necessary to add that, in order to determine precisely which are the most profitable producers, records of the production of each cow for the entire milking period should be kept; and that, for best results, liberal and judicious feeding throughout the year, or at least during the period of lactation, is absolutely essential. Among the advantages of keeping records, it will doubtless be discovered that some cows which do not conform to the ideal dairy form, but, on the contrary, are plain and unshapely in body and udder, prove by their record that they are more profitable workers than some others which are models in conformation and milk vessel; and, since, in quite a few cases nowadays, cows are being sold and bought largely on their records of production, too much importance may possibly be credited to outward appearance, though the combination of good looks and utility is preferable, if it can be obtained.

Testing Benefits Makers and Patrons.

In a circular letter to milk-testers and cheese and butter makers, the Dominion Dairy Division points out to these parties that, with the commencement of cow-testing comes more milk per cow, which is a great gain to the patron, for some men are now receiving twice as much income per cow as they were four years ago. There comes, also, the opportunity for the makers to secure a substantial addition to their income every month through doing the testing, as the Department pays five cents for every test, and supplies the acid.

The probable gain to the factory is very important. More milk from the same territory means lower cost of both hauling and making, besides a longer factory season. Then, as members become better dairymen, there is improvement in the care of milk, which means easier work in the factory and a better product.

All of which is abundantly true.

POULTRY.

Improving the Quality of Kansas Eggs.

An active campaign for the improvement of farm eggs in the Middle West was undertaken last summer by the Bureau of Animal Industry of the United States Department of Agriculture. This work was preceded by a general survey of the field in the spring of 1908, which showed that an enormous loss was being sustained annually as the result of spoiled and deteriorated eggs. This loss results from lack of information, carelessness or indifference of the producer, and from the dilatory and unsatisfactory methods of marketing

among the egg-producers, and impressing upon them the necessity of keeping eggs intended for market in a cool, dry place, and of marketing them frequently. Incidentally, they have given the producers help whenever possible in the practical management and breeding of poultry, and have urged the keeping of pure-bred poultry.

The Bureau sought and obtained the co-operation of the egg-buyers of Kansas, and as a result, the "loss-off" or quality system of buying was brought into use. By this system, the bad eggs are rejected, and only the good eggs paid for. There is possibly no measure which has such a definite and far-reaching influence for the improvement of the commercial egg as the general adoption of this system of buying and selling. The State food authorities also co-operated by prosecuting under existing State law cases where bad eggs were sold. On account of the material improvement effected in Kansas eggs, the movement has spread to adjacent States, and efforts are being made to secure uniform legislation in many of these States, so as to establish the loss-off system of buying, at least during the hot months.

In the work of investigation, various lots of eggs were traced from the time they were produced on the farm until they reached the packing-house, in order to determine the factors causing deterioration, and to study how conditions of handling and shipment may be improved.

The results thus far have been so satisfactory that it is proposed to continue the work in Kansas in about the same manner during the coming summer.

Why not Raise Geese?

Many things had a place on the average farm in the early days of this country that now are relegated to the fancier or the specialist. The time is not so far back as to be beyond the memory of many of our readers when on practically every farm there were a few hives of bees, a score or more of sheep, and a flock of geese. In the late fall, a percentage of the hives of bees were set over the fumes of burning sulphur, and the stupefied bees fell down and perished, or were afterwards buried to keep them quiet, and for a time the children had honey galore, with wax to chew, mingled with bee-bread, which gave a wholesome bitter to the mouthful. For weeks afterwards, jelly-bags, or similar receptacles, filled with crushed honeycombs, slowly dropped their sweetness into vessels below.

The flock of sheep, after being duly washed some fine day in May, in some near-by stream or pond, were brought home dripping and tired, but clean, and, when dry, had their fleeces removed. The boy of the place, who had had the fun of pitching the lambs into the water, had to stay home from school on shearing day and help by holding the hind feet of some obstreperous wether or ewe which failed to see comfort in a sitting posture or in reclining on its back with the head on the shepherd's breast. As the said hind feet, when the kicking fit would start, flew back and forth alternately with spasmodic jerks, the boy's arms moved, or, rather, were twitched in unison, almost as rapidly as the tattoo of a kettledrum; and, while his shoulder-joints felt as if they were being pulled out five times every second, his head kept bobbing and his teeth snapping, so that he had perforce to forbear talking for fear of having his tongue bitten. The wool being picked—the black fleeces mixed with the proper number of white to make the gray for stockings—was greased and taken to the carding mill, and the downy rolls and the booming spinning-wheel furnished employment for the women of the house, who had not so many lessons on the piano to take or so many functions to attend, as weary the gentler



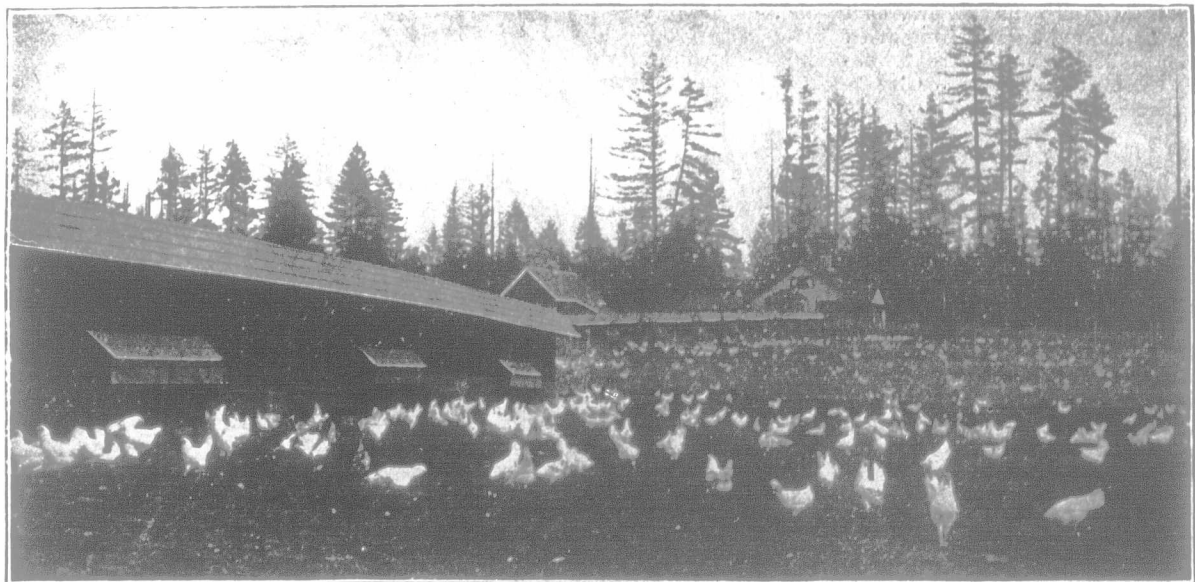
Stanley A. Logan.

President Holstein-Friesian Association of Canada.

in vogue. The actual money loss is believed to be suffered mainly by the farmer, the loss in quality by the consumer. A report of this preliminary investigation was published as Circular 140 of the Bureau of Animal Industry.

The campaign of the past summer had for its ultimate end the improvement of conditions surrounding the handling and marketing of eggs, and consequently the improvement of the quality of the egg itself as it reaches the consumer. Coincident with such improvement, there will be a saving to the farmer of a great part of the money lost at present sustained.

The efforts have so far been directed mainly to education in better methods, co-operation with egg-buyers and State authorities, and experimentation. The actual work has been done mostly in the State of Kansas. The educational work has been done by the Department field men, going



Hillcrest Poultry Farm, Vancouver Island, B.C.

An item about the ninety-day egg-record of the White Leghorn pullets appeared in our Poultry Department last week.

sex to-day. During the autumn, or at threshing time, how handy to get some fresh meat by killing a lamb that hadn't been shipped to Buffalo. The lamb and sheep skins being hung over a pole and dried, furnished a convenient means of barter for tinware when the pedlar came round.

And the geese—we almost forgot the geese, though they are what we started out to tell about. How they did squawk when the live geese-feathers, so springy for the pillows and beds, were being secured! The gander with the broken wing was the feature of many farmyards. Brave defender of his tribe, he had caught the forelock of an advancing cow, only to be caught, alas, by a turn of her head on one of her horns, and slung high and far over her back; or, instead of that, mayhap, his wing was caught under the sharp hoof of the cow and crushed. How the female portion of the flock, with stretched-out necks, would praise him with noisy cackle when he had performed some feat of valor, intoxicating him with self-importance until nothing was too big for him to attack, with screams and hisses. How charming the scene when the anxiously-expected goslings at last appeared, and the old birds, with slow and watchful movements, led the huddled group of downy, yellow peepers to where the grass was fresh and tender. How those goslings grew! It seemed only a few weeks until feathers began to take the place of down and they almost rivalled in size the parent birds. But—there is always a "but" somewhere—when those same goslings were fattened, killed and dressed, they sold for so little that the profit was hard to discover. Fifty cents for a 10 to 14-pound, tender goose was better for the buyer than the seller. But those days of low prices for fowls have gone. Gone, too, as noted before, are the flocks of geese and of sheep, and the stand with its beehives, from the average farm. Have we not gone too far?

Look at the present price of dressed geese, for instance, and consider if it might not be wise to re-establish the graceful birds on many farms. At 14c. to 15c. per pound—the price in Toronto market—a 14-pound bird sells for \$2.00 or more. Several arguments might be brought forward to show that the question is worth serious consideration by many farmers.

First.—Geese require very little grain. Their natural food is grass. If they have a wide pasture range in summer, and clover and turnips or mangels in winter, much grain food is a positive injury—except to those being fattened—including lazy habits, and being the cause of infertile eggs.

Second.—No expensive buildings are needed. A mere roof or rough shed is sufficient shelter for geese. With their thick, downy coat of feathers, neither cold nor wet has any terrors for them.

Third.—While geese are waterfowl, and it is well for them to have access to open water where they can swim and wash for a short time every day, such a privilege is not at all necessary. With a plentiful daily supply of drinking water, they can be raised more successfully even than when they have liberty to swim about all day. Geese that swim too much never attain to desirable weights.

Fourth.—Besides the money returns for the dressed fowl, which are not to be despised, there are the feathers, which are worth 50 cents per pound, and of which the supply has for years been very short. One can almost tell where geese are or have been kept by the luxurious feel of the pillows of the beds.

Fifth.—Geese are beautiful birds, some of the varieties rivalling swans in their grace of form and action. The presence of a flock of them on the farm steading gives a certain full finish to the scene which is exquisite.

HINTS.

It is well to have an enclosed pasture for geese, at least until after grain crops are harvested, as they do great damage to standing grain by pulling down heads and by trampling it with their broad feet.

Many breeders prefer to hatch goose eggs under large hens, four or five eggs to each, the nests being always made in damp soil.

The goslings should remain in the nest for at least 20 hours before being disturbed or fed. They may then be removed, and supplied with young grass and oatmeal. A little hard-boiled egg should be added, and made somewhat pasty with skim milk. A liberal supply of fine sharp grit is necessary from the first.

The experience of a Middlesex farmer with geese in the summer of 1910 may fittingly close this article. The geese in question were of the common gray variety. There were three to start with—one gander and two geese. By the way, it may be noted that two or three geese to one gander are enough. They must have been fairly good layers, for there were 35 goslings hatched out. Of these, 27 reached their full growth, and averaged, when sold, 13 pounds each. They had for pasture a four-acre field, without any pond or stream, on which calves also were pastured. A little bran and shorts, mixed, was the only food given them as long as grass lasted.

Poultry Producers' Organization.

Started in a small way two years ago, the Poultry Producers' Association of Eastern Canada has assumed a national character. The name, as changed by vote at the annual meeting, is henceforth to be Poultry Producers' Association of Canada.

The past year's work has been one of education, rather than organization. Several suggestions were made to the Dominion Minister of Agriculture, some of which have been acted on, while on others no decision has been reached. The standards have been revised. Copies of suggested grades have been sent to dealers and producers, asking for criticism or approval, and in almost every instance universal approval has been given. Producers, dealers and consumers are alike united in the advantages of the standardization and grading of poultry products.

There has been a general awakening and demand for a reformation in the marketing of poultry products throughout the Dominion, and insistent requests for the improved methods of selling through co-operation are now coming from all quarters.

The following are the officers elect: Hon. President, Earl Grey; Hon. Vice-Presidents, Hon. S. Fisher and Dr. Robertson; Past President, A. P. Hillhouse; President, Prof. Graham; Secretary-Treasurer, F. C. Elford.

GARDEN & ORCHARD.

Homemade Concentrated Lime-Sulphur.

There is no spray mixture so much talked about to-day in almost any part of North America as lime-sulphur. For many years, the old home-boiled form of the wash, 20 pounds lime, 15 pounds sulphur, and 40 gallons water, has been used with excellent results to destroy scale insects and blister mite, and ward off peach leaf-curl. Of late years, commercial lime-sulphur, made by various manufacturers, has become a

keen rival of the old home-boiled wash, and has likewise been proven to be very satisfactory, not only for the above pests, but also as a summer spray to prevent apple and pear scab. Several years ago, Prof. Cordley, of Oregon Experiment Station, showed that fruit-growers themselves could make a concentrated form of the wash that would be of the same nature as the commercial wash, and, like it, would keep indefinitely if the air were excluded. Nearly two years ago, Prof. Stewart, of Pennsylvania, published the results of a long series of experiments in making this "Homemade Concentrated Wash," as it is now known. A number of the fruit-growers have since become much interested in this wash, believing that they could make it more cheaply than they could buy the commercial wash. During the past season it was tested by the writer and several others, both as a spring and summer wash, and found to be the equal of the commercial wash when used at the same strength; so that it is quite reliable as a spray mixture if diluted to the proper amount.

HOMEMADE CONCENTRATED VERSUS THE OLD HOME-BOILED, AS A SPRING WASH.

From this season's experience, it seems almost certain that in a short time, most of those who have been making the old home-boiled will change to the homemade concentrated, because it is just as easy to make, and takes very much less time, since every barrel of it is from six to seven times as strong as the home-boiled, and, therefore, will make that many barrels of diluted spray. Moreover, the concentrated form, like the commercial, will, if covered, keep indefinitely, whereas the home-boiled soon crystallizes when cold, and has to be reboiled before using. Again, the home-boiled is meant only for a spring spray, before the buds burst, while the concentrated can be used also as a summer spray.

WILL THE HOMEMADE CONCENTRATED SUPERSEDE THE COMMERCIAL WASH.

Whether the homemade concentrated is destined to come into general use and supersede the commercial wash, is a more debatable question. The probability, however, is that the commercial companies will always find a large number of customers, especially among owners of small orchards and others who would prefer to pay considerably more, rather than go to the trouble of making their own.

The commercial wash usually costs \$8.00 per 40-gallon barrel, and to this must be added the cost of the freight. The homemade concentrated, made according to the formula given below, is only about two-thirds as strong as the commercial, and, when this is taken into account, it will be found that the amount equivalent to 40 gallons of the commercial will, when made in small quantities, cost about \$6. This includes cost of materials, labor, fuel, barrel, and interest on boiling outfit. For orchards of about 200 trees, from 30 to 40 years of age, only about three barrels of the commercial strength is required. Hence, it is very doubtful whether the saving of \$6 or \$8 on this would compensate for the trouble of making one's own wash, especially as a hydrometer must be used, though it is wise to test even the commercial wash with this. When we come to consider the case of large growers who require ten or more barrels of the wash, or co-operative associations which will need 100 barrels or more for their members, the cost of preparing the homemade concentrated can be much reduced, and would probably be from \$4 to \$5 per barrel (commercial strength).

Taking everything into consideration, the writer would advise those who intend to use lime-sulphur this season for the first time to purchase it from the commercial companies, and then, after a year's experience with the wash, and after learning to use the hydrometer, to consider carefully the advisability of making their own wash the next year, or getting a few of their neighbors to co-operate with them in making enough for all at one central boiling plant.

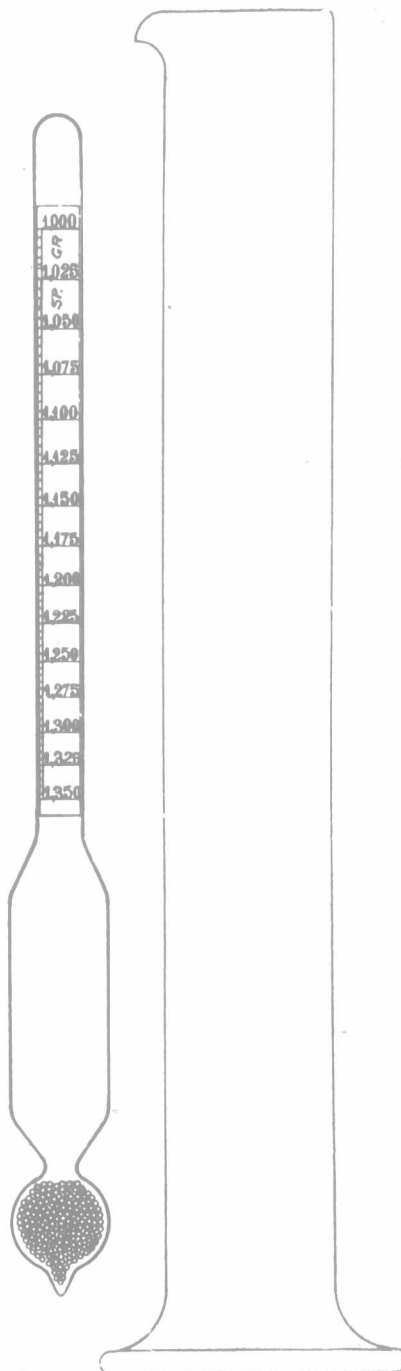
HOW TO MAKE THE HOMEMADE CONCENTRATED.

Outfit.—Any kind of outfit that can be used for making the home-boiled wash will do, also, for the concentrated. For boiling large quantities, a steam engine or large steam-generator of some kind is the most satisfactory. For smaller quantities, a box with wooden sides and sheet-iron or galvanized-iron bottom, and holding at least 60 gallons, is most convenient.

Formula.—Several formulae have been given by various experimenters, but, for the present, the following is recommended:

- 100 pounds fine-grade of sulphur (either flour or flowers).
- 50 pounds fresh lime, high in calcium, preferably Beachville lime.
- 40 gallons water.

Method of Procedure.—If the boiling outfit is large enough, put 50 gallons water in it (the excess over 40 gallons is to allow for evaporation), and heat to near boiling, then add the 50 pounds lime. Stir this a little with a hoe while slaking,



The Hydrometer.

Figure on the left shows the hydrometer proper, with specific gravity scale. Figure on the right shows hydrometer cylinder.



Power Boiling Plant for Making Lime-sulphur.

On farm of W. H. Bunting, St. Catharines, Ont. Note water supply handy.

to prevent its caking on the bottom. When the slaking is over, or almost over, add the 100 pounds sulphur. (This will unite better and leave fewer lumps if it is first worked through a coarse screen, and made into a paste by the addition of water.) Boil vigorously for one hour, stirring frequently to break any lumps. At the end of this time, strain the wash through a screen of 20 meshes to the inch into a barrel, and add whatever amount of water is necessary to bring the total up to 40 gallons. Cover the barrel well to keep out air, or pour oil of almost any kind over the surface to the depth of about one-eighth inch.

If the boiling outfit is too small to make 40 gallons at a time, half the amount can be made. If a steam outfit is used, and the boiling is done in barrels, it will be wise to make half-barrel lots in each to prevent loss of liquid by boiling over or splashing out. As there is no loss by evaporation when steam is used, it will not be necessary to put more than 20 gallons in for each half-barrel.

How to Dilute Before Spraying.—As a rule, every gallon of the above mixture may be diluted with water to seven gallons for use before the buds burst, and to about 25 gallons for use after the foliage is out. This will usually be a safe guide, but sometimes, owing to difference in character of lime, or carelessness in weighing or measuring, or in adding or failing to add water to allow for evaporation when the boiling is done in a box or large kettle, it may be far from safe. In such cases, an hydrometer should be used; in fact, with homemade concentrated, it is always wise to use the hydrometer.

How to Use the Hydrometer.—An hydrometer is a small glass instrument about one foot long, for determining the density of liquids. For our purpose, it is necessary to purchase the kind with specific-gravity readings from 1,000 to 1,350. When the hydrometer is dropped into water, it reads 1,000, but in denser liquids it reads higher. In commercial lime sulphur it usually reads about 1,310; in the homemade concentrated, made as described above, it will read about 1,200, thus showing that this is much less dense, and, therefore, much weaker, than the commercial wash, hence cannot be diluted so much.

Before taking the reading, it is always necessary to wait for the sediment to settle and the liquid to become cold.

To get the right strength for spring use, before the buds burst, the rule is: Divide the three figures to the right of the 1 by 30, and dilute each gallon with water to the number thus obtained. For example, suppose the barrel reads 1,210, divide 210 by 30, equals 7. This means that each gallon must be diluted to 7 gallons with water, to give us the right spring strength. If it reads 1,180, divide 180 by 30, equals 6; hence this may only be diluted to 6 gallons. If the reading were 1,320, divide 320 by 30, equals 10½; hence this must be diluted to 10½ gallons.

For summer strength, after the foliage is out, the rule is: Divide the last three figures by 9, and dilute with water to the number thus indicated. For example, suppose the reading is

Note 4.—After taking the reading of each barrel, mark this clearly on the outside, or keep careful record of it; then, it is possible to stir the sediment up in every case before using, as the sediment has considerable value.

L. CAESAR.

Ontario Agricultural College.

Change of Seed Potatoes.

Prof. W. T. Macoun, Horticulturist, in the 1910 report of the Central Experimental Farm, Ottawa, contributes a comprehensive discussion of the importance of using seed of strong vitality in

potato-growing. Taking the results of four well-known varieties (Early Rose, State of Maine, Empire State and Delaware), grown continuously for sixteen years, it was found that there was no deterioration, comparing the first four years with the last four years, but a fair increase in yield, due to careful selection and good cultivation each year. But in 1906 there was a very unfavorable change, dry, hot weather in the latter part of the season parching up the foliage prematurely. The crop was small and prematurely ripened. The best of the tubers were used for seed in 1907, which proved to be another unfavorable year, yielding a small crop. The best of the tubers were used for seed in 1908. Thrips injured the vines that year, and, though apparently first-class tubers were selected for the crop, for the planting of 1909, the results again were poor. The point is brought out by the tabulated comparison below.

The lessened yield is attributed in part to the

1,210, divide 210 by 9, equals 23½; hence, each gallon here should be diluted to 23½ gallons. If the reading were 1,325, divide 325 by 9, equals 36 1-9, or roughly speaking, 36; hence, dilute each gallon to 36.

Note 1.—For the codling moth, spray just after the blossoms drop. Dilute slightly more than thus indicated in each instance. For example, instead of diluting to 23 gallons, dilute to 25, and instead of 36, dilute to 40.

Note 2.—The only poison that can be safely added to lime-sulphur, whether commercial or homemade concentrated, is arsenate of lead (2 pounds to 40 gallons).

Note 3.—There are still several interesting problems in connection with this wash, some of which we hope to solve this coming season.

unfavorable seasons, and in part to lessened vitality of the seed. At the same time, newer seed of other varieties yielded in those bad years as high as at the rate of 224 bush. per acre in 1906, 462 bush. in 1907, 325 bush. in 1908, and 321 bush. in 1909, proving that seed of good vitality gave good results.

Years.	Average yield, 4 varieties.			
1906-9 (after drouth)...	91	116	132	131
1902-6 (before drouth)...	317	361	338	352

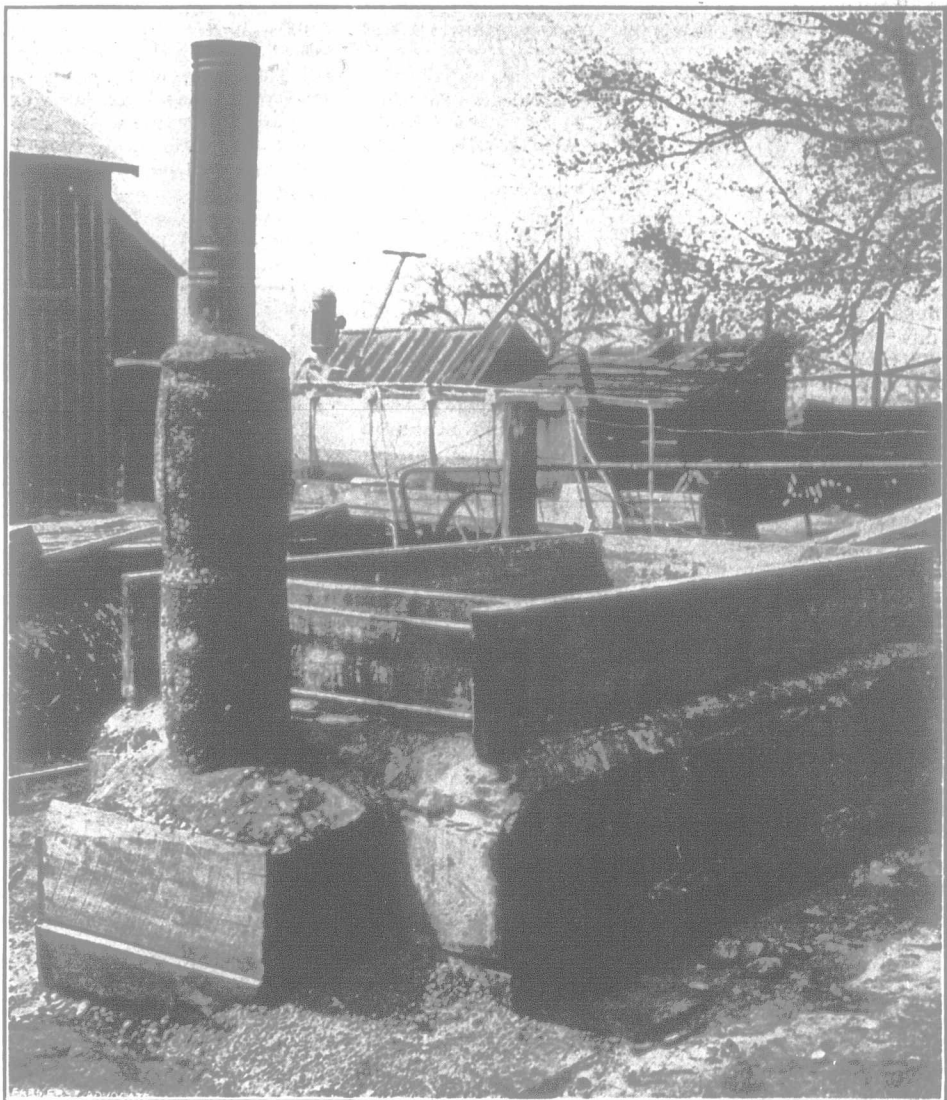
In another series of trials with seed from the Experimental Farm at Nappan, N. S., the latter yielded very much more than the Central Farm seed, nearly five times as much in one case, and more than twice as much in two cases. It thus appears that in some cases a change of seed more than doubles the yield. Vitality of seed appears to be the crucial point. Every potato-grower should be an experimenter and close observer of his crops. It has been fairly well shown that potatoes, prematurely ripened, either by early drying up of the tops, or by poor development on a weak vine, are low in vitality, and should not be used as seed, if the best results are desired. In Great Britain, it is well recognized that potatoes in warm, dry districts that ripen the potatoes rapidly, do not give as good-yielding seed as in case of potatoes grown in cooler, moister conditions that do not hurry the crop. There is a difference between immature tubers and prematurely-ripened tubers. Potatoes grown in cool climates tend to be immature; potatoes grown in warmer climates tend to be prematurely ripened. The former may be dug before frost kills the tops, or before the tops are fully ripe. Though immature, the tubers will be full of vitality, and, therefore, make far better seed than those under other conditions prematurely ripened. In England, immature potatoes have been recommended for seed for at least 100 years.

THE FARM BULLETIN.

Reciprocity.

By Peter McArthur.

When I was in Toronto last week every friend I met greeted me with the question: "How about Reciprocity in your part of the country?" Only when I had answered that question to his satisfaction would he go on to ask: "How are the wife and family?" Everybody seemed to have Reciprocity on the brain. Luckily, I have a Conservative friend



200-gallon Boiling Tank for Lime-sulphur. Top of wood, with sheet-iron bottom. E. Hack, St. Catharines, Ont. (From Ontario Fruit Branch Report, 1908.)

who keeps me posted on the ripest thought of his party, and that enabled me to tell everyone I met in Toronto just what he wanted to know—or, rather, to believe. I shudder to think what would have happened to me in that headquarters of Conservatism if before starting on the trip I had allowed myself to be loaded with Liberal opinions. This is no idle fear, I assure you. One evening I saw on the street what I thought at first was one of those nice little riots for which Toronto is becoming justly famous, but on investigation I found that a Liberal who had strayed into the city from somewhere had ventured to make a few remarks, and was being set right by a number of Conservatives. I left before the ambulance arrived.

Since returning to the country I have given the matter some thought, and have come to the conclusion that we need a great deal of Reciprocity, though of a different kind from the Reciprocity that is being discussed. Instead of Reciprocity in produce and manufactured goods between the United States and Canada, we need Reciprocity in opinions between neighbors. Personally, I am willing that my neighbors shall have whatever opinions they like about anything, including myself, if they will only let me have whatever opinions I like.

In matters of opinion I am an absolute free-trader. If a man thinks that freer trade relations with the United States will bring about annexation and blue ruin it is wholly unnecessary for him to shake his fist under my nose and speak to me harshly to make me understand how deeply in earnest he is. On the other hand, if a man thinks that Reciprocity will cheapen the price of hog-feed and put a piano in every parlor in the country, he doesn't need to throw me down in the street and step on my stomach to bring that great truth home to me. As a matter of fact, I do not think it will either bring about annexation or put a piano in the parlor, but I do think that the discussion as it is being carried on will cause a lot of bad blood among otherwise pleasant people. When men who hold such opinions as I have suggested try to argue the matter they usually end by standing with their faces about six inches apart and bawling at the tops of their voices:

"It will!"
"It won't!"
"It will!"
"It won't!"

When they finally get out of breath, they separate, and refuse to speak to one another for months. Could anything be more absurd? Neither absolute free trade nor a tariff wall as high as Haman's gallows is important enough to cause a quarrel between good neighbors. As a friend, whose opinion I value, remarked:

"Whether the tariff agreement is adopted or not, no one will have a word to say about it six months from now."

But if you quarrel with someone about it, you may start a feud that will last for generations. The kind of Reciprocity which I advocate would do away with all that. How would this do for a statement of it?

SCHEDULE A.—Ideas, acts, opinions, etc., in which there should be free trade between all human beings.

Kind words, kind deeds, praise, compliments, good news, forbearance, patience, charity, hopefulness, words of cheer, smiles, jokes, and all things that tend to make life better and brighter.

SCHEDULE B.—Ideas, acts, opinions, etc., which should only be exchanged under a reasonable sense of duty, and with a greater preference than even Mr. Foster demands, for British common sense.

Criticism, wholesome truth, reproaches, strict business, politics, bad news, tales of woe, personal troubles, personal remarks, gossip, tips on stocks and races, good advice, and all other things that tend to make life hard and unpleasant.

SCHEDULE C.—Harsh words, scolding, nagging, scardal, abuse, angry words, blows, sneers, contempt, sarcasm, and all the things that hurt and help to make the lives of so many people tragic. All the things mentioned in this schedule should be prohibited by a stern sense of duty that would amount to the highest possible protection.

If this system of Reciprocity were adopted, no one would care very much whether the other one was or not. And perhaps it doesn't matter very much whether the other system is adopted or not.

In a recent address, Lord Morley told of an experience he once had with the poet-painter, Dante Gabriel Rossetti. He called on him during the closing days of a bitter campaign, and was very much surprised to find that the poet knew nothing about what was agitating the minds of everyone else. After the situation had been explained to him, Rossetti remarked, indifferently:

"I don't suppose it matters very much which party wins."

In commenting on this attitude, Lord Morley said that, as he himself could not remember, after the lapse of years, just what was the issue at stake, or which party won in that particular election, he inclined to the opinion that, after all, the poet was right.

And, speaking of poets, I am reminded that

one poet has got himself mixed up in this trouble. As nearly as I can see, the best thing that may result from all this discussion is that Canon Scott may become known as he should be to his fellow countrymen. In spite of his unfortunate prayer in verse, Canon Scott is a true poet, with whose good work Canadians should be familiar. It is hard, however, to connect the poet of politics with the one who wrote of Canadians:

"Gnaws at our heartstrings the hunger for action;
Burns like the desert the thirst of our souls."

It is even harder to think that he is the same man who composed the noble sonnet which opens with the line:

"I saw Time in his workshop carving faces!"

If I dared trust to my memory, I would quote you all of it, to show just what Canon Scott can do when controlled by poetical inspiration, rather than politics. I hope that the attention he has called to himself will keep him in the public eye until his better work has been brought to view and appreciated. That would atone for much of the nonsense that has been talked by both sides.

Whether or not people are willing to adopt the more important system of Reciprocity which I have suggested—one which would enable them to discuss the other Reciprocity in a sane and kindly way, there are a couple of suggestions that I want to make to both sides in the present contention.

Let those who think that the adoption of Reciprocity will benefit the country mightily, and increase the butter-fat in milk, remember that "There is many a slip 'twixt the cup and the lip."

And to those who think that Reciprocity will bring about annexation, give chickens the pip, and otherwise work us woe, I commend the reply of the old lady who was asked if she had much trouble in her life: "Yes, my dear," she said, with a smile, "I have had a great deal of trouble, but most of it never happened."

The Passenger Pigeon.

Not Discovered Last Year—Renewal of Search—A Reward of \$1,000 for First Information as to the Location of a Nesting Pair, When Properly Confirmed.

The search for the passenger pigeon will be carried on for another year. No pigeon was successful last year in finding this finest and noblest of all wild pigeons. Whereas, forty or fifty years ago, great flocks comprising hundreds of thousands, or even millions, were frequently observed, much doubt exists as to whether there are any left to-day. Its range extended over the portion of the American continent east of the Rocky Mountains, and as far north as Hudson's Bay.

Last year many reports were received to the effect that the long-lost pigeon had been found, but, on further inquiry, and on demanding a deposit of \$5 as an evidence of good faith and care in its identification, before we incurred any ex-

pense in confirming the discovery, it turned out that some other bird had been mistaken for it.

All finds are to be reported to Dr. C. F. Hodge, Clark University, Worcester, Mass., or to the undersigned. The awards are offered solely and only for the information of location of undisturbed nestings. We do not desire to obtain possession of any birds, dead or alive, but we are working solely to save the free wild pigeon.

To insure intelligence and good faith, informants of nestings are advised to enclose, or agree to forfeit, at least \$5.00, in case they have failed to identify the birds correctly. This is only fair, since the amount may cover only a small part of the costs occasioned by a false report. The money will be immediately returned if the birds are found to be the true wild passenger pigeons.

In sending reports, give exact date, hour, number in flock, direction of flight, and descriptions of the nest, the eggs, and the birds themselves.

Last year, the Mourning Dove, the Band-tailed Pigeon of the Pacific Slope, and Cuckoos, were mistaken for Passenger Pigeons.

Passenger Pigeons nest during April or May, making rude, scanty platforms of twigs, through which the eggs can be seen. The nests are usually from 10 to 30 feet above the ground, and are apt to be found in any woodland. There is usually one (sometimes two) elliptical white egg, $1\frac{1}{2}$ inches by 1 inch, in each nest. The Passenger Pigeon is 16 inches long from bill to end of tail, of slender build, and has a long, graduated tail; that is, the central tail-feathers are about twice the length of the outer ones. The male is blue-gray above and on the head, and ruddy underneath; the female is duller colored, inclining to brownish.

The Mourning Dove is shorter by 4 inches, and both sexes have black spots on the ears, and brownish backs. The forehead of the adult is vinaceous brown, and the nest is usually less than ten feet from the ground.

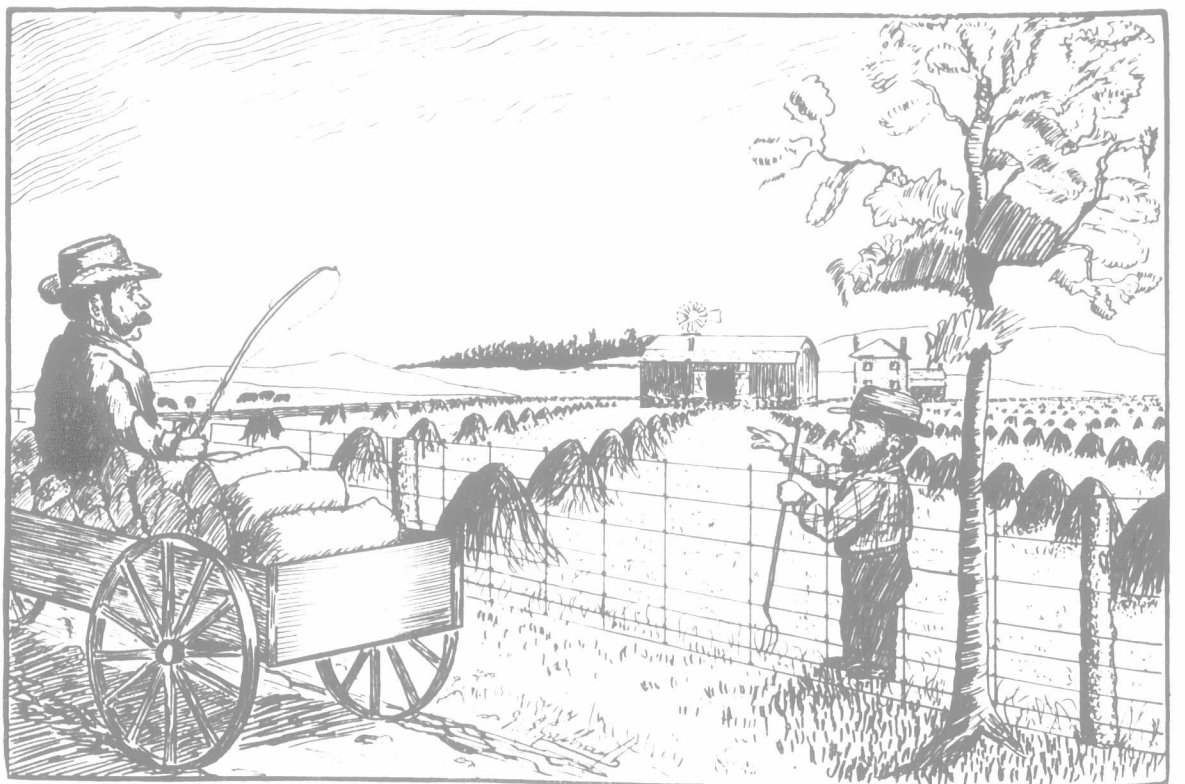
Observers should be absolutely sure of the identity of the bird before making a report. If the nest contains eggs, haste in reporting is unnecessary, as the young birds will remain in the nest for three weeks or more before leaving.

It should be remembered, too, that the rewards are offered for undisturbed nests. The birds must not be molested in any way. Watch them closely from a concealed position with a field-glass, and ascertain for a certainty that they are Passenger Pigeons before reporting.

W. L. CHHEAD.

8-months' Credit Offer.

To our present subscribers: For each new yearly subscription to "The Farmer's Advocate and Home Magazine" that you send in to us, accompanied by \$1.50, we will credit you with 8-months' renewal of your own subscription FREE. Or, if preferred, you may send in the new names, accompanied by the full subscription price of \$1.50 each (United States subscriptions, \$2.50 per year), and have your choice of some of our splendid premiums.



First Farmer—"How much a ton are you paying for the bran?"

Second Farmer—"I'm paying \$20.00 a ton for it. The cows must have it to do their best."

First Farmer—"Why don't you give alfalfa, Hiram? Just look at that crop; I expect to get not less than four tons to the acre this year, and those scientific chaps have proved that well-cured alfalfa hay is worth almost as much, ten for ten, as bran, so I guess it pays all right. You could easily grow it on that place of yours."

Good Roads Convention.

The annual meeting of the Ontario Good Roads Association was held in Toronto on March 1st, 2nd and 3rd, and was well attended. Every County Council in the Province was represented, and a large number of township municipalities, there being over 400 delegates present.

The Wednesday morning session was largely occupied with preliminary business and the appointment of committees, but included an interesting paper by J. F. Beam, of Black Creek, on the history of the road movement in Ontario. President W. H. Pugsley, in an opening address, discussed the defects of the statute-labor system, described the steps being taken by the County of York in establishing their county-road system, and outlined the reasons why Toronto had, by so substantial a majority, voted \$100,000 to be expended on the main roads of York County.

The first address on Wednesday afternoon was that of the Provincial Engineer of Highways, W. A. McLean, who reviewed the main features of the highway systems of England, Germany, France, and a number of the States, pointing out that these are of more recent origin than is commonly supposed; that none have been created by municipal effort alone; that special effort was made in every case for first construction; that their classification into township, county, and in some cases State roads, for construction and maintenance, was one of the features common to all; and that skilled and experienced supervision is regarded as essential. Mr. McLean outlined the present Ontario methods, urged thorough organization as necessary to good results, and deprecated the tendency to leave so many roads half-built. From his experience, he found that the people were most pleased with roads that were fully constructed, as regards draining, grading, metalling and rolling, and that the ratepayers were willing to pay what such roads should reasonably cost.

T. P. Kennedy, reeve of Toronto Township, thought that every municipality should place its roads under one superintendent, and advocated the oiling of main roads much frequented by automobiles.

C. R. Young, C. E., in an address on "Highway Bridges," came to the conclusion that concrete, reinforced with steel, was the most economical material for short-span bridges.

An excellent address was given at the Thursday morning session by L. J. Street, C. E., on "The Erection of Steel Highway Bridges." Mr. Street exhibited a series of defective rivets, sections of steel, and instances of bad painting, to illustrate his remarks.

M. M. Maxwell, of Cleveland, Ohio, told of the progress being made in his State, where \$1,500,000 is appropriated annually by the State Legislature.

Geo. C. Diehl, Engineer of Erie County, Buffalo, described the New York State law, under which every mile of road in the State is under the control of the State Highway Commission. The State pays the entire cost of State highways, one-half the cost of county roads, and one-third of the cost of township roads, but this does not include any part of the cost of bridges.

H. J. Bowman, C. E., of Berlin, had communicated with those counties of the Province which had not to the present participated in the Ontario Highway Act, and summarized his conclusions by stating that the majority were holding back for "lack of funds."

The "Cost of Transportation" was the subject of an interesting address by R. H. Jupp, Superintendent of Simcoe County roads.

E. M. Young, County Clerk of Prince Edward, advocated the country-road system, as carried out in that county. Their system of 55 miles, as originally assumed, was now constructed, and the County Council, with the feeling of the people strongly in support, were asking the Provincial Government to contribute one-third of the cost of extensions amounting to 65 miles, making a system amounting in all to 120 miles.

The county system was also strongly endorsed by W. R. Cummings, of Ottawa; John A. Sanderson, Warden of Leeds and Grenville; Geo. M. Fox, Warden of Wellington; W. B. Russ, of Lincoln County; Jas. L. Taylor, of Wentworth County, and other county representatives.

At the Friday morning session, H. S. Carpenter, Superintendent of Highways for the Province of Saskatchewan, described the pioneer efforts at road-building on the prairies, where the Provincial Government is taking an active part in aiding and co-operating with the local municipalities.

The statute-labor system, as now carried on, was criticised by R. W. Longmore, Reeve of Ernestown; Wm. B. Bridgeman, Reeve of Saltfleet, and F. H. Lawry, Reeve of Niagara Township. It was the evident feeling of the convention that, while the statute-labor system, when originally adopted in Ontario, was the only possible method open to pioneer conditions, the time had come when it had ceased to be generally applicable, and township councils were strongly urged to discontinue its use, placing all road-

work on a cash basis, under a township road superintendent or foreman.

The committee on resolutions, in their report, as adopted, urged that there be Provincial co-operation in the maintenance of county roads, and that, to obtain a revenue for this purpose, a tax of 50 cents per horse-power should be levied on motor vehicles; that the Provincial grant to county roads be increased from one-third to one-half; that a Federal Department of Roads be created at Ottawa; and that a Highway Board be appointed for the Province.

Officers were elected as follows: Hon. President, W. H. Pugsley, Richmond Hill; President, T. L. Kennedy, Desue; 1st Vice-President, A. Rankin, Collins' Bay; Secretary-Treasurer, Col. J. E. Farewell, Whitby; Assistant Secretary, W. A. McLean, C. E., Toronto; Executive Committee—Messrs. R. Spratt, J. A. Sanderson, R. H. Jupp, J. L. Taylor, E. Grimmon, J. Eddy, and K. W. McKay.

The Better-farming Special.

As a means of stimulating by novelty the appetite for expert or scientific information, the Better-farming Special, being run over the Michigan Central Railroad, in Southern Ontario, is proving a decided success. Credit for introducing this feature of Farmers' Institute work in Eastern Canada belongs, we believe, to the Michigan Central Railway, which has had experience of it for a number of years across the line, where special Institute trains of one kind or another are quite the vogue. They have also been run, on a few occasions, through Western Canada. When the M. C. R. officials offered to run over their line a train of three passenger coaches and six baggage cars, Geo. A. Putnam, Superintendent of Farmers' Institutes, jumped at the chance, and proceeded to make arrangements. Illustrative material along dairying, fruit-raising, poultry, drainage, corn-growing and other lines was assembled to put into the baggage cars, where it could be inspected at will by visitors passing through. The passenger coaches were used for lecture purposes. The train was scheduled to run four days last week and four days this week over the Michigan Central lines in Canada, stopping at four stations a day. In addition, the train was open until 12.30 at St. Thomas on Saturday, though, as this appointment was not well advertised in advance, the crowd here was small.

One of the three passenger cars was devoted to lectures for ladies and children on dairying, poultry-keeping and bacteriology, as applied to home conditions. In the other two cars, fifteen-minute lectures proceeded simultaneously, the speakers changing from car to car. Each audience heard four addresses. In addition, it proved necessary last week, at several points, to hold overflow meetings.

Both the Department of Agriculture and the railroad officials were delighted with the large attendance and close attention manifested. Last week the train was west of St. Thomas. On the first day it was visited by 1,075 people, the second day by 1,265, third day by 1,030, and on Friday by 1,500.

Those who visited the special were highly pleased. At Melbourne, for instance, where the local leaders confessed they had never been able to get a good crowd out to an Institute meeting, there were 300 present, and many desires expressed that the train should come again. The ladies, too, were interested. At Brigden, on Friday, there were over 100 women present, while the car was also inspected by a hundred school children. Altogether, the effort should prove a fruitful one, and it is to be hoped other railroad companies in Canada will co-operate in the same way with the Departments of Agriculture.

Two thousand Wisconsin farmers, housewives, boys, cheese and butter factory managers, and apiarists, attended the short courses last month at Madison. Over 2,000 New Yorkers enjoyed the agricultural short courses at Cornell University.

Farmers Support Reciprocity.

While opinion divides somewhat sharply upon the reciprocity issue, evidence accumulates that, throughout the rural districts, sentiment preponderates strongly in favor of it.

James Bower, President Canadian National Council of Agriculture, has been in Ottawa to urge the Government to grant in full the demands of the farmers' delegation of Dec. 16th.

Mr. Bower, in an interview, said: "The agreement is a good one and a wise one." Referring to speeches opposing it, heard in the House of Commons, he said: "The speakers are either entirely ignorant of how the agreement will affect the farmers, or they are trying to mislead the public." After referring to the benefit to the trade in barley and in cattle that would result from reciprocity, he remarked that, "perhaps the great boon reciprocity will confer upon the farmers of the West will be in its indirect results in reducing freight rates." In regard to the annexation bogey, Mr. Bower said: "Western farmers think it all nonsense. If there was any danger of any Western farmers wanting to be annexed to the United States, it would be because they did not get what they wanted."

Only four men in the Counties of Peterboro and Prince Edward, opposed to reciprocity, were met by E. C. Drury in the course of a two weeks' tour through those counties. He had been addressing meetings twice a day, with an average attendance of seventy-five.

J. R. Anderson, of Prince Edward County, treasurer of the Eastern Ontario Dairymen's Association, said that during last year reciprocity would have meant to him an additional revenue of \$800 on his 35 cows.

"The West is solidly in favor of reciprocity and an extension of the British preference," said T. A. Crerar, president Grain-growers' Association Grain Company, of Winnipeg.

"Practically none of the Western farmers are opposed to reciprocity," said R. Mackenzie, secretary Manitoba Grain-growers' Association. "They realize, too, that free trade in cattle will give a great impetus to stock-raising in the West."

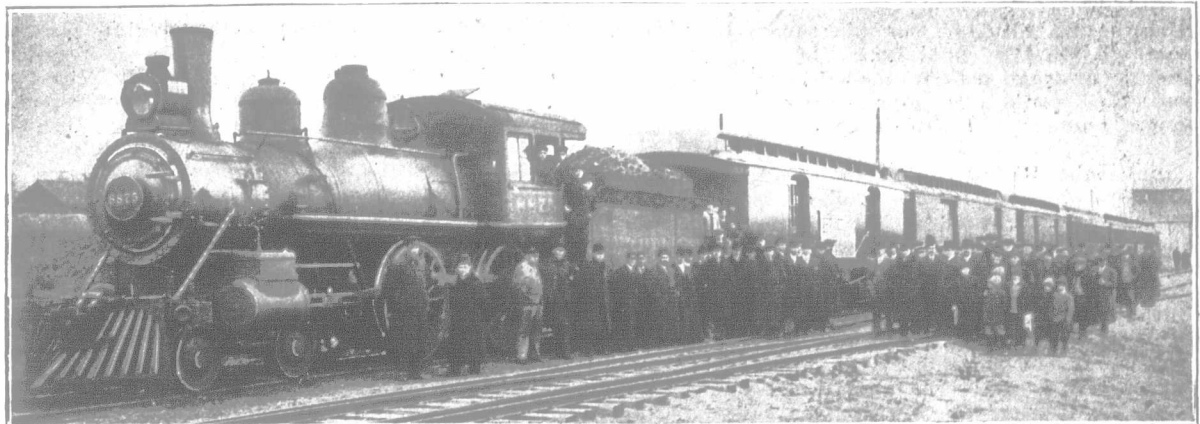
"The farmers of Alberta are delighted with the prospect of free trade with the United States," said Hon. Duncan Marshall, Minister of Agriculture for Alberta, in a recent interview. "Had free trade prevailed last summer during the dry period, when the ranchers had to sell their cattle, they could have obtained a much better price than they received for their steers and heaves." He pointed out that Chicago could easily have absorbed all they had to offer, at current prices. They got but 2½ or 2¼ cents per pound.

Strongly-worded resolutions in favor of reciprocity were passed, with practical unanimity at open meetings of two Granges in Lambton County, Ont.

Farm-convenience Competition.

Did any reader of "The Farmer's Advocate" overlook the announcement of prizes for accounts of labor-saving plans and devices, on page 350, March 2nd (last week's) issue? If so, turn it up now, read the conditions, and send a contribution, to reach this office not later than March 18th. The experience of nearly every alert farmer will furnish something original and useful, if only looked up.

A bill respecting the destruction by constables and others of injured animals, to be known as the "Injured Animals Act," has been introduced into the Ontario Legislature. Under its provisions, a police constable or the inspector of an incorporated humane society, can, as painlessly as possible, kill any large animal so severely injured that it cannot without cruelty be led away, whether the owner is willing or not. They have power, also, to despatch an abandoned animal, or one disabled or badly diseased, found in street, road or other public place, as also any large animal severely injured or mortally mutilated by railway train.



The Better-farming Special on the Michigan Central. First Farmers' Institute train, so far as we are aware, ever run in Eastern Canada.

P.E. Island Dairymen Enthusiastic.

Quite a goodly number of dairymen attended the annual meeting of the Provincial Dairymen's Association in Charlottetown, on February 23rd. The president, Arthur Simpson, delivered a short, extempore address. The meeting was an enthusiastic one, and everybody felt optimistic as to the future of dairying. In the year just closed, a considerable advance was made in the total value of butter and cheese manufactured by the co-operative companies. Though cheese fell off a little on account of excessive drouth in the latter part of the season, the increase in the output of butter more than made up for it.

The report of Inspector Morrow went to show that all the makers were doing excellent work, and that the quality of the cheese and butter left little to be desired. Reports showed that quite a few factories pasteurized the whey last season, and that patrons were well satisfied with the result. Many more factories will pasteurize this year. One result of proper pasteurization has been improvement in flavor of cheese. Island cheese reached market in much better condition this year, as an officer of the Dairy Division followed the shipments from the port of shipment in the Island to the ocean steamer in Halifax. This officer made it his business to see that cars loaded with cheese were not allowed to stand in the sun and get heated, but had them shunted at once into the freight sheds, and the car doors left a little open. A thermograph was also placed with the cheese in the steamer, that recorded the temperature every day during the ocean voyage. After this officer got to work, there were no more complaints of heated cheese from English buyers.

A dairy-herd competition took place here under the management of the Association, for the largest amount of milk per cow, delivered at a cheese factory for five months, and five cows to a herd. Another competition was for the most butter-fat per acre delivered to a creamery for the same time. In the cheese-factory competition the average of the herds for the five months was 5,065 pounds of milk per cow. This average, for the twenty herds in the competition, is considered pretty good, considering that so few on the Island make a specialty of milk production. Cow-testing is now becoming general on the Island, and, after a few years of weeding out, the average of the herds will be much greater.

At the evening meeting, J. A. Dewar, one of our progressive dairymen, read a paper on "Keeping Records," in which he gave his experience in finding out which of his cows were paying a profit. He said weighing and testing would prove an eye-opener to any dairyman, and would tend to make the production of milk much more profitable, by cutting out of the herds the cows that were kept at a loss.

Harvey Mitchell, of the Dairy Commissioner's Staff, stated that the Minister of Agriculture had instructed the Dairy Commissioner to select three districts (one of which would be on the Island), and get all the dairymen in said district to test their cows and select the heifer calves from the best milkers. This is expected to be a great education to dairymen in the next few years, as testing and selecting goes on. Mr. Mitchell instanced cases where cow-testing and weeding out had been practiced, and the average per cow had been raised 2,000 pounds.

From the excellent report of the secretary, John Anderson, we cull the following figures:

COMPARATIVE STATEMENT.

	Gross Value of Output.		
	1909.	1910.	
Cheese	\$375,591.98	\$361,452.59	\$14,139.39*
Butter	127,001.76	152,949.10	25,947.34†
	\$502,593.74	\$514,401.69	\$11,807.95†

*Decrease; †Increase; ‡Net Increase.

	Net Value to Patrons.		
	1909.	1910.	
Cheese	\$300,043.22	\$284,018.03	\$16,025.19*
Butter	99,864.83	121,327.33	21,462.50†
	\$399,908.05	\$405,345.36	\$ 5,437.31†

*Decrease; †Increase; ‡Net Increase.

Cheese and Butter manufactured in 1910.—Cheese, 3,346,428 pounds; butter, 638,137 pounds. Average cost of manufacturing 1 pound cheese, 2.31 cents; 1 pound butter, 4.95 cents. Average pounds milk to make 1 pound cheese, 10.4.

Hon. John Richards, Commissioner of Agriculture, in a short, pithy address, spoke of the breeding of cattle, and advised the use of the very best dairy sires obtainable. This, with testing and selection, would, he thought, result, in the near future, in much larger production, and more profitable herds of milch cows. Professor Ross, Secretary of Agriculture, spoke strongly of the necessity of making dairying an all-year-round business. He said that labor is cheaper in winter, and better calves can then be raised, which will develop into larger producers. He gave instances of Island herds that engaged in all-year-round dairying, that paid 140 per cent. on their feed.

W. S.

New Brunswick Agricultural Problems.

The thirty-fifth annual convention of the New Brunswick Farmers' and Dairymen's Association opened at Fredericton on the 28th ult., with one of the largest attendances on record. President S. B. Hatheway, of Kingsclear, in the course of his opening address, referred to the large number of farms which were only being half worked, or were altogether vacant, though he was glad to note that many of the former had been much improved during the year, and their productiveness increased, by underdraining. He regretted the lack of a more advanced knowledge of farming science and technical training, which, with the lack of adequate transportation facilities, was a great drawback to the industry. While the Provincial Government, no doubt, had the welfare of farmers at heart, no great advance could be made as long as the Legislature contained so few of the class, for no others would take a sufficiently aggressive stand in the interests of agriculture.

Hon. D. V. Landry, Provincial Minister of Agriculture, referred to the fact that the Government had already increased the grant to agriculture, and that the number of agricultural societies had almost doubled since it came into power. He was glad to notice the increased interest the members of these societies were taking in the work, and it was the intention of the Government, at an early date, to appoint a superintendent whose business it would be to overlook the work of the societies, and give all the assistance in his power to increase their usefulness. In order to stimulate the poultry industry, the Government had recently appointed a poultry expert who would make it his business to show the possibilities of the business and the best means of taking advantage of it. With regard to the matter of education, which had been referred to by the president, several schemes were now under consideration, by means of which some instruction in elementary agricultural subjects would be given in the rural schools, and some more advanced instruction in the Normal School.

The report of the committee appointed at the last convention to interview the Commissioner of Agriculture on the question of bonusing the dairy cow, was to the effect that, while the Commissioner himself was heartily in accord with the idea, he feared he would not be able to get his colleagues in the Government to see it in the same light. To carry it out would cost some thousands of dollars, which were not available, unless economies were practiced in other directions. If they were prepared to forego the amount at present applied to Institute work, and cut down the grants to the exhibitions, it might be possible to carry out the idea, but not otherwise. The sum of the whole matter seemed to be that, while all were agreed that something should be done, they could not see any practical way in which to do it. The report recommended the appointment of a new committee to push the question forward.

A general discussion on dairy matters then ensued, and the necessity of doing something to stimulate interest in the industry was conceded. The chief trouble, according to most of the speakers, was to get the average farmer to weigh his milk and test it. It seemed strange that men should be too indifferent to ascertain for themselves which of their cows were paying and which were not, and it was a question whether the appointment of county inspectors to go round among the producers and educate them up to this would be worth while. Other speakers were opposed to bonusing the dairy cow at all, on the ground that if a farmer had not sufficient energy and progressiveness to improve his stock for his own sake, the Government should certainly not be asked to pay him to do so. Ultimately, the committee's report was adopted.

A series of resolutions were passed on the subject of the representation of the farming industry in the Legislature, and also in the Federal Parliament, the general tenor of which was that there should be one farmer representative, at least, from each constituency to the Legislature, and that farmers should support that representative, irrespective of politics.

The following officers were appointed for the ensuing year: President, Col. H. Montgomery-Campbell, of Apohaqui, King's Co.; Vice-President, A. J. Jensen, Salmonhurst; Corresponding Secretary, Geo. E. Fisher, Chatham; Recording Secretary, Bliss M. Fawcett, Sackville; and Treasurer, H. H. Smith, Blissville.

In connection with the Association's meeting, a seed fair and competition was held, when prizes to the amount of \$300 were offered. Prof. Cutler, of Macdonald College, and S. J. Moore, Dominion Seed Inspector, gave addresses demonstrating how to judge seed, using samples of oats and score-cards in the practical demonstration.

Geo. E. Fisher, of Chatham, in a well-thought-out paper, discussed the social side of farm life, taking it up under three heads: Sociability in the home, sociability in the dairy stable, and sociability with our neighbors. He urged the advantages of consolidated rural schools, and described the modern farm home,

with its bathroom, telephone, broad veranda, and so on. He also referred to the improvement of ornamental trees made to the home surroundings. Reference was also made to the necessity of taking proper care of the farm animals. The social side of farm life, he thought, should be carefully cultivated, and he added, also, that he thought there should be more sociability displayed in forming agricultural societies.

Percheron Registration.

As recently noted in these columns, the Percheron Society of America has taken over all the books, records and business rights of the Percheron Registry Company, of Columbus, Ohio; and, in consideration thereof, will issue to each of the 206 members of the Percheron Registry Company one share of stock in the Percheron Society of America. The Percheron Society of America recognizes the horses recorded by the Percheron Registry Company, of Columbus, Ohio, as pure-bred, recorded horses; and, where the animals in question are being bred to grade mares, there is no necessity for having the certificates rewritten; but the produce of animals with Percheron Registry certificates will not be accepted for record until the certificates for such animals are renumbered, rewritten, and placed in shape for republication. The expense of rewriting the certificates where renumbering and republishing ancestors is not involved, will be \$2.00 each. Where it is necessary to renumber or republish one or more ancestors, in order to rewrite the certificates, the expense will be \$1 for each such ancestor involved.

City and Country Prices.

Here is the way in which Senator McCumber, of North Dakota, puts the argument as to the relative prices of things in town and country:

"If a Senator went to New York," said he, "and paid his expenses with farm products, the bill would read like this:

"Cab to hotel—Six bushels of oats.
 "Tip to driver—Fifteen cabbages.
 "Tip to elevator boy—One and a half bushels of barley.
 "Breakfast—Quarter ton hay.
 "Tip to waiter—Two bushels potatoes.
 "Luncheon—One sheep.
 "Tip to waiter—One and a half bushels carrots.
 "Dinner—Four bushels rye.
 "Tip to waiter—One bushel onions.
 "Room—Half car turnips."

Taxation of railways and of express companies is provided for by a bill before the Ontario House. A stamp tax on transfer of securities of corporations, such as shares, bonds, debentures, or debenture stock, is also proposed. The bill goes after racing associations, also, and where these hold race-track meetings of greater length than three days, a license fee of \$200 per day is to be prepaid, trotting and pacing meetings to pay \$10 for one day, \$40 for two days, and \$60 for a three-day meet.

The Motor Vehicles Act is getting knocked. Another amendment proposed holds the owner and the driver of an automobile that has caused an accident jointly and severally liable for any loss or damage, unless, in the opinion of the court or jury trying the action, such loss or damage was occasioned by the negligence of the person or persons sustaining such damage, or either or any of them.

Reports from the Niagara Peninsula state that the fruit trees have thus far wintered well. Of course, there will have to be a peach-failure scare, but there is still plenty of time for that. Experienced orchardists guardedly imply that the greatest danger is still to come.

After the completion of their four-years' course, graduates of the Wisconsin Agricultural College will have the privilege of spending some time gaining experience on their choice of twelve of the "accredited" best-conducted farms in the State.

Illinois University is running an agricultural extension train through nine counties, equipped with illustrative materials for talks on poultry, insects, live stock, soils, crops, gardens, etc., chiefly for the benefit of rural-school pupils, who will visit the cars on the sidings.

Twenty-one students of the New York College of Agriculture were dropped from the list for failure to maintain a satisfactory standing in their work during the first semester.

The United States Department of Agriculture is experimenting with bread, cake and biscuit made of cottonseed meal, with a view to finding a cheap substitute for meat and bread.

The Canadian Bank of Commerce

affords to farmers and others every facility for the transaction of their banking business.

Accounts may be opened by mail and moneys deposited or withdrawn in this way with equal facility.

SALES NOTES will be cashed or taken for collection.

Branches throughout Canada, including Toronto, Hamilton, Montreal, Charlottetown, New Glasgow and Truro.

MARKETS.

Toronto. LIVE STOCK.

At West Toronto, on Monday, March 6th, receipts numbered 63 carloads, comprising 1,301 cattle, 5 hogs, 110 sheep, 23 calves, and 18 horses. Quality of cattle was good; trade steady; prices unchanged. Exporters, \$5.75 to \$5.90; export bulls, \$5 to \$5.25; prime picked butchers, \$5.80 to \$6; loads of good, \$5.50 to \$5.75; mediums, \$5.25 to \$5.45; common butchers, \$5 to \$5.20; cows, \$3.50 to \$5.25; milkers, \$40 to \$70; one at \$80; calves, \$3.50 to \$8.50. Sheep, \$4.50 to \$4.75; rams, \$3.50 to \$4; lambs, \$6 to \$6.60. Hogs, selects, fed and watered, \$7.05, and \$6.75 f. o. b. cars at country points.

REVIEW OF LAST WEEK'S MARKETS The total receipts of live stock at the City and Union Stock-yards last week were as follows:

	City.	Union.	Total.
Cars	202	151	353
Cattle	2,843	2,594	5,437
Hogs	4,270	1,191	5,461
Sheep	705	277	982
Calves	268	60	328
Horses	38	150	188

The total receipts at the two yards for the corresponding week of 1910 were:

	City.	Union.	Total.
Cars	198	155	353
Cattle	2,873	2,155	5,028
Hogs	4,216	1,480	5,696
Sheep	609	171	780
Calves	228	77	305
Horses	97	491	588

The combined receipts of live stock at the two yards are nearly the same as for the corresponding week of 1910. The carloads show no difference, but there is an increase of 409 cattle, 202 sheep and lambs, and 23 calves; but a decrease of 285 hogs, and 400 horses.

Receipts of live-stock were not as large as for the previous week. Trade was dull and draggy from the start to the finish of the week, more especially for the export class. Prices for all classes of cattle were on the decline, especially in the export class, which suffered most. Butchers', at the beginning of the week, were about steady, with what we reported in our last letter, but before the close of the week they, too, were lower, in sympathy with the exporters, as many of the latter were bought by the local abattoirs and wholesale butchers. The main reason for the slow trade in export cattle, was the dullness of the British markets, and the low prices prevailing. Export dealers had lost heavily in many of their shipments, and either had to buy cheaper or not at all. The reason of the slowness of the butcher trade was that drovers had paid too much for their cattle in the country, and refused the prices offered. During the storms of three weeks ago, there was a temporary scarcity of cattle on the market, which caused prices to advance beyond real values for two or three markets. This caused the drovers to go back to the farmer, and pay prices, in many instances, that were

unwarranted on the best market since the year commenced, the result being that many drovers lost heavily during the past two weeks.

Exporters.—Exporters sold at about 20c. per cwt. lower, on the average, and, in some instances, 25c. lower than for the previous week. Export steers ranged from \$5.70 to \$5.90; bulls, \$5 to \$5.25. E. L. Woodward bought for Swift & Co., 180 steers for London, 1,272 lbs. average weight, at \$5.81 average price; also, 39 steers for Liverpool, 1,190 lbs. each, at \$5.85; 12 heifers, 1,015 lbs. each, at \$5.75; 7 bulls, 1,525 lbs. each, at \$5.

Butchers'.—At the close of the week, the following prices prevailed: Prime picked lots, \$5.80 to \$5.90; loads of good, \$5.50 to \$5.75; medium, \$5.15 to \$5.40; common, \$4.75 to \$5.10; cows held better than any other class, and sold from \$3.50 to \$5.25; canners, \$2.50 to \$3; bulls, \$4 to \$5.

Milkers and Springers.—Many milkers and springers were offered, but few of choice quality were amongst the number. Prices ranged all the way from \$35 to \$75, the bulk going from \$45 to \$65.

Veal Calves.—Trade steady; prices unchanged, at \$3.50 to \$3.50 per cwt.

Sheep and Lambs.—The sheep and lamb market was easier, especially for lambs. Ewes sold at \$4.25 to \$4.75; rams, \$3.50 to \$4; lambs, \$6 to \$6.40.

Hogs.—Selects, fed and watered, that is, hogs 160 to 220 lbs. in weight, sold at \$7.05; and \$6.75, f. o. b. cars at country points. Hogs over 220 lbs. were culled out, at 50c. per cwt. less than the above quotations.

Horses.—Trade in horses at the Union Horse Exchange last week was better than for several weeks. Mr. Smith, the manager, tells us that the weather having become much better in the Northwest, he has been enabled to make several shipments during the week. The Ontario and local city trade was much better also. Prices ruled steady, at our last quotations, as follows: Drafters, \$200 to \$225; general-purpose horses, \$150 to \$175; express and wagon horses, \$175 to \$225; drivers, \$100 to \$200; serviceably sound, \$35 to \$100 each.

BREADSTUFFS.

Wheat.—No. 2 red, white, or mixed, 80c. to 81c., outside points. Manitoba—No. 1 northern, 96c.; No. 2 northern, 94c.; No. 3 northern, 91c., lake ports. Rye—No. 2, 65c. to 66c., outside. Peas—No. 2, 80c. to 81c., outside points. Barley—For malting, 65c. to 67c.; for feed, 50c. to 55c., outside. Buckwheat—47c. to 48c., outside. Oats—Canadian Western, No. 2, 36c.; No. 3, 35c., lake ports; Ontario, No. 2, 32c.; No. 3, 31c., outside. Corn—No. 3 American yellow, new, 50c., at Toronto. Flour—Ontario, 90-per-cent. winter-wheat patents, \$3.40, seaboard. Manitoba flour—Toronto prices: First patents, \$5.40; second patents, \$4.90; strong bakers', \$4.70.

HAY AND MILLFEED.

Hay.—Baled, car lots, on track, Toronto, No. 1, \$12.50 to \$13; No. 2, \$8.50 to \$10.50.

Straw.—Baled, car lots, track, Toronto, \$7.00.

Bran.—Manitoba bran, \$20 per ton; shorts, \$22; Ontario bran, \$22 in bags; shorts, \$24, car lots, track, Toronto.

COUNTRY PRODUCE.

Butter.—Market unchanged. Creamery pound rolls, 26c. to 28c.; creamery solids, 22c. to 23c.; separator dairy, 22c. to 24c.; store lots, 17c. to 19c.

Eggs.—Strictly new-laid, 23c. to 24c.; cold-storage, 17c.

Cheese.—Market steady. Large, 13c.; twins, 13c.

Honey.—The honey season is nearly over. Prices nominal, at 10c. to 11c. for extracted, and \$2.50 per dozen sections for combs.

Beans.—Broken car lots are selling to the retailers at \$1.70 to \$1.80 per bushel, for hand-picked.

Potatoes.—Car lots of Ontario potatoes are selling, on track, Toronto, at 85c. to 87c. per bag. New Brunswick Delawares, 90c. to \$1.

Poultry.—Receipts of fresh-killed poultry were light. Turkeys, 22c. to 24c.; chickens, "yearlings," 17c. to 19c.; hens, 15c. to 16c. Ducks and geese, none.

HIDES AND WOOL.

E. T. Carter & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows,

9c.; No. 2 inspected steers and cows, 8c.; No. 3 inspected steers, cows and bulls, 7c.; country hides, cured, 8c. to 8c.; green, 7c. to 8c.; calf skins, 11c. to 13c.; sheep skins, 95c. to \$1.20; horse hides, No. 1, \$3.00; horse hair, per lb., 30c. to 32c.; tallow, No. 1, per lb., 6c. to 7c.

TORONTO SEED MARKET.

The William Rennie Seed Company report the following prices, at which re-cleaned seeds are being sold to the trade: Alsike No. 1, per bushel, \$11; alsike No. 2, \$9.60; alsike No. 3, \$8.75; red clover No. 1, per bushel, \$10.50; red clover No. 2, \$9.30; red clover No. 3, \$8.40; timothy No. 1, per bushel, \$7.20; timothy No. 2, \$6.75; alfalfa No. 1, per bushel, \$13.75; alfalfa No. 2, per bushel, \$12.25.

FRUITS AND VEGETABLES.

Apples during the last week were a little easier at the wholesale houses, at least some of them. Spies sold at \$5 to \$5.50; Greenings, \$4 to \$4.50; Baldwins, \$3.75 to \$4.50, per barrel, in each quotation; cabbage, per 100 lbs., \$1; parsnips, 60c. per bag; carrots, 50c. to 60c. per bag; celery, per dozen, 60c.; mushrooms, 75c. per lb.; strawberries, from Florida, 40c. to 50c. per quart.

Montreal.

Live Stock.—The demand last week was principally for good beef, and the supply on the local market was ample for requirements. A good trade was done. Choice steers sold at 6c. per lb.; fine at 6c.; good at 5c. to 6c.; medium at 5c. to 5c., and common at 4c. to 5c. Some choice cows were offered, and sold as high as 6c., some common stock being as low as 3c.

Sales of extra choice bulls were made at 5c. to 6c., and some lower grades sold at 4c. Sheep sold at 4c. to 5c., and lambs at 6c. to 6c. per lb. Calves were in good demand, but the offerings were light, and prices ranged up to a high figure, some selling at \$15 each. Inferior qualities sold at \$4. Hogs.—The demand from packers was excellent. Selected lots sold at 7c. to 7c. per lb., weighed off cars.

Horses.—Dealers report a good demand for high-grade horses for the local market. Prices continue steady. Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$300 to \$350 each; light draft, 1,400 to 1,500 lbs., \$225 to \$300 each; light horses, 1,000 to 1,100 lbs., \$100 to \$200 each; inferior, broken-down animals, \$50 to \$100 each, and choicest carriage and saddle animals, \$350 to \$500 each.

Dressed Hogs and Provisions.—Fresh-killed, abattoir-dressed, sold at 10c. and 10c.; country-dressed, 8c. to 9c. per lb. The market for provisions continues practically unchanged.

Poultry.—A lot of held stock continues to come in, some of which is very poor indeed. Turkeys can be had all the way from 7c. to 15c. per lb.; chickens, 8c. to 12c.; fowl, 7c. to 9c.; ducks, 6c. to 9c.; geese, 6c. to 9c. per lb. As may be expected, these figures, for the most part, are not for choice stock, there being very little choice offered.

Potatoes.—Choicest stock cost from 90c. to 95c. per 90 lbs., carloads, on track. Dealers sold these over again, in the same position, at an advance of 5c., while grocers were paying \$1.20 per bag, in smaller quantities.

Eggs.—Market somewhat lower. Canadian fresh-laid eggs—so-called—25c., wholesale. Americans cost, laid down here, about 21c. to 22c., and were sold, wholesale, at 23c. to 25c., with No. 2, 17c. to 18c.

Butter.—Finest held creamery, 25c. to 25c., wholesale; current makes, at 23c. and 24c. per pound. Dairy rolls, 20c. and 21c., and tubs at 19c. and 21c.

Apples.—Supplies light; prices tending upwards, No. 1 selling at auction around \$6; No. 2 at \$4.50 to \$5, and No. 3 at \$3.30 to \$3.60 per barrel.

Grain.—No. 2 Canadian Western oats quoted at 39c. to 39c. per bushel, car lots, store; No. 1 extra feed at 1c. under; No. 3 Canadian Western at 37c. to 37c.; No. 2 local white at 1c. lower; No. 3 yet a cent under, and No. 4 yet a cent under. No. 4 Manitoba barley, 49c. to 50c. per bushel, and No. 3 American yellow corn, 56c. to 57c. per bushel.

Flour.—No change; \$5.60 per barrel, in bags, for Manitoba first patents; \$5.10 for seconds, and \$4.90 for strong bakers'.

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Has sought to render to its customers the best of banking services. Desirable banking connections have been secured, and every modern facility of banking provided in order to make every department of our service perfect.

Your banking business solicited.

Bank of Toronto

Incorporated 1855

Ontario patents, \$4.75 to \$5, and straight rollers, \$4.35 to \$4.50.

Millfeed.—Manitoba bran, \$21 to \$23 per ton; shorts, \$28 to \$25, being an advance of \$1 per ton. Ontario bran, \$22 to \$23; middlings, \$24 to \$25; pure grain mouille, \$30, and mixed, \$25 to \$28; cotton-seed meal, \$37 to \$38.

Buffalo.

Cattle.—Prime steers, \$6.25 to \$6.60; butcher grades, \$3 to \$6.

Calves.—Cull to choice, \$6 to \$10.75. Sheep and Lambs.—Choice lambs, \$6.25 to \$6.40; cull to fair, \$5 to \$6; yearlings, \$5 to \$5.50; sheep, \$3 to \$4.85.

Hogs.—Yorkers, \$7.50 to \$7.55; stags, \$5 to \$5.50; pigs, \$7.55; mixed, \$7.40 to \$7.45; heavy, \$7.30 to \$7.35; roughs, \$6 to \$6.40.

Reciprocity and the Horse Market.

Instructed to ascertain the opinion of Montreal horsemen upon the probable effect of reciprocity on the horse market, the Montreal market reporter of "The Farmer's Advocate" interviewed Geo. Climie, one of the largest horse dealers, if not the largest one, in that city, and a man in whom our reporter places much confidence.

Asked if he was in favor of reciprocity, Mr. Climie said:

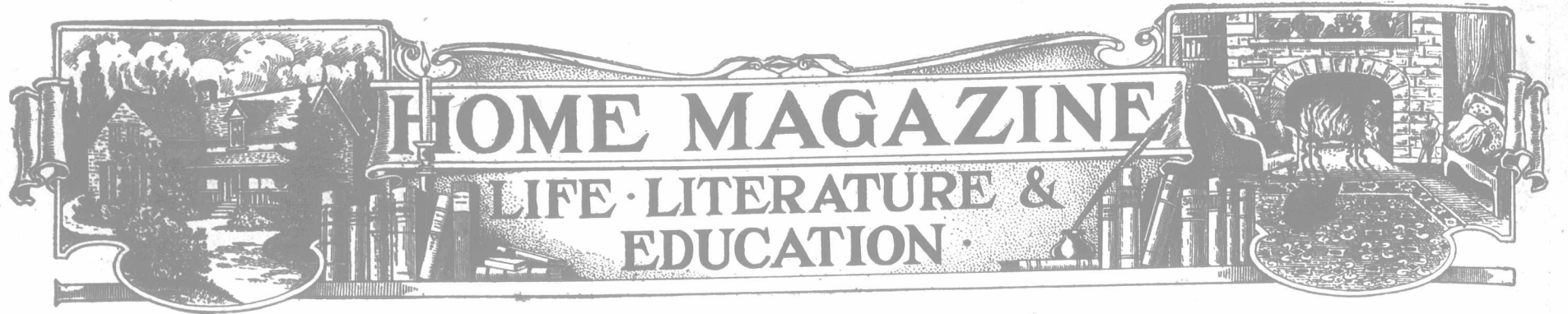
"Why, yes; I think it would be a splendid thing for the country. I am quite confident that we dealers in Montreal would do a large business with the States of New York, Maine, New Hampshire and Vermont, although it is just possible that we might lose a little of the far Western trade."

Asked if it would have the effect of advancing prices on horses throughout the country, Mr. Climie said:

"No; I doubt if the price of horses would advance very much because of reciprocity. The principal change would be in the broader markets. It is just possible that we would purchase quite a few horses in the United States, instead of bringing them from farther distances, as at present. On the other hand, we, in selling to the United States, would have to ship much shorter distances than we now do. There should be considerable saving in freight and costs of transportation on these, so that I doubt if the price of horses to consumers would be more than it is at present. Who would get the advantage of any saving of this character which is effected, it is, of course, difficult to say. Possibly the buyers and consumers would divide it between them."

"I think the main advantage of reciprocity would be in giving greater freedom to both buyer and seller, and in opening up additional opportunities all the way around. This is bound to be advantageous to the man who raises horses, and to him who buys them."

For Chicago Markets, see page 420.



Little Trips Among Eminent Writers. 289-310

John Burroughs.

"John Burroughs, writer, farmer; born at Roxbury, N. Y., 3rd April, 1837; son of C. A. Burroughs, farmer"—so runs "Who's Who," but there is little need to run down the list of books which follows, for who, in this age of reading, does not know and has not been delighted by them? "Wake-Robin," "Winter Sunshine," "Locusts and Wild Honey," "Fresh Fields," "Indoor Studies," "Birds and Poets," "Pepperton," "Signs and Seasons," "Riverby," "Whitman, a Study," "The Light of Day," "Literary Values," "Far and Near," "Ways of Nature," "Leaf and Tendril," "Songs of Nature," "Bird and Bough," "Squirrels and Other Fur-bearingers." The very names of these books are suggestive. There is a literary flavor about them. One suspects that the man who wrote them knows how to write, not only facts, but literature; that he can not only instruct, but entertain, and that right royally—a pleasing suspicion that the most casual acquaintance with the books must verify. As a matter of fact, John Burroughs is one of the most popular writers of the present day, and by long odds the most popular of the nature-writers. To miss knowing him is to miss one of the things that help to make life worth living, especially for those who have ready access to the country, its fields, woods and groves. He is boon companion with all the birds and bees and little furry animals. Gaily he carries us with him on many a fishing or camping trip, his sharp eye sharpening ours, his ready ear catching the sounds of nature, and his facile pen transmitting the notes to us as though they were bars of music. True, in his earlier writings, he sometimes carries a gun, but it is pleasing to note that, as the years go on, the gun is laid aside. He has learned to love the furred and feathered creatures too well to shoot. He has found out that there is a better marksmanship, as, for instance, he explains in "Far and Near," when, in speaking of the bald eagle, he says: "When the smoke begins to rise from my chimney, or he sees me going to the spring for water, he concludes it is time for him to be off. But he need not fear the crack of the rifle here; nothing more deadly than field-glasses shall be pointed at him while I am about." Or, again, in speaking of the river migrants which he sees in spring along Black Creek: "I go here in early spring, after the ice has broken up, to get a glimpse of the first wild ducks and to play the sportsman without a gun. I am sure I would not exchange the quiet surprise and pleasure I feel, as, on rounding some point or curve in the stream, two or more ducks spring suddenly out from some little cove or indentation in the shore, and with an alarm quack, quack, launch into the air, quickly gain the free spaces above the tree-tops, for the satisfaction of the gunner who sees their dead bodies fall before his murderous fire. He has only a dead duck, which, the chances are, he will not find very toothsome at this season; while I have a live duck with whistling wings cleaving the air northward, where, in some lake or river of Maine or Canada, in late summer, I may meet him again with his brood."

In short, John Burroughs has

learned to be scathing of those who shoot our harmless, interesting field and wood friends, or make collections of birds' eggs. Enough collections have been made to serve the interests of science, then why should every Tom, Dick and Harry join in the foolishness of helping to exterminate those creatures which add so much interest to the world, and which usually are of positive economic value in keeping down insects and rodents?

To return, however, to his career. For the first twenty-six years of his life, Burroughs remained close to his birthplace, now turning furrows on his father's farm, now attending school at the neighboring academies, now teaching. During this time, too, he read much, being especially influenced by Emerson and Walt Whitman. His first essay, indeed, published in the Atlantic Monthly, showed the influence of the former so strongly that, on first reading, the editor could scarcely persuade himself that it was not written by the Sage of Concord himself. Burroughs, however, recognized the danger of following in the tracks of any man. He also recognized the untouched fields still remaining for the skillful pen in the world of na-

post of National Bank Examiner. "The country," however, which he loved as a boy, was calling him, and at last he bought a fruit farm at West Park, near Esopus, on the Hudson. His description of his final retirement "to the wilderness," where he and his son built, with their own hands, the now celebrated "Slabsides," is interesting: "To a countryman like myself, not born to a great river or an extensive water-view, these things, I think, grow wearisome after a time. He becomes surfeited with a beauty that is alien to him. He longs for something more homely, private and secluded. Scenery may be too fine or too grand and imposing for one's daily and hourly view. It tires after a while. It demands a mood that comes to you only at intervals. Hence, it is never wise to build your house on the most ambitious spot in the landscape. Rather seek out a more humble and secluded nook or corner, which you can fill and warm with your domestic and home instincts and affections. . . . One day I had an errand to a farmhouse nestled in a little valley or basin at the foot of a mountain. The earth put out protecting arms all about it—a low hill, with an orchard

that contained a secluded nook and a few acres of level, fertile land, shut off from the vain and noisy world of railroads, steamboats and yachts by a wooded, precipitous mountain, I quickly closed the bargain, and built me a rustic house there, which I call 'Slabsides,' because its outer walls are covered with slabs. I might have given it a prettier name, but not one more fit, or more in keeping with the mood that brought me thither. A slab is the first cut from the log, and the bark goes with it. It is like the first cut from the loaf, which we call crust, and which the children reject, but which we older ones often prefer. I wanted to take a fresh cut of life—something that had the bark on, or, if you please, that was like a well-browned and hardened crust. After three years, I am quite satisfied with the experiment. Life has a different flavor here. It is reduced to simpler terms; its complex equations all disappear. The exact value of X may still elude me, but I can press it hard; I have shorn it of many of its disguises and entanglements."

So he went "to the woods," and here he has spent the greater part of the happy years following, cultivating his grapes and orchard, writing on all sorts of subjects, but most of all of his neighbors, the robins, swifts, chickadees, phoebes, warblers, wrens, owls, and the occasional hermit thrush which sends him to the "Delectable Mountains." Often, too, he writes of Black Creek, or the Shattega, a mile away through the wood, and of Black Pond. "Here I get the moist, spongy, tranquil, luxurious side of Nature. Here she stands or sits, knee-deep in water, and wreathes herself with pond-lilies in summer, and bedecks herself with scarlet maples in autumn. She is an Indian maiden, dark, subtle, dreaming, with glances now and then that thrill the wild blood in one's veins."

Mr. Burroughs, in the course of his lifetime, has seen, also, something of the great world. A second trip to Great Britain twelve years after the first, gave him some food for reflection. In 1899 he was one of a party of forty invited by Mr. E. H. Harriman, the great railway magnate, on a trip across the continent to Washington State, and thence by steamer up to Alaska, and across to Siberia—a trip most delightfully described in "Far and Near." Upon another occasion (1902), he and his son spent a few weeks in the West Indies. At "Slabsides" he still continues to write, and we may hope to see many articles still from his bright and genial pen. In addition to the books above mentioned, several volumes of selections from his works have been published, notably, "Birds and Bees," "A Year in the Fields," and "In the Catskills."



John Burroughs in the New England Woods.

ture, and, in a firm attempt to break loose from his idols and blaze a trail for himself, began to write of the birds and animals, although, strangely enough, the first series of these essays was composed after he had left the Catskills. In 1863 he had gone to Washington, where he entered the Treasury Department, and it was during the years in which he served as assistant in the office of the comptroller of the currency, and in which part of the time his only duty was to be at his desk, that "Wake-Robin" and the greater part of "Winter Sunshine" were written. In 1871 he went to England on business for the Department, and the next year he resigned his position, only to take, a short time later, the

on one side, a sloping pasture on another, and the mountain, with the skirts of its mantling forests close at hand in the rear. How my heart warmed toward it! I had been so long perched high upon the banks of a great river, in sight of all the world, exposed to every wind that blows, with a horizon-line that sweeps over half a county, that, quite unconsciously to myself, I was pining for a nook to sit down in. I was hungry for the private and circumscribed; I knew it when I saw this sheltered farmstead. I had long been restless and dissatisfied—a vague kind of homesickness; now I knew the remedy. Hence, when, not long afterward, I was offered a tract of wild land, barely a mile from home,

Forehint Upon the Wind.

The scent of the fields, elusive,
Drifting across the wind,
Hepaticas half uncovered
And ferns that grasses bind.

The scent of the birch buds stirring,
Smell of mould from the hills,
And sweet, oh, sweet, from the maples
The odor of their stills.

Of these, is the vagrant incense
Borne to me on the wind,
Of all of these; with their telling
That spring's not far behind!

—Arthur L. Phelps.

Hope's Quiet Hour.

Taking Up the Cross.

Our Lord's command to each of His followers is: "Take up thy cross daily." That means more than brave endurance of troubles that can't be avoided, more than bearing a cross laid on the shoulders. Something that is hard or disagreeable must be done by somebody. One and another may pass it by, with a shrug of the shoulders and a half-formed thought: "Why should I do it?" At last, one, who cares more about helping others than about his own comfort, stoops and lifts the burden—glad to do more than is absolutely required of him, rejoicing to follow in the steps of One "Who for the joy that was set before Him, endured the cross, despising the shame."

In the Passion Play of Ober-Ammergau, there is one of the minor scenes which is very touching. It is when the Christ has fallen, exhausted, beneath the cross, and Simon, the Cyrenian, is captured by the soldiers and compelled to lift the burden. At first, he struggles, crying, "Indeed I am innocent; I have committed no crime!" Then he submits sullenly, because resistance is evidently useless. Then he accepts the heavy cross willingly, and stands up beneath it with uplifted head and radiant face, saying: "What is this I see? This is the holy man from Nazareth. For the love of thee will I carry it. Oh, would that thereby I could make myself useful to thee."

If we were ready to take up the cross daily, for the love of Him, Whom, having not seen, we love, we should make life easier for all about us, and our own souls would daily grow stronger and nobler by the daily exercise of patient endurance.

Think of the result of the opposite habit. One who shirks all the unpleasant things which he can leave to other people, slipping easily through each day with the least possible trouble to himself, makes life harder for others, and grows daily more selfish. He is soon allowed to take his own way. No one expects him to do anything disagreeable; he is not even asked to take his reasonable share of the little extras which demand attention—he is not asked because he makes such a fuss, and grumbles in such an ill-used fashion, that the rest of the family find it pleasanter to let him settle himself comfortably, regardless of the comforts and necessities of anyone else.

Happily for us—if we form this habit of refusing to take up any avoidable burden—God does not allow us to escape life's valuable schooling altogether. When people say, as they often do, "How can God be loving when He lays such heavy burdens on His children?" They might see the answer to their question by studying human nature. It is because God loves His children that He gives them the chance to grow in the beauty of holiness, and many of the most priceless lessons of life can only be learned in the school of suffering. Even if His children are given no choice, if they are "compelled" to bear the cross of pain—pain of body, of heart, or of mind—they can stand up bravely beneath the burden, saying with radiant face: "For the love of Thee will I bear it."

Browning is not holding up an impossible idea when he says:

"Welcome each rebuff
That turns earth's smoothness rough,
Each sting that bids nor sit nor stand,
but go!"

It is quite possible to thank God for the daily opportunities He has given us of enduring hardness, as good soldiers of Christ should be ready to do. Perhaps you have to live with someone whose temper is "difficult." No matter how hard you try to give satisfaction, you are blamed and scolded unjustly; until your own temper gets rasped, and you answer back in a way that makes matters much worse. If that is your position, then you have a splendid chance to

"take up" a daily cross. Anyone can be pleasant and amiable when with sweet-tempered people—there is no victory over selfishness and bad temper in that—but we claim to be disciples of One who loved His enemies, did good to those who hated Him, and prayed for those who used Him shamefully and cruelly.

One day lately I was in a small shop in Toronto. The owner of the shop began to tell me how rude a lady had been to him because, after he had put himself to some inconvenience to do a job of mending for her in a hurry, she had found out that she could have got it for ten cents less at Eaton's. "Just wait till she comes to ask me to do something for her again," he exclaimed, "and I will tell her my opinion of her and refuse to do it. He was hoping for an opportunity to overcome evil with good, for a chance to show courtesy to one who had been rude to him—wishing for the chance, so that he might throw it away and sink to the level of the woman he despised!

The cross must be taken up "daily," says our Master. Then He must be speaking of very tiny burdens, as well as heavy ones, for we don't find large crosses awaiting us every day—at least, most of us don't. We are not allowed to make

Redeemer of the world, have we not all the same glorious privilege? Christ is one with the least of His brethren. If you help a child with his "home-work," or an old woman with her knitting, or even try to cheer a fretful baby, are you not lightening the load of one of the members of the Body of Christ?

St. Paul says that to bear one another's burdens is to fulfill the law of Christ, and we are also told that Love is the fulfilling of the law. It is possible to take up a cross in such a way that the person for whom the kindness is done would rather have been left to bear the burden alone. If you consider it "a bother" to go out of your way, then there is little of the spirit of love in your action. Look on every call to service as a glad privilege, and you can give joy to Christ every day. He chose a path of action which resulted in terrible suffering, chose it of His own free-will, because it was the royal road of Love. Are we—we who have promised to walk in His steps—free to choose the easiest possible path? The royal road of Love is rocky and steep, but it is far more joyous than the easy path of selfishness. Joy is a word that we only learn the meaning of when we are climbing,

The Beaver Circle.

[All children in Second Part and Second Books, also those in Third Book, if ten years of age or under, will write to Junior Beavers' Department, which will appear as early as possible each month. Please address letters to Junior Beavers' Department, "The Farmer's Advocate," London, Ont.]

Our Junior Beavers.

Dear Junior Beavers,—We have had many a snowstorm this winter, but you should have seen the snowstorm of letters by which poor Puck was snowed under during the past two or three weeks. In they came, by the hundred, so that it was no easy task to judge them,—and Puck felt so sorry that, after all, but a very few could get a prize, or even have the letters published at all. However, he hopes you enjoyed writing the stories, anyway. It was good practice for you, and, you see, you may be able to find your name in the Honor Roll.

In the first place, dozens of letters were thrown out because the Beavers who wrote them were too old. If you will read the notice at the head of the Junior Beaver Circle, you will see that no one over ten years old, or past the Third Book, can write for the Junior's once-a-month corner. All the rest must write for Senior Beavers. Even if you are only ten years old, but in the Fourth Book, you must write for Senior Beavers. You see, we must keep one little corner which the smallest Beavers of all can have to themselves.

Again, Grace Gidney wrote one of the very best letters, but as she did not sign her age, and did not send it before the letters had to go to the printers, her story had to be set aside. Ida Ferguson, and others, made the same mistake.

The prizes, then, went to Wilfred McEwen (age 10), Maxville, Ont.; Thelma Brown (age 10), Yeovil, Ont.; Francis Nichol (Book II.), Hubrey, Ont.; Hattie Pelly (Book II.), Abercrombie, Pictou Co., N. S.

Extra prizes were also given to those among the very youngest Beavers of all, who wrote the best letters: Margaret Ketchen (age 8)—who must send us the name of her post office before she can get her prize; Clement Hilliker (age 8), Burgessville, Ont.; Graham Wray (age 6), Glenbarrow, Ont.; Velma Sanderson (age 7), Morrow, Ont.

Now, for the Honor Roll! All of the following wrote good letters: Hazel Clarke, Francis Simpson, Elmina Learn, Mabel Sollitt, Kenneth McIntosh, Bertha Ginrich, Mabelle Fitzpatrick, Mabel Dann, Dorothy Young, Lulu Bell, Florence Poole, Florence Deans, Lulu Gardener, Florence Tambie, Irene Clough, Hamilton Clutton, Muriel Piens, Alvin Pym, Marion Burch, Jennie Harwood, Clara McLean, Lillian McClellan, Murray Little, Mabel Guest, Helen Scott, Dorothy Newton, Maggie Gavin, Kenneth Tuttle, Norman Schell, Louis Cowan (P. E. I.), Beatrice Nichols, Florence Jones, Ecallan Lraep, Hugh Malcolm, Evelyn Richardson, Laura Chesney, Dorothy Hunter, Cecile Webster, Lena Fifield, Sadie Henry, Verta Christmann, Wilfred Srigley, Milfred Hopkins, Bruce Smith, Sam Willis, Morris Reid, Mary Ellis, John Irving, Nina Srigley, Minnie Pringle, William Hemingway, Mary McLeod, Cordella Frey, Ernie Randall, Annie Nicholson, May Robinson, Ella Kirk, Laurene Ellis, Ella Ellis, Barbara Martin, Hamilton Ross, Grace McLean, Edna McGregor, Alma Hall, Ivy Cage, Gladys Dann, Leslie Wilcox, Tainy Mulligan, Monta Nichols, Leonard Hillman, Olive Smith, Maggie Walker, Margaret Fraser, Myrtle Harris, Nellie Van Sickle, Maggie Malcolm, Hazel Willows, Nora Haase, Mabel Haase, Olive Schweitzer, Annie Snider, Alma Handley, Gladys Skippen, Gertrude Noon, Arthur White, Carman Knox, Grace Chambers, James Watson, Annie Pfahler, Hazel Pfahler, Jean Barker, Sarah Jackson, Ruby Leighton, Mabel Leighton, Wild Rose, Percy Neale, Willie Laing, Lila Chapel.



A New Competition for Junior Beavers.

Write a letter about this picture. All letters must be at this office before March 23rd. Please address, Junior Beavers' Department, "The Farmer's Advocate," London, Ont.

troubles for ourselves, only a cross that God offers to us is our portion—take up "thy" cross, He says.

Several years ago I was superintending a game of "musical chairs" at a children's party. One little girl failed to reach a chair in time, and was obliged to give up her place in the game. She was inclined to be tearful, but it could not be helped, apparently. Then an older child saved the situation most unselfishly. She said, brightly: "Take my chair, I will go out of the game and you can have my place."

It was a little thing to do, but she could not have given up her own inclinations with such ease and readiness unless she had already formed the habit.

To take up a very heavy cross, once or twice in a lifetime, will not make a character round out in symmetrical beauty. But one who is constantly on the watch for the privilege of bearing trifling burdens, which might be left entirely on the shoulders of others, is not only fulfilling the law of Christ, but is daily becoming more like Him who is altogether lovely.

If Simon the Cyrenian was given the privilege of helping with the Cross of the

when we are growing into the likeness of Him whose greatest Name is LOVE.

"Love is the filling from one's own
Another's cup.
Love is daily laying down
And taking up.
A choosing of the stony path
Through each new day,
That other feet may tread at ease
The smoother way.
Love is not blind, but looks abroad
Through other eyes,
And asks not, 'Must I give?' but
'May I sacrifice?'
Love hides its grief, that other hearts
And lips may sing;
And burdened walks, that other hearts
May, buoyant, wing."

DORA FARNCOMB.

I visited a school the other day, writes a correspondent of the Manchester Guardian, where a class of boys were engaged on an essay on Milton. One had written the following: "Milton was a splendid poet, and wrote that beautiful poem 'Paradise Lost,' and on the death of his wife, 'Paradise Regained.'"

Beaver Circle Notes.

Gladys Skippen, Green Bay, Ont., wants someone, age 10, Book III., to write to her.

A very good letter, with Canboro stamped on the envelope, had no name signed to it. Don't forget, Beavers, to sign name, age, and post office, every time you write.

Sadie Henry sent a little photo of herself, which is now pinned up on Puck's desk. Thank you, Sadie.—You are a happy-looking little lady. With a fine Japanese parasol, too!

Lulu Gardner, won't you tell us some more about that wonderful 12-year-old cat?

The Prize Essays.

We are sorry we have not space to publish all of these. However, here are a few. The prizes are equal. We may say here that a few failed in getting a prize because they did not look at the picture closely enough. Some said the frog was a toad, and forgot to notice either the water or the steps. A "picture" competition, you see, is given to teach boys and girls to observe, so don't forget next time. Always try to write a nice, interesting composition, bringing in everything you see in the picture.

The Kittens and the Frog.

One beautiful summer day, old Tabby came back to her basket of sawdust where she had left her two kittens, Spot and Skip, and told them if they would be good children, she would take them for a walk.

She brushed and combed and smoothed their fur, and started down the path toward the river. Spot and Skip frisked and jumped, and chased a butterfly, but did not catch it. Old Tabby mewed for her kittens, and they walked on till they came to the bank of the river, where there were stone steps going down to the water where the boys kept their boats in the summer. The kittens wanted to go down to the water, so old Tabby went down with them, and sat on the step close to the water.

They thought the water was very nice, so they looked over and saw their shadows, like two other kittens, looking up at them. While they were sitting there, they saw a frog pop his head out of the water before them. The kittens had never seen a frog before, and they wondered if it would not be a good, nice thing to play with, but old Tabby's eyes grew fierce, and she would have stretched out her paw and caught poor froggie, and taken him in for their dinner, but he was a little too far out in the water, and she did not like to wet her paws.

Froggie thought the kittens would make nice little play-fellows, but when he saw how angry their mother was, and hearing his own mother calling, "jug-o-run," he decided it was time for him to go home, so he went down into the water and went home, while Tabby and her kittens climbed the steps and went home to their basket of sawdust.

WILFRED McEWEN
(age 10, Book III.).

Mrs. Tabby, a very handsome cat, lived with her two kittens, Tommy and Dick, on Mr. Brown's farm down by the river, where she made a home for her children in an old shed. One day, she and her children strolled down to the river, and were sitting sunning themselves on an old landing by the edge of the stream, when a frog came up out of the water quite near them.

Dick, who was rather shy, hid behind his mother, but Tom stood there winking and blinking at this queer old green and yellow being, wondering what kind of a fish it could be. "Who are you?" croaked the frog. She answered, "I am Mrs. Tabby, and who are you?" "O, I am Mr. Frog. I live down the river a little ways." "Is that your family?" he asked, and then, laughing, he said, "Why, I have a thousand children, I think, although I

have never counted them yet, and I don't believe I could if I tried, for when I was a boy my education was sadly neglected, and, although I have learned to sing fairly well, I am not very good at numbers."

Thus drawn into conversation, the Frog told Mrs. Tabby a place where there were lots of mice, amongst the long grass down by the river. This was very welcome news, for they had not been able to find a mouse that day, and they were very hungry. So they scampered away, and soon returned with their hunger satisfied. That night there was a terrible storm. Near morning, Mrs. Tabby and her family were awakened by the frog, who said they had better run to a place of safety, because there was a flood coming.

They set out in the rain for the barn, which they reached in safety, feeling very grateful to the thoughtful frog. The next morning when they looked out, the shed was no place in sight, and the place where it had stood was a mass of roaring, angry water.

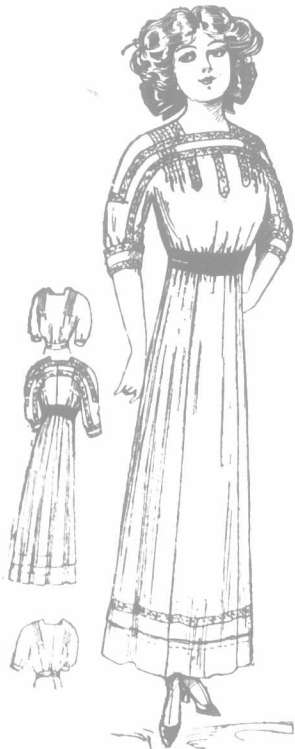
Time had passed by when one afternoon the kittens were romping about, when they heard a noise, and, running to where it came from, they found a hawk trying to carry off the frog. The kittens made a dive at the hawk and put it out of existence. This act of bravery made Mrs. Tabby very proud of her two children, as well she might be.

The kittens grew up to be fine cats; but they never forgot their old friend, the frog.

FRANCIS NICHOL
(Book II.).

It was early in the spring, but the pussywills were out, and lots of new things were coming to life, when our pussy-cat and her twins went out for a stroll and little adventure. It was late in the afternoon, and birds were flying about, so puss thought it a good time to take her little ones out. They wandered around till they came to a nice platform, made of nice, square stones, so they sat down to wait for passing birds. They heard some very strange voices in the pond of water, some saying "Rodrick! Rodrick! kep-a-rond! kup-a-rond!" and some whistling. They never saw anything very close until, all of a sudden, a green, shiny frog popped up out of the water close by. The three got a start and surprise to see a living creature coming up out of the cold, chilly water. Puss made a spring forward, but the creature's skin was different from birds' or mice, and was harder to hold on to. Puss scrambled back on the stones, a little wet, but wiser and sadder. Then puss saw Ted running to the house, saying, "I saw puss after a frog, but she missed it." Then pussy sneezed and thought "that's the name of the bird I never caught."

HATTIE HELENA PELLY (Book II.).

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The Ingle Nook.

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

You are sitting by the kitchen stove, hands clasped, feet on the oven shelf; it is storming "blue vengeance" out of doors, sleet beating at the windows, icy snow collecting into gritty drifts, branches rattling in unbending mail,—there is nothing to do but sit indoors and mope, and so you are not feeling in the best of humors. Then someone comes in from the post office. You read your letter or two, and then, by good luck—here are the spring catalogues, gorgeous as ever in big, red tomatoes, and blue-green cucumbers, and corn daintily slit apart to show a twin-row of pearls, and asters such as never were, and pansies that could not miss taking the first prize at the Canadian National could they be realized. Ordinarily, you know a good picture when you see it, and rejoice in "atmospheres" and soft tones; but even to you there is nothing incongruous in the blaze of color which clothes the seed catalogue. Isn't it a harbinger of spring? Doesn't it bring back the days of childhood, whose savage taste screamed aloud in delight at the ancestral counterparts of this? Best of all, doesn't it set you a-seeing visions and dreaming dreams wherein gardens not to be despised of "good Haroun Alraschid" take form and dissolve, and take form again in arrangements and rearrangements, each better than the last? And so you turn over the leaves, dreaming and dreaming, and this is right, for unless there be first the vision, how can any great thing come to pass?

No, I am not altogether joking. Your garden really is not a trifling thing. It is worth while, especially to you, for to each of us the things which concern us are, after all, the great things. The vegetable garden,—what does it not bring?—Variety to the table; yes, beauty, too, in its curled lettuce, and crimson radishes, and feathery celery, and crisp, green onion spikes. And are not its vulgarian parsnips, and potatoes, and beets, and turnips, hidden away there in the soil, just transmuted sunshine, and moisture, and medicinal salts, and the fat of the earth, waiting to realize themselves in ruddy cheeks and bright eyes? . . . A garden a trifling thing? Away with such nonsense!

Then, the flower garden;—but who can describe what the flower garden means to its lovers? Who translate the messages too fine for words which it speaks to her who will hear? Who be eloquent of the honesty with which the little faces of blue or pink or crimson look up to friend or foe alike, asking only for a little love and a little care, that they may multiply to a thousandfold? What need to tell about all this?—for you know all about it, and so do I.

And, now, to business: Almost every spring, there come filtering into the office questions such as this: "What should I plant in a shady spot in my garden?" "Tell me the names of some rapid-growing vines"; "What would you plant on the north side of a house?" and so on. So, to forestall all this, and save some trouble, we have done some investigating and some epitomizing, and the following is the result. Complete lists of flowers are not, of course, given, but care has been taken to give good standard varieties.

I. Plants that grow quickly, flower profusely, and cost but little:—(a) Vines,—Morning-glory, cobeæ, moonflower, ornamental gourds. Provide all of these with strings to cling to, and hasten slowly-germinating seeds, such as morning-glory, by soaking them for two or three hours, or even over night, in warm water, planting immediately afterwards. Plant cobeæ seeds as early as possible. (b) For a shady place:—Musk, pansy, godetia, nemophilas, tuberous-rooted begonias. Ferns make a fine background for these. A good vine for a shady place is adlumina. (c) For planting in bright sunshine:—Balsam, nasturtiums, sweet peas, gailardia, portulaca, petunia, sweet alyssum

(use plenty of it), candytuft, cornflower, marigolds, annual phlox, asters. (d) Plants for perfume:—Sweet peas, mignonette, verbena, sweet sultan, heliotrope, stocks.

II. Bulbs. (a) Those that bloom in spring and early summer:—Crocus, Dutchman's breeches (to be found in the woods), snowdrop, crown imperial, hyacinth, meadow lily, June lily, grape hyacinth, poet's narcissus, jonquil, daffodil, tulips. Some of these need a year to mature before blooming. (b) Those that bloom in midsummer and fall:—Gladiolus, orange lily, Easter lily (blooms late when planted out of doors), Turk's cap lily, tiger lily.

III. Hardy plants for a permanent garden. All of these may not bloom this year, but will be well-rooted for next. Some are really annuals, or biennials, but self-sow, so are permanent; others are true perennials. (a) Those that bloom in spring and early summer:—Aquilegia, alyssum saxatile, rock cress, lily of the valley, June pink, bleeding heart, candytuft, iris, forget-me-not, peony, foxglove, moss pink, cowslip, mandrake, bloodroot, windflower, foam flower (the last three from the woods), honesty, Iceland poppy, pansy. (b) Those that bloom in midsummer and fall:—Monkshood, plume poppy, shasta daisy, coreopsis, larkspur, day lily, baby's breath, everlasting pea, ragged robin, bergamot, bee balm (last two from moist woods or swamp edges), Oriental poppy, perennial phlox, golden glow, double buttercup, spider lily, hardy verbena, Alleghany vine (or Adlumia), hollyhock, Canterbury bell, sweet William, pansy, sweet alyssum, cosmos (sow very early in the house), morning-glory, four-o'clock, Shirley poppy, portulaca, scarlet salvia, French marigold.

Now, this is a pretty good list, is it not? Ah, but I'm afraid I have left you in the condition of Pat, who "couldn't see London for the houses." However, this selection may be a help to you as you sit by the stove and dream of your garden, and mark your selection in the catalogue. Do not choose too many kinds, but get more seeds of a few kinds, and try "massing" this year, won't you?—seeing to it, of course, that substitutes are coming on to fill the place of those that have finished blooming.

Just one word more,—order your seeds early, so that you will have good choice, and may be able to start such seeds as need it in the house or hotbed.

Seasonable Recipes.

Pandowdy.—Fill a dish with layers of sliced apples, each layer sprinkled with sugar and cinnamon. Pour in 1 cup water. Take half a cup of rye flour and the same of corn meal, a pinch of salt, and enough boiling water to make a dough. Cover the top of apples with this; bake slowly 5 hours, then break the crust down into the apples, cover with a plate, and bake 2 hours longer. Remove from the oven, and let stand, covered, all night. Serve with cream and sugar. Delicious.

Creamed Turnips.—Pare the turnips, slice, and cut into cubes. Let stand in cold water an hour, drain, then cook until tender in boiling water. Drain, cover with a cream sauce, seasoned with butter, salt, and pepper, or paprika.

Eggs Baked with Cream.—Scald a scant cup of thin cream or rich milk for every three eggs. Butter the baking dish, pour in the milk, and break the eggs in carefully. Sprinkle a little salt over each, and set in the oven. When the eggs begin to set, sprinkle with grated cheese, and return to the oven to finish cooking.

Fish Balls with Cabbage Salad.—Pick some cooked fish fine. Press some hot boiled potatoes through the ricer, and add to them a little fish sauce, or sweet cream, butter, pepper and salt. To the fish, add just enough of the hot potato to hold the fish together. Shape into balls, roll in fine crumbs, and fry in deep fat. Serve with catsup, or with very finely-cut cabbage salad, which may be served, if you wish it to look pretty, in lemon-skin cups, which may be left after making marmalade.

Orange Marmalade.—Slice very finely 2 dozen unpeeled oranges, and remove the seeds. Add 2 lemons shredded, or the juice alone. Measure the juice, and add enough water to make 3 quarts liquid. Put all away in a crock or granite vessel in a cool place for over night. Next morning, bring very slowly to the boiling

point, and simmer until the peel is very tender. Then stir in 1 lb. sugar for every pint juice, and boil until the skin looks clear. Remove, and, when cool, turn into jelly glasses, covering each with melted paraffin. You may use bitter oranges and omit the lemon, if you choose. Personally, I like this best.

To Candy Orange and Lemon Peel.—Keep the peel in mild salt water until enough is secured, then cut into sticks, place in cold water, and boil. As soon as the water tastes salty and bitter, change, and repeat with cold water again. When clear, make a thick syrup, add the peel, and boil down until the syrup is gone. Turn on plates, and, when half-dry, roll in granulated sugar, then continue the drying.

Cooked Figs.—Wash the figs well, then cook until tender, simmering gently. When almost done, add a very little sugar. Serve with whipped cream, and some little cubes of fruit or gelatine jelly.

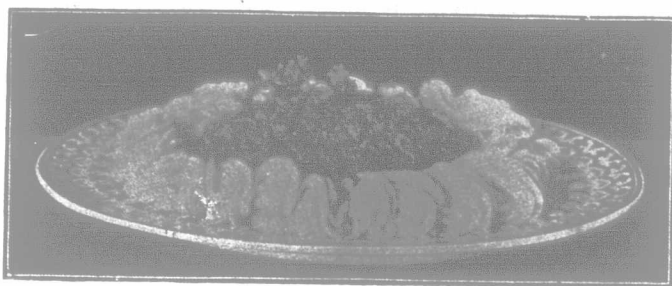
Beef Hash, Russian Style.—Put 2 lbs.

Soak morning-glory and moonflower seeds in warm water for several hours, then plant immediately. Moonflowers require, in addition, a notch filed in the seed.

Do not cover very fine seeds with soil. Simply press them in with a smooth board, and water the box by absorption. Plant large seed from one to two inches deep.

You may gain a month or two in nearly all kinds of vegetables by sowing the seed in the house or hotbed. Do not keep them so warm that they will grow spindly. Sow lettuce, cress, etc., at intervals of two weeks, to keep up a succession.

If you have never "bothered much" with a garden, try the experiment this season, vegetables, and a few flowers, too. There is no better investment for a dollar or two. Buy the seeds directly from a reliable seedsman, and give the plants the best of care from sowing to maturity.



Beef Hash, with Piped Potatoes.

round steak through the meat-grinder, with 2 small slices of onion and a sprig or two of parsley, if you have it growing in the house. Otherwise, add a little dried herbs. Add 1/2 cup fine bread crumbs, 1/2 cup broth or a beaten egg, and season to taste. Mix well, and shape in a loaf. Lay on an agate pan on which a slice of salt pork has been placed, sprinkle the top with fine crumbs, and bake 40 minutes, basting four or five times with fat. Remove to a serving dish, and pipe around it hot mashed potato, seasoned with salt, pepper, butter and cream, and beaten very light. Brush the edges of the potato with beaten egg, and set the dish in the oven (over a dish of hot water to protect the plate) to brown the edges of the potato. The "piping" is done through a pastry-bag.

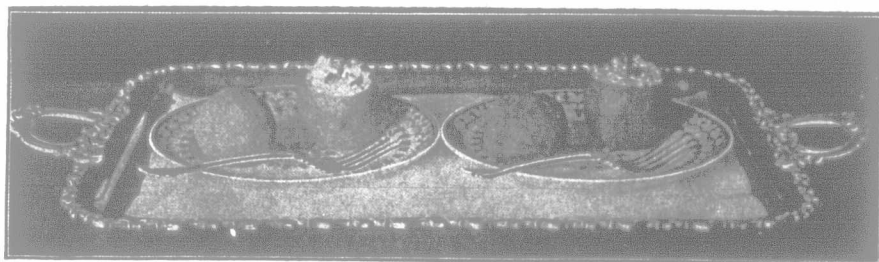
To Make a Pastry-bag.—Make a cornucopia-shaped bag of pillow-ticking, leaving a small hole at the small end. Through this, slip a small tin tube, made larger at the one end than the other—your hard-

My Vegetable Garden.

(A half-over paper that is seasonable now.)

My Vegetable Garden is a topic that should interest every woman, whether living in town or country. True, the woman who is so fortunate as to have her home in the country, has a decided advantage over her town cousin in that she has at hand all the elements necessary for the culture of her garden; earth enriched with a wealth of fertility from the barnyard, oceans of pure, sun-warmed air, and usually all the implements necessary for the cultivation of her little patch of health-giving sweets.

When planning a garden, one should aim to have it as near the house as possible, as when "the gardener" has house, poultry and dairy to attend to, she must plan to save steps. My vegetable garden is within a few steps of the kitchen door, and as a protection against "biddies and



Fish Balls, with Salad, in Lemon-skin Cups.

were man will make this for you—and your pastry-bag is complete. It is splendid for piping potatoes or cream-puff paste through. A smaller tube may be used for icing. By this simple method, very handsome dishes may be produced. Be sure to boil the bag frequently, to keep it sweet.

Garden Matters.

Prune roses now to force new shoots. The flowers come on new wood.

Sow such flower seeds as asters, snapdragons, salvia, castor beans, petunias, verbenas and salpiglossis in the house now, and at intervals of two weeks, to secure succession of bloom. Cosmos and cobaea need only the first sowing, and as early as possible, as later sowings are not likely to flower out of doors. Poppies do not transplant well. If sown in the house, it should be in eggshells, so that they may be set out without disturbing them, by breaking the shells.

their broods," is enclosed by a split-cedar picket fence.

I find it a decided advantage to have the garden drilled, as for turnips, then all that is necessary is to make a rut in the middle of each drill with a hoe, sow the seed, then draw the soil over it with the hoe. This plan also leaves space for the cultivator to uproot weeds and loosen the soil, features so essential to the growth and productiveness of all plants.

As early as the ground can be properly worked, I sow, for early use, such vegetables as the family have a liking for; if space is limited, one may have a drill in the turnip field reserved for later vegetables.

The following list of vegetables give variety to the table, and health to the consumer: Carrots, Scarlet Intermediate; beets, Blood Turnip. Those I sow rather thickly, then, when two or three leaves have formed, I thin sparingly; the second thinning is among our first treats from the garden. Beans (Yellow Wax), tender and tempting, delicious for pickle; lettuce,

crisp to the palate, and dainty as a garnish; radish, rosy and appetizing,—sow at intervals of two weeks; cabbage and cauliflower, sow in boxes in March and transplant in May; onions, from the tiny pickling to the Mammoth Silver King, so mild, tender and sweet that it may be eaten raw without "nipping."

When planting or sowing onions, bear in mind the aged lady who, when asked on her hundred-and-third birthday to what she attributed her remarkable longevity, replied: "Ever since I can remember I have eaten onions in some form once every day."

No garden is complete without the real garden peas, so tender and sweet. Many country dwellers depend entirely on the field peas to supply their table, but anyone who has never grown the garden varieties—the great big, fat fellows—has indeed missed the real pleasure of "shell-ing peas." The three best varieties for the garden are Nott's Excelsior, Thos. Laxton, and Improved Stratagem. These can all be sown at the same time, and be ready for use in succession. Corn, Sweet Cory—sweet by name and nature—I plant in a row, dropping the seeds about six inches apart. I also plant a row of early potatoes in the garden, just for a treat. The luscious melon and tomato, although of a fruity nature, must find a place in our vegetable garden; also the cucumber (white Spine), crisp for slicing and delicious for sweet pickle, and the pumpkin for pies, that "melt in the mouth." Plant cucumber and melon seed at extreme ends of the garden, about the middle of May, in hills, into which a shovelful of well-decayed manure has been worked; thin to four plants to each hill. Set out tomato plants in well-enriched ground after danger of frost is past; plant in a row, then on either side of the row put a pole supported at each end about a foot from the ground; this makes an ideal support for the fruit-laden vines; pinch off all side shoots to ensure early-ripening and larger fruit. Don't forget to grow a little plot of parsley, for nothing adds to the attractiveness of the table during the hot summer days so much as the dainty green garnishing. Celery plants are confined to the field, as attending to growing celery is rather taxing. I find it economy to buy vegetable seed in bulk, as one gets double the quantity contained in packets for the same expenditure. Many seeds, such as corn, peas, beans and parsley, germinate more rapidly if soaked for a few hours in tepid water before planting.

Vitally important is the fact that to have crisp, early vegetables for the table, one must have a "real liking" for garden work, and must at times—especially on the farm—neglect, for the time being, some of the less-important duties of housework, as the seed must be sown early to give good results.

With fresh seed and rich soil, the time and money spent on a vegetable garden will more than repay the farm gardener, for she can have fresh vegetables and salads galore, from early summer till "frost time," and after that a well-stored cellar.

PERI WINKLE.

Color Scheme for a Bedroom.

Dear Dame Durden,—I am like most other chatters, always glad to come to your cozy Nook for help and advice. It is drawing near to spring, and that means the general housecleaning and renovating which most of us dread, and yet enjoy. I have a bedroom needing some fixing up. It is in the north-west corner of the house, with a north and also a west window, with deep window-seats. The paper is too good to change; it is a cream background, with blue. The furniture is light-colored wood. What sort of rug would look well with these, and what designs would be suitable for stencilling? Also, what material should the stencilling be done on, for covers, curtains, etc.?

Some time ago I saw something, and I fancy it was in the Nook, on ideas for new schoolhouses. I think there were some illustrations given of some schools, not of the ordinary, but something more attractive-looking, and equally as good in every respect. If this information could be repeated, or some new given, it would be gratefully received. Wishing the Nook continued success.

Bruce Co., Ont. PUNCE.
Your cream and blue wall paper should be lovely for a bedroom. If the paper

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is very much figured, a plain, or almost plain, blue rug, of a pretty, deep shade, would be suitable, with plain scrim curtains, stencilled with a narrow border in blue, or blue and green. We have received some new stencils, with at least one or two patterns that would do splendidly for you; price, as before, \$1.00 for the set, or a set sent free to any subscriber who sends us in one new subscription. Scrim is a fine material for stencilling; for both curtains and covers, but five-cent factory cotton really looks very well, if one wishes to economize.

We do not like to repeat articles, etc., in "The Farmer's Advocate," but if you will refer to the back numbers, which, no doubt, you have saved, for May 13, 1909; March 31, 1910, and July 28, 1910, you will find the articles and pictures to which you refer. We are on the lookout for new material in regard to attractive schoolhouses and grounds in Canada, but they seem to be a rather scarce quantity. Samples of the opposite would not be so hard to find.

Chocolate Fudge.

Dear Dame Durden,—Having seen Lankshire Lass' inquiry for chocolate fudge, I have a very good one, and easily made. I use cocoa instead of chocolate, as it is not so strong.

Cocoa Fudge.—One cup white sugar, 1 cup brown sugar, $\frac{1}{2}$ cup syrup, $\frac{1}{2}$ cup sweet milk, $\frac{1}{2}$ cup melted butter. Boil 2 $\frac{1}{2}$ minutes, then add 2 teaspoonfuls cocoa, boil five minutes longer, then take from stove and add 1 teaspoonful vanilla. Beat till creamy, then pour in buttered pans, and mark in squares.

Lanark Co., Ont. ISABEL.

The Woman Farmer.

Dear Dame Durden,—I am surprised you did not have more letters from the women who farm alone. I feel sure there are some amongst your readers. I have never farmed alone, but my mother has, and her troubles have been many, most of which came from hired help. They thought they knew far more than she did, and times without number would say to others, "Think of a woman telling me how to do this or that! What does she know?" Since thinking the matter over, I find the only way out of the difficulty is to get, if possible, an educated or Christian man to manage for you, for you always find an ignorant man will give you an amount of trouble; but it seems almost impossible to get the former, unless during summer months. It is a pain to any refined woman to have anything to say to some of the hired help she must have if left alone. Her husband or son can manage them so easily, but how hard it is for her. I fear there are very few of us who would have as easy a time as "Lady Farmer." It is hard for a woman to be compelled to sell her farm because of these things, and perhaps have to live in a city, shut away from nature and all its beauties. To me, there is no life to be compared to the life on the farm. It seems as if "Earth's crammed with heaven, and every common bush afire with God."

I wish others would write about this subject. I would like, if I am wrong in my statements, to have my letter pulled to pieces by someone who knows more about it.

AN INTERESTED ONE.

About Furnishing.

Dear Dame Durden,—We have taken "The Farmer's Advocate" ever since we were married, but this is the first time I have made bold enough to write to you. I would like your advice in regard to some small house furnishings, as to what is good form and what is not. Right here, though, I want to explain, and be perfectly free and honest. This spring, or winter, rather, we have bought a fine two-story, white brick, cottage-roofed home, known as "Cedar Cottage."

What is best for curtains for the bay window in the parlor? Is lace the better style? What is right taste, or form, for a front small-hall furnishing, floor covering included? The stairway leads up from this hall, with a finely-finished banister. Would the narrow panels of wine-colored glass in door, with a floral scroll, need any draping with net or any material? Would sash curtains, white, be proper for dining-room? and I would like (in my

mind's eye) to have inner dark curtains to give an air of privacy and coziness in summer at nightfall, and of warmth in winter. But are they used on large curtain pole, and brought back entirely to the wall in daytime, so as to admit the sunlight?

Now, Dame, please do not laugh at my way of putting questions, as baby sits here bothering me, and it is hard to collect one's thoughts and express one's self properly. Would the inner curtains on this window be best to have them crimson, as there is a doorway without a door, and for which I have red or crimson tapestry curtains in this room? Our linoleum has cream ground, with red and green floral pattern in it. Our couch is green velvet. I believe in doing without, rather than have poor shoddy furnishing.

In an old number of "The Farmer's Advocate," I noticed something about matting along behind a couch. Where can I get it, and what kind is best? How far does it extend upwards, or does it go right down to the couch, or, rather, below it? Are there different widths, and please mention about the moulding, or plate-rail along the top of this matting.

Oh, by the way, is it good style to have curtains on doorway where there is a door out of parlor into hall? And, if so, what is best?

Hoping you will condescend to answer me, and assuring you that I have often blessed you for your helpful hints in "The Farmer's Advocate." S. M. H. Oxford Co., Ont.

Lace is seldom used for curtains now, except for very formal drawing-rooms, when very handsome ones may be used. In greater favor are pongee silk, with wide, heavy insertion; heavy nets, similarly trimmed; madras, or scrim with insertion or stencilling.

For the hall, very little furnishing is necessary. The floor may be stained or painted, and one long runner rug laid along it. The old-fashioned hat-rack piece of furniture is not favored now, a wooden hall-seat, with a broad hall-mirror hung above it, being used instead. Sometimes this mirror has pegs at the side for coats and hats, but a nicer fashion is to have the pegs—turned wooden ones, preferably—in a row on some inconspicuous portion of the wall. Still nicer, if it can be managed, is to have a closed-in closet under the stairs, for hats and coats. This, with one hall-chair and one inconspicuous umbrella-stand, will be enough furnishing for an ordinary hall. Of course, a large, square hall, would need more. In any case, have the paper good, and see to it that it blends harmoniously with that in all the rooms opening from it. . . . I do not think draping would improve the crimson panels in your door.

Curtains reaching just to the sash, with a valance across the top, are the kind used for dining-rooms. They might be white, but would be prettier either dyed to a tint the same as the ground color of the wall, or trimmed with a chintz or stencilled border (if curtains are plain) to blend with the color-scheme of the room. If you choose heavy, dark curtains, of course you must have net ones, also close to the glass. All dark curtains, unless when needed as a screen, are drawn well back over the wall in daytime. I have seen crimson ones that looked very well, but, of course, they were nicer in winter than in summer. I believe, on the whole, that I should rather have thin madras or scrim curtains to match the ground-color of the paper. One has to avoid spotty effects, you know.

Good Japanese matting, or fibre matting, are suitable. You should find them at any carpet store. The piece should go right down to the couch, and extend upward for three or four feet, or about one width of the matting. The moulding for the top may be the ordinary wooden moulding used for placing below the wall-paper border or frieze. If you want it wide enough to set vases, pictures, etc., on (do not use too many of these), you had better buy the regular plate-rail moulding, choosing a piece that is narrow and not too heavy-looking.

Curtains are still used for such doorways; they may be of plain velours or rep, or, in certain rooms, of striped Bagdad material. Monkscloth and casement cloth also are good.

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An Enquiry.

Some weeks ago I found in "The Farmer's Advocate" a quilt pattern called the Basket Pattern. It was all right, and I made a number of baskets, but all my skill will not put them together. Will you please find out how they go together, if possible, and publish?

ENQUIRER.

Will some of those who sent this pattern, please answer?

Lullaby.

Listen—the robin!
Baby of mine, 'tis waking-up time,
Drowsy-head, deep in the pillows!
Open your eyes! Spring's first surprise
Waits for you there in the willows.
Sunbeams have crept from their beds
In the sky,
Breezes have stirred in their cradles on
high.
Soon as the dawning
Robin was warning,
"Hurry—be quick—do get up—it is
morning!"
Little my dear, have you waked, can
you hear?
Listen—the robin!
—Charlotte, Louise Rudyard.

St. Patrick's Day Party.

For "Subscriber." Requested. Have the room decorated with plenty of green, and harps and shamrocks everywhere. Ask the guests to come dressed either as some Irish character, as "Erin," "Miss Hibernia," "Brian Boru," "Pat and Mike," etc., or to represent some Irish book or poem. Give a prize of a shamrock stickpin to the one who guesses the most of the characters correctly; also a booby prize of a pig made with a potato and

some toothpicks, to the one who is behind. Have Irish songs and recitations, such as "Kathleen Mavourneen," "Good-bye Mavourneen," "The harp that once thro' Tara's halls," etc.; and for a bit of fun, an Irish potato race—gathering up potatoes on spoons, you know. For refreshments, have cheese wafers tied with green ribbon, olives, pickles, sandwich, Irish potato salad, cake, and pistachio jelly. A good Irish tableau or two will finish the evening very well.
Please do not ask that information of this kind be sent privately. It is against rules.

The Odd Country.

Where's the land o' Dreamland?
How should I know?
On the moon's further side,
Where the drift clouds ride
And the stars hang low.
Where's the sound o' Dreamland?
How should I hear?
Bell tones from far below.
Night's haunting cock crow,
Olden songs and dear.
Where's the gate o' Dreamland?
How should I tell?
Sudden you stand before,
Slip through the quiet door—
Ah, but all's well.
JOSEPHINE DODGE DASKAM.

"Here's a note from one of those cheerful idiots," remarked the answers-to-correspondents editor, as he opened a yellow envelope. "who wants to know why Niagara falls."
"That's easy," rejoined the horse reporter. "Tell him it's because its bed cannot hold it up."

Golden Light at Eventide.

(A sunset lyric of an Ontario winter scene.)

The setting sun is passing from my vision,
And slowly falling in the golden west;
His radiance tinting red the wooded valley,
As he sinks softly to his ocean rest.

I stand and watch his glorious beauty fading,
Whilst o'er my heart there steals a long-
ing pain;
I know not why—my eyes with tears are
filling,
I strive to check them—but I strive in
vain.

And now the golden globe the wood has
hidden,
Leaving me saddened in the deepening
gloom,
My soul within me bowed by nature's
grandeur,
Awed by a stillness—silent as the tomb.

Great God of Nature, Thou knowest all
things,
My heart's most hidden depths to Thee
are clear;
Let Thy pure light illumine its recesses,
Thy Holy Truths grow every day more
near.

When my life's sun is hastening to its
setting,
The world's day - brightness fading into
night,
May its last flickering ray on earth's
horizon,
Be quenched in floods of Everlasting
Light.
RUPERT.

Brave Love.

James Whitcomb Riley, the Hoosier poet, was once asked to name his favorite poem, and responded by giving the following bit of verse, written many years ago by Mary Kyle Dallas:

He'd nothing but his violin,
I'd nothing but my song,
But we were wed when skies were blue
And summer days were long,
And when we rested by the hedge
The robins came and told
How they had dared to woo and win
When early spring was cold.

We sometimes supped on dewberries,
Or slept among the hay,
But oft the farmers' wives at eve
Came out to hear us play
The rare old tunes—the dear old tunes—
We could not starve for long
While my man had his violin
And I my sweet love song.

The world has aye gone well with us,
Old man, since we were one,
Our homeless wanderings down the lanes—
It long ago was done.
But those who wait for gold or gear,
For houses and for kine,
Till youth's sweet spring grows brown
and sere,
And love and beauty tine,
Will never know the joy of hearts
That met without a fear
When you had but your violin
And I a song, my dear.

This fair earth and all we see
Are the thoughts of Deity.
—J. R. Lowell.

How to Make 16 Ounces of Good Cough Syrup and Save \$2.

This recipe for homemade cough remedy is used and prized in thousands of homes in the United States and Canada. It costs little, but it is splendid. Even whooping cough yields to it quickly.

Mix two cups of granulated sugar and 1 cup of warm water and stir for 2 minutes. Put 2½ ounces of Pinex (fifty cents' worth) in a 16-oz. bottle, and add the Sugar Syrup. This makes more and better cough syrup than you could buy ready-made for \$2.50. Take a teaspoonful every one, two or three hours.

This simple remedy will usually stop a deep-seated cough in less than 24 hours. It tones up the appetite, has a pleasant taste and is slightly laxative, which is helpful. You will also find it splendid for bronchial troubles, lung and throat affections, asthma, etc.

This Pinex and Sugar Syrup recipe is so popular that it is often imitated, though never successfully. In trying it, use only the pure, genuine Pinex, which contains guaiacol and all the natural healing elements of Norwegian white pine extract, in concentrated compound.

A guarantee of absolute satisfaction, or money refunded, goes with this recipe. Your druggist has Pinex or will get it for you. If not, send to The Pinex Co., Toronto, Ont.

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This is the name usually given to Goitre, a most uncomfortable, unsightly and dangerous condition. A few years ago we were asked to prepare our home treatment for Goitre, a trial having been so satisfactory in one case. Since that time our

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has been a winner. Letters of gratitude from those who have used it received frequently. A young man recently said: "My collar is a size smaller in three weeks, and my health is better." Internal and external treatment. Price \$2, express paid.

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W. B. ROBERTS, SPARTA, ONT.

The Garden of a Commuter's Wife.

(By Mabel Osgood Wright.)

XI.

The Terrible Temptation.

February 10. Why is it that so many people think that charity consists in giving away merely what they cannot use, instead of the article the recipient needs? For it often seems to me that in the eyes of the multitude it is not until a thing becomes useless that they think of passing it on.

This miscellaneous unloading of trash upon the hospital reached such a pass at Christmas time that the managers, many of whom were leaving to winter in the city, appointed a Committee of One with Power, to handle the problem. I am it, and my name is Committee for the Reception of Donations Other than Money—a title as long as the duties are various.

The old way had been to have the gifts sent to the Superintendent's office, thence being distributed at his discretion, or, in the case of books, pictures, etc., oftentimes to allow visitors themselves to do the giving.

Murmurs of the lack of tact displayed had often reached father, but it was only recently that the extent of the abuse first appealed to me.

I was arranging some Christmas greens in the men's surgical ward, when a poor fellow, an engineer who had lost both legs through a railway collision, called to me and said, with grave face but keen humor twinkling in his hollow eyes:

"Ma'am, isn't it funny how some well-meanin' folks like to grind a fellow when he's down," and he pointed to a card hanging on the opposite wall, and to a book on the floor beside the cot. The picture was a flaming, illuminated text hung by a ribbon. It read, "Arise, take up thy bed and walk!" The book was a sensational account of railway accidents!

The grim humor of the combination struck us both, and we laughed over it heartily as I confiscated book and text, the man telling father afterward that the cheer of the sympathetic laugh was the first thing that encouraged him to get well.

I bore the articles to the superintendent's office, and there listened to a tale from his wife that amazed me. Not only were useless articles of furniture and clothing sent almost daily, for which receipts and official thanks were expected, but unsuitable food arrived, as well—skim milk on the turn, soggy potatoes, "jellies" that from stinginess with the sugar declined to jell, the last donation of all being a case of fermented fruits from the Lady of the Bluffs. Fruit kept so long that the tin cans had popped at both ends! together with some equally suspicious tins of deviled ham! This gift was accompanied by a violet-scented note, saying, "If the fruit, a superior California grade, and quite expensive, is nicely and thoroughly cooked, and more sugar added, it will be a refreshing treat to our dear convalescents." Of course, such food was destroyed, and never given to the patients, but the Village Liar via the Emporium had started the tale that the Superintendent's family "fattened on the delicacies sent to the sick!" Shades of ptomaine poison! Was it not time to appoint a Committee of One with Power?

I have established a food quarantine in a little room off the hospital kitchen, and nothing unsuitable is allowed even to be received; while all other articles are collected in a loft where once a week I go to inspect and sort them, the useless things being left to accumulate. They will be scattered annually by a well-advertised "rummage sale," to which, if I know human nature, people will flock in order to see if they will recognize any of their neighbors' goods. The proceeds will, of course, belong to the hospital.

The Village Liar will doubtless have plenty to say upon the subject. She sent fermented cabbages that were rejected yesterday.

These memoranda may seem out of place in my Garden Boke, but then, gardening isn't all earth, the growing of flowers, and the crushing of weeds; it is the developing of the soul and the body, as well. As there are human beings whose very presence seems to bring God nearer, so there are others who by their nothingness send us the more gladly back to the companionship of the beasts and flowers of the field. Surely there is no greater garden for human nature study than the flotsam and jetsam of the hospital.

Two months of winter gone already! White winter is never dreary, for the trees are wreathed with snow flowers that bloom by day and night. On the shelf around the bay window of the den where I am sitting, freezias, Roman hyacinths, pink and yellow oxalis, and cyclamen are in bloom, the delicate color being enhanced by half a dozen medium-sized plants of the ubiquitous Boston fern (*Nephrolepis Bostoniensis*). This fern should be divided every spring, and not allowed to grow too large, as the pots are then heavy to handle, and the fronds are less vigorous and perfect than with the smaller plants.

Now that we have this fern, there is no excuse for keeping the rubber plant, that abomination of stationary motion that would be quite as satisfactory if made out of zinc and painted.

I returned home too late to prepare anything except bulbs for my window garden this season, for pot plants bought of a florist and brought from greenhouse heat to the conditions of a living-room soon grow feeble, and seldom adapt themselves to the new condition. From outdoors in is quite change enough to be overcome.

After all, I am quite sure that bulbs are by far the most satisfactory things for window culture. They may be brought from the frames in succession, and removed again to be dried off when out of flower, and what in nature is more pitiful than a pinched and starving house plant?—nothing except the caged wild bird that, grown too feeble even to struggle, sits crouching on its perch, and with dimming eyes looks through the bars toward the sky.

I have led quite a virtuous and commendable existence these past months; in fact, ever since the great storm quenched, for the time being, at least, the outward manifestation of my gardening passion and forced me indoors, face to face with the domestic occupations of a commuter's wife in a snowy winter. Now we are pruning the fruit trees by degrees, and the days are lengthening. Thirty more of them will bring hotbed making, and the garden is again beginning to lure me in thought. I've devoted a fair share of my days to my fellow beings and the before-mentioned scanning of hospital donations. I've made personally and carefully certain concoctions that the sick but respectable poor, with traditions and pasts, associate with a self-respecting convalescence, and have taken my wares to the hospital for special cases. It has always been one of my pet amusements to watch people eat the things they enjoy, from children drooling over a lump of sugar, upward. Mouths have so many different expressions; even Bluff's lips look dry and contracted when his meal is of dog biscuits, and totally different from the abandon with which they linger over the leavings of a kidney stew.

It is well worth a little effort to see parched, fevered lips, moistened with expectancy when I take from my "hospital basket" the glass plate of lemon jelly or glazed orange, seeded and parted in its natural divisions, sprinkled with sugar and frozen. The jelly, I know, would not be as palatable from a thick hospital saucer.

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True, modern science questions the nutritiveness of many "sick-room messes" of our grandmother's day. Yet father thinks that there is such a thing as satisfying the mental side of an invalid's appetite, which some of the young doctors, learned in everything except the common sense of experience, do not understand. For surely there are some nervous, homesick conditions, where a little homemade apple sauce is more reviving than a pint of correct and unpalatable peptonoids.

Besides this work, which I really like next best to sitting in the den with Evan, or gardening, I've done a little sewing, in spite of my prejudice, and absolutely made holders for the kitchen, neat carpet cookies covered with ticking, binding them properly about the edges with turkey red, after Aunt Lot's habit, instead of hobgobbling them with shoe thread, as my Familiar Spirit suggested. By the way, this "Familiar" is not of the guardian angel tribe, for it is frequently a suggester of questionable short cuts and of shifting purpose, invariably opposing me in argument.

I have given the village tea, which passed off in a cloud of glory composed of hot oysters, chicken salad, chocolate with whipped cream a-top, sandwiches, biscuit glace, and pistache cake, instead of the usual local sop of salty ice-cream and adamantine chocolata cake.

That collation was an inspiration of Evan's. I said, having argued for and aft about it with my Familiar for two months:

"I must have this tea as a matter of course, for, you know, having no reception at the time of our wedding, and going away so soon, they scarcely realize us as a unit."

"Which you are quite determined that they shall do, having made up your mind to that effect, and notified me long ago," said Evan, laughing. "Do you know, Barbara, there have been times when I've been afraid that you were not quite feminine enough to be wholly comfortable in your surroundings, but I shall worry no longer!"

"What if I do wish to show you to all the people that have known me ever since I was a kitten, even if some of them are well—original! Surely there is nothing strange in that."

Then I, too, was forced to laugh at the complete way in which I had committed myself.

"We will allow a double motive, then, if you wish, but doing so is a compliment to you, for which you must pay by telling me how to entertain them. Of course, they will not come and go as people do in the city when bidden to tea at four, but arrive at the beginning and stay for two hours. Even your charms, great as they are, will hardly withstand such wear and tear. Shall we have some one to recite, a lecture on foreign missions, illustrated by magic-lantern slides of the India famine and pious Chinese, or will a palmist and some coon songs do?"

"Neither one nor the other," Evan answered emphatically. "Put all your strength into a substantial hot collation, order it from town, but do not mention the fact. Food bought ready made suggests hash or something warmed over, as well as a shirking of trouble, to the rural minds of all countries. Having done this, give them plenty of time to talk, and your success is assured."

Perfectly true. On the appointed day Evan came home a little after four, donned his newest frock coat, his most deeply-creased trousers, and an obstreperous tie, and pervaded the rooms smiling, and at intervals cheerfully partaking of cake, which he never eats, and ice-cream, which always gives him a pain in his nose. Father wafled uneasily about, wearing his genial expression, but avoided emphatic expression of opinion upon any subject.

The good things disappeared rapidly, and at one time I feared a famine, but I had ordered in accordance with the number invited, and not on

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Your wife, daughter, sweetheart will delight in such a gift for years to come. For such an instrument as the SHERLOCK-MANNING GUARANTEED PIANO is a lasting memento of your affection, and one that does not soon become outworn or unstylish, as other gifts must.

Style 105, shown here, is the latest triumph of our designers. Observe the grace and artistry of its charming lines. Then realize that with these you get a matchless tone, which will for a lifetime satisfy the most critical musician.



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For a very limited time we will sell you this exquisite instrument at a reduction of \$100 from its regular, standard price. But you must clip out this advertisement and mail to us to secure this concession. Then we will tell you where you can examine and test it for yourself. Send us the advt. TO-DAY.

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Made Up To Standard *Standard* Not Down To Price.

Is There Any Money in Dairying

I once heard a farmer say that if the cows paid their own way he had the manure pile for his profit. EASILY SATISFIED, WASN'T HE?

DON'T LAUGH, MAYBE YOU ARE STILL EASIER SATISFIED, AND DON'T KNOW THAT YOU HAVE EVEN THAT MUCH PROFIT.

Why plunge along in the dark? For all you know, instead of the DAIRY MAKING MONEY TO KEEP YOU, YOU ARE MAKING MONEY TO KEEP THE DAIRY.

Investigate

First look to the **quality** of milk your herd are giving. This is just as important as the quantity.

Then get a proper way of taking care of the milk. The matter that will decide whether your dairy is to be run at a PROFIT or at a LOSS is the getting of the cream from the milk. There is only one way that this can be done to advantage, and that is by the use of a GOOD CREAM SEPARATOR. Any cream separator is better than the old way, but to get the best results only the highest grade machine should be used.

"STANDARD" CREAM SEPARATORS PRODUCE MORE CREAM (butter-fat) FROM THE MILK THAN IS POSSIBLE WITH ANY OTHER SEPARATOR. A "STANDARD" will get enough extra cream over the pan or deep-setting system TO PAY FOR ITSELF IN LESS THAN ONE SEASON with a herd of six cows, and gets enough extra over the next best skimming separator TO PAY FOR ITSELF IN TWO AND ONE-HALF YEARS. The above are FACTS which can be PROVEN by a TRIAL.

Write for our free Catalogue, which fully describes THE WORLD'S GREATEST SEPARATOR.

Address Desk 7 **The Renfrew Machinery Co. Ltd., Renfrew, Ont.**

WHEN WRITING ADVERTISERS MENTION THE FARMER'S ADVOCATE

the two-thirds principle of the society which suffers from social surfeit.

The cream pistache cake was the belle of the ball. It was eyed dubiously at first, but every one took a second piece, and Mrs. Haddock from Centreville, dear soul, who had absolutely hired a livery team for the ten-mile drive, an unheard-of extravagance, took a third piece, which she dexterously concealed in her large squirrel muff, whispering to a neighbor:

"That mustache cake beats me! It just creams in your mouth without chewin', though the fillin' does appear to be of green peanuts, and the icin' beat up with spinach. I feel called to take a piece home to see what my son's wife makes of it. And do you know," subduing her voice still further, "I'd powerful like to ask what it's named for, but I can't quite fetch myself to. One thing's certain, that's a proper smart woman help of Evan's that they fetched over, if she is English. Lot, she never made such cake, let alone bein' so liberal with her victuals."

The fame of the pistache cake spread.

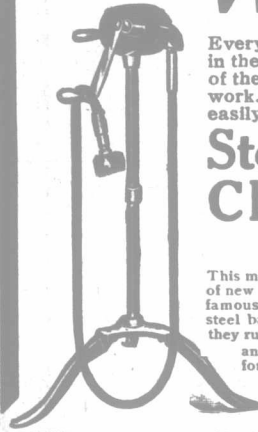
I was called upon to furnish the recipe, which was easily obtained, but called for so many ingredients and such skill in making that it impressed them as a species of culinary mathematics. It was decided by the Emporium that we were really well to do, and had not come to live at home because Evan was poor, that he had no intention of peddling vegetables, but owned a whole block of granite stores in the city, and merely went to town to collect his rents.

Upon such a trifle as the making and liberal distribution of cake does country reputation often hang, while in the city diamond stomachers, an opera box, a yacht, or an automobile would not reflect half so much glory.

After the tea was quite over, father and Evan disappeared together, and I found them sitting at the pantry table before a deliciously broiled porterhouse steak and a dish of crisp potatoes, which Martha Corkle herself was serving. As I gave her a glance in which question and approval blended, she said, by way of explanation, born of the proper English regard of the man's rights in his home, in which, by the way, there was no tone of apology, rather of instruction:



Which is Yours?



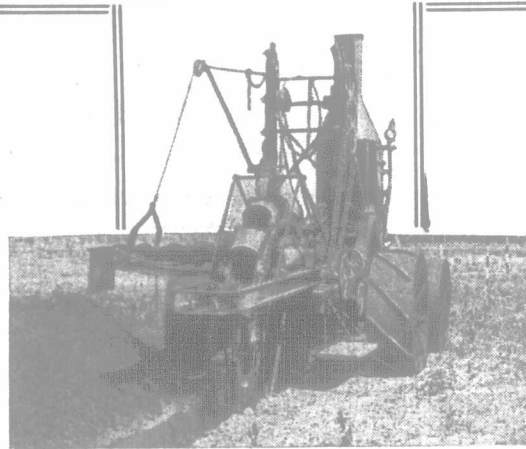
Every progressive owner of horses recognizes the fact that horses clipped in the spring dry off quick after sweating, rest well and get more good out of their feed. They not only look better, but they feel better and do better work. No way of clipping has ever been devised that takes off the hair so easily, so quickly and so smoothly as with the

Stewart Ball Bearing Clipping Machine \$9.75

BEWARE OF POORLY MADE IMITATIONS

This machine weighs only 36 pounds, boxed. You can carry it about anywhere. It has 6 feet of new style, easy-running flexible shaft, so all parts of the horse are reached easily. It has the famous Stewart One-Nut Tension Knife—highest grade. The gears are all cut from the solid steel bar and made file hard. Then all are enclosed and protected from dust and dirt, where they run in constant oil bath. **IT IS GUARANTEED FOR 25 YEARS** and anyone can run it and do perfect clipping with it. Get one now at your dealer's, or write for new 1911 Catalogue. **DO IT TODAY**

Chicago Flexible Shaft Co., 110 LaSalle Ave. Chicago



Have You Land to Tile?

OR

Do You Want to Earn More Money?

If you have a farm that is not thoroughly drained, we want to remind you NOW to get ready for this important work. Tile drainage is more than important—it's a necessity. If you doubt this, talk with any of your prosperous

neighbors, or write your own Department of Agriculture.

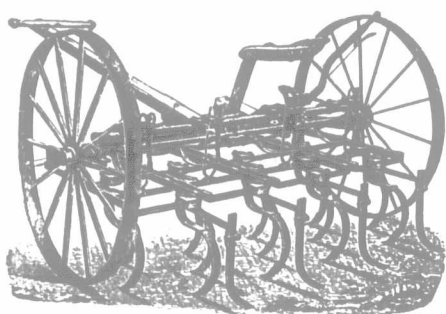
Whether or not you are a land-owner—you may be interested in doing ditching by contract in your own neighborhood—we say: Before you start ditching by hand this spring or summer, first consider how expensive, how slow and unreliable hand-work is. We want you to know about the

Buckeye Traction Ditcher

—a machine that cuts a ditch to a perfect grade so much BETTER, FASTER and CHEAPER than no one can afford to do the work in any other way. Our DITCHER is moderate in price, simple and easy of operation and a remarkable money-making and time-saving device. Hundreds of farmers in the United States and Canada are already using the BUCKEYE, and have found it always satisfactory in every way.

Farmers and Threshermen! Here is the machine that can be used 8 to 12 months a year, and brings in large returns on the investment. We will gladly send our new Catalogue "T" to all requesting it.

THE BUCKEYE TRACTION DITCHER CO'Y.
Findlay, Ohio.



The **Noxon Co., Ltd.**
INGERSOLL, ONT.

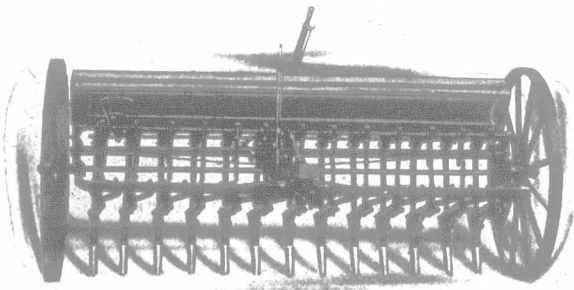
The "Old Reliable"
Cultivating and
Seeding Line

The Famous Noxon Hoosier Drill

A Strong, Efficient Cultivator

Our "Buffalo Pitts" Disc Harrow is unequalled for efficiency, durability, lightness of draft, absence of neck-weight.

Send your enquiry direct to Ingersoll.



"The gentlemen needs something hearty, Mrs. Evan. Company food and sweets is most destroying to their habits. In the old days, at such times, I always served the master a steak in my sitting room with my own hands, I bein' housekeeper then, Mrs. Evan."

Good woman! I think if the habits of our American men were not so frequently "destroyed" by haste and by company food, we should be better off. Thank you, Martha Corkle. I am not ashamed to learn of you.

I should be restless or at least tired and fidgety after these months of indoor life and repression, but I'm not. However, indoor life in the country is only a figure of speech to me at any season, save in the evening; and I've been so well that I've not even had the excuse of a snuffle cold to keep me in bed a single dark, sleepy morning. Now I feel, however, that the grip of civilization is loosening, and since morning I've been confronted and surrounded by a Terrible Temptation, one of the greatest that besets the commuter's wife on gardening bent. All day it has been beside me. I have fought it bravely until various tasks were done; for when I once yield, I shall be absorbed and no longer mistress of myself. Now there is a comfortable hour before dinner; Delia, another log for the fire, the lamp with the pale-yellow shade, the deepest chair! I abandon myself and draw the Terrible Temptation to me—the seed catalogues that Evan has collected at the office, and then sent in a bunch by the morning mail.

(To be continued.)

BOOK REVIEW.

A BOOK FOR THE TIMES.—There is no cessation in the stream of agricultural text-books. Most of them, though designed to further the cause of agricultural education, are purely informational. Many of them have been planned in accordance with the agricultural-college idea; others for elementary schools, but the one under review—"The Teaching of Agriculture in the High Schools"—is the first we have seen dealing specifically with the subject as it should, in the author's judgment, be presented in Secondary Schools. This makes it peculiarly opportune in Canada, where High-school agricultural classes are being tried. Probably one hundred men can compile facts compared with one who grasps the genius of education. Naturally, there may be floundering in arriving at correct methods in so new a field, but the little volume by G. A. Bricker, M.A., assistant in agricultural education, Extension Department, College of Agriculture, Ohio University, will prove a distinct help in the right direction, especially to those undertaking so critical a work as teaching the youth in the adolescent age. Up to May of last year, 566 schools of Secondary grade in the United States were giving instruction in agriculture. The book embraces the writer's best reflections drawn from teaching experience in Secondary Schools, and as a teacher and Supervisor in the field of general education. Its content shows his competence. He takes the ground that the type of education exemplified by "Secondary Agriculture"—the product of the first decade of the 20th century—has come to stay, and he evidently fully recognizes its cultural, as well as its vocational, nature. There are ample references to American agricultural literature. The chapters on educational aims, determination of sequences, organization of courses, and methods of presentation, are highly suggestive. The Macmillan Co., of Canada, are the publishers of this lucid and admirable work, which may be ordered through this office, at \$1.15, postpaid.

As announced in the advertisement in this paper, John & Wesley Wise, of St. Thomas, Ont., will sell at auction, on Tuesday, March 21st, twenty-six head of registered Shorthorns, twenty-three females and three bulls, twenty head of grade cows, heifers and steers, several Clydesdale mares, fillies and colts, and a number of Oxford and Shropshire sheep. With the present outlook for business in these lines of stock, this sale should attract ready buyers.

SCRATCHED FOR 40 YEARS Used D. D. D. Six Months—All Itching Gone.

This is the actual experience of Anne Croman, Santa Rosa, Cal., with the wonderful D. D. D. Prescription.

D. D. D. is the proven Eczema Cure, the mild wash that gives instant relief in all forms of skin trouble.

Cleanses the skin of all impurities—washes away blotches and pimples, leaving the skin as smooth and healthy as that of a child.

Write to-day for a free trial bottle of this wonderful Eczema Cure, to the D. D. D. Laboratories, Dept. A., 49 Colborne street, Toronto. It will give you instant relief.

(For sale by all Druggists.)

Clearing Auction Sale

OF PEDIGREED

Durham Cattle Clydesdale Horses

Etc., Etc.

Estate of the late **Edwin A. Garnham,**
STRAFFORDVILLE, ONT., on

Tuesday, Mar. 14, 1911

Beginning at 12 o'clock (noon).

Included in this sale are some of the very best Durham cattle and Clydesdale horses in Canada. Positively no reserve.

Cowan's Maple Buds

(NAME AND DESIGN REGISTERED)

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

The Cowan Co. Limited,
Toronto. 87

Cost Nothing to Try

HACKNEY
STOCK REMEDIES

Every article guaranteed to give satisfaction or money refunded.

HACKNEY STOCK TONIC

Is a medicine to build up the run-down animal. Try a 50-cent pkg.

SOLD ALL OVER CANADA.

Aladdin MANTLE Lamp

BURNS KEROSENE (Coal Oil)
Produces powerful, white, more brilliant light than city gas, gasoline or electricity—simple, noiseless, odorless, clean, safe, durable—complete success—recognized world's standard. Fully Guaranteed.

T. H. BALL, California, SOLD 850 On money back guarantee—not one returned. C. E. Kramer made \$700 in 60 days. Complete line of lamps and chandeliers for homes, offices and public places. Ask nearest office for agency proposition or how to get lamp free.

MANTLE LAMP CO. OF AMERICA, Dept. E-1,
Chicago, Portland, Ore., Waterbury, Conn., Winnipeg, Montreal, Canada.
A FLOOD OF LIGHT FROM KEROSENE (COAL OIL).

Elmwood Holsteins Offer choice young cows to freshen during March and April, 1911. Spring crop calves. Sired by Ykema Sir Posch and Pontiac Sarcastic—a grandson of Henderveldt DeKol. Prices right. Express prepaid. Safe delivery guaranteed.
E. D. George & Sons, Putnam, Ont.

GOSSIP.

QUEBEC HOLSTEIN BREEDERS' SALE.

On February 21st, the first annual sale of the Quebec Holstein Breeders' Sale Association took place at the G. T. R. Stock-yards, Montreal. It was a great success; there were many in attendance, and prices were good for Quebec. It will be noticed from the detailed list, that the cattle were distributed through the Eastern Townships, Island of Montreal, Ottawa District, and between Montreal and Toronto. As a result of the sale, a bull has been bought in the Montreal district for a little less than \$750, and will go to Toronto. This is a son of King of Pontiacs, Stevens Bros.' celebrated bull, a brother of the champion cow of the world, whose official seven-day butter-record is 37.28 lbs. The buyers were all satisfied—those from the West congratulating themselves that what they bought would have cost 30 per cent. more at home, Mr. Gooderham, of Toronto, saying he could easily sell the cow he paid \$180 for, at \$250 in Toronto. The facilities at the G. T. R. stock-yards were excellent, and will be improved before another year.

The consignors were: Dr. L. de La Harwood, Les Chenaux Farms, Vaudreuil; P. J. Salley, Riverview Farm, Lachine Rapids; F. E. Came, Canaan Farm, St. Lambert; Lieut.-Col. T. J. Riley, Home-wood Farm, Lavigne; E. N. Brown, Fraser Farm, Lachine Rapids; Felix P. Ashby, Marieville.

- Consigned by E. N. Brown. Females: Prescott De Kol, 13 years old—J. Rankin, Huntingdon, Que., \$145; Prescott De Kol's Maida, 1 year—A. N. Trinsdell, Laprairie, Que., 140; Pauline Posch Calamity, 2 years—Andrew Boa, Genoa, Que., 100; Lucele G., 5 years—D. W. McCall, Maxville, Ont., 75; Heifer calf, 3 months—Canaan Farm, St. Lambert, Que., 40; Inez's Pet, 8 years—A. Drummond, Notre Dame de Grace, Que., 60; Pauline De Kol of Ekron, 3 years—A. Drummond, Notre Dame de Grace, 65; Pauline of Cedar Grove, 4 years—Canaan Farm, St. Lambert, Que., 75; Nellie Rose, 11 years—H. G. Curtis, Stanstead, Que., 60; Lady Gretchen, 2 years—Canaan Farm, St. Lambert, Que., 90; Gipsev of Fairview, 14 years—S. Champ, St. Romis, Que., 120; Male: Sir Francv Posch Beets, 1 year—J. D. McMartin, St. Eustache, Que., 75.

Consigned by Les Chenaux Farms: Hengerveld Count Segis Lad, 5 months—Felix Ashby, Marieville, Que., 75; Sir Hengerveld Pontiac, 5 months—J. D. McMartin, St. Eustache, Que., 75; Female: Alice Duckeye De Kol, 5 years—Geo. Winter, Brooklet, Que., 85.

Consigned by P. J. Salley. Females: Countess Chase 2nd, 4 years—Gordon Gooderham, Toronto, Ont., 180; Wiotske Hengerveld De Kol Mercedes, 11 years—A. Brunet, St. Anne de Bellevue, Que., 200; Heifer calf, 1 week—W. B. Allison, Chesterville, Ont., 100; Male: Riverview Canary Paul, 1 year—J. Z. Tisdale, Terrebonne, Que., 150; Consigned by Canaan Farm: Josephine Beryl De Kol, 5 years—J. W. King, Prescott, Ont., 60; Canaan Beauty De Kol Burke, 11 months—D. Munro, St. Hubert, Que., 85; Male: Canaan Clara's Judge Akkrum, 11 months—Donald S. Muir, Clearwater, Alberta., 35.

Consigned by Lt.-Col. J. J. Riley. Male: Juanita Sylvia's Jewel Prince, 2 years—Robert Dobbie, Lachine, Que., 80.

Consigned by Felix P. Ashby: Rose Irene, 8 years—Geo. Winter, Brooklet, Que., 185; Bull calf, 1 month—J. W. King, Prescott, Ont., 15; Rubena of Rouville, 5 years—Sidney Carlyle, Chesterville, Ont., 175; Male: Faforit Reuben De Kol, 1 year—Col. Gilmore, Stanbridge East, Que., 80; Eight Holstein grades, of various ages, were also sold.

H. M. Vanderlip, Cainsville, Ont., writes: We have sold all the young Shorthorn bulls we advertised, and wish to thank "The Farmer's Advocate" for the patronage we received.

Official records of 231 Holstein-Friesian cows were accepted by the American Holstein Association, from January 12th to January 27th, 1911. This herd of 231 animals, of which nearly one-half were heifers with first or second calves, produced in seven consecutive days, 93,556.2 lbs. of milk, containing 3,339.702 lbs. of butter-fat; thus showing an average of 3.57 per cent. fat. The average production for each animal was 405 lbs. of milk, containing 14.458 lbs. of butter-fat; equivalent to 57.9 lbs. or over 27 1/2 quarts of milk per day, and 16 1/2 lbs. of the best commercial butter per week.

John Elder & Son, Hensall, Ont., breeders of Shorthorns, and growers of O. A. C. No. 21 seed barley, have sold six young bulls since January 1st, and have four left, fit for service, from fourteen to nearly three months old, richly-bred, and high-class individuals, which will be sold at moderate prices, quality considered. The Messrs. Elder make a specialty of growing the famous O. A. C. No. 21 barley, which they have grown with great success, and sold extensively to satisfied purchasers for years. Look up their advertisement in "Want-and-for-Sale" column, and write for prices and particulars.

TRADE TOPICS.

If you don't grow strawberries, you probably ought to, and will be interested in the advertisement of John Downham, Strathroy, Ont., about getting good plants. Get his catalogue.

The attention of farmers interested in tile draining, as practically all farmers should be, is directed to the new advertisement in this issue of the Buckeye Traction Ditcher. Threshermen also may find it to their advantage to consider the proposition of securing one of these ditching machines and undertaking contract work in their neighborhood. There will certainly be much of this work required in this and coming years, as no improvement on the farm gives greater returns for the cost than tile draining.

Cedar is practically cleaned out of Michigan, and in the future 90 per cent. of the poles, ties and posts will be produced in Upper Minnesota and in the West. Such is the announcement of the Valentine-Clarke Company, of Chicago, who, in order to be in closer touch with their woods operations, are removing their general offices to 932 Security Bank Building, Minneapolis. The company has a large plant at one of their yards for the treatment of cedar poles with C. A. Wood Preserver. See their advertisement in this issue.

FERTILIZING ORCHARD AND GARDEN.—"Fertilizing Orchard and Garden" is the title of a beautifully gotten-up booklet, published by the Canadian offices of the Potash Syndicate. It is printed on a very fine grade of paper, and the many half-tone cuts with which it is illustrated, in consequence, show up splendidly. One very telling picture, shows in the foreground a packing-table loaded with fine apples, the picking and packing gang standing behind, and in the background the orchard of 6 1/2 acres, from which \$1,100 worth of fruit was obtained in 1910. The instructions as to fertilizing are prepared by B. Leslie Emslie and Walter Shipley. In regard to the fertilizing of orchards, it is said that where cover crops of clover, etc., are plowed down, little or no extra nitrogen will be required; the humus supply is kept up, too, thus doing away, to a large extent, with the necessity for using barnyard manure. The practice of the Annapolis Valley apple-growers is quoted with approval. A prevailing practice there is to apply Bone Meal (600 lbs.) and Muriate of Potash (300 lbs.) per acre in the fall, nitrogen being supplied by plowing down clover and other leguminous crops. Anyone wishing this publication, or a list of several others which may be obtained free, should write to The Dominion Agricultural Offices of The Potash Syndicate, 1102-1105 Temple Building, Toronto.

SEED OATS

No doubt your most important grain crop is your Oat crop.

Now is the Time to Get Your Seed Ready

If you have a clean, pure seed, and a variety that yields you a crop of over 60 bushels per acre, then there is no necessity to go further than your own granary. But, on the other hand if you are not satisfied with your own seed, its purity and its yielding qualities, then we think we can help you.

Our Supplies Have Been Drawn From Clean Farms.

The mill, with its riddle and wind, will improve grain 50%, but no machine made can make impure seed pure. The grain has to be grown free from weeds in the first place.

The Prices We Ask Are Reasonable.

As it is impossible for you all to call and see our stock, we will be very glad to send you samples of identical lots of the varieties you want, and quote prices delivered at your nearest railway station.

Order Enough for a Field.

Prices per bush. f. o. b. Toronto, in 5-bush. lots or over, bags free: Lincoln, 80c.; Canadian-grown Regenerated Abundance, 80c.; Canadian-grown Regenerated Banner, 80c.; Scotch-grown Regenerated Banner, \$1.25; Early White Cluster, 80c.; White Wave, 80c.; Daubeney (for mixing with 6-rowed barley), 90c.

Grow only one variety of barley. Our stock of O. A. C. No. 21 Barley is going fast. The price for our best sample is \$1.10 per bush. (5 bush. lots), bags free.

Ninety-nine times out of one hundred we can save you money on Red Clover, Alfalfa Clover and Timothy. This week's prices per bush. for our best brands Clover and Timothy are (up till March 15th we will pay freight in Ontario on orders of 200 lbs. or over on Clovers and Timothy): "Sun" Red Clover, \$9.50; "Sun" Mammoth Clover, \$9.50; "Gold" Alfalfa, \$13.50; "Ocean" Alsylke, \$11; "Crescent" Timothy, \$6.50; "Diamond" Timothy, \$7. These all grade No. 1 Government Standard. Allow 25c. each for bags.

Before you order your Corn and Roots see our Catalogue.

GEO. KEITH & SONS

SEED MERCHANTS SINCE 1866

124 King Street, East, Toronto, Ont.

PURITY FLOUR

If that name is on the sack you can buy with confidence



"More bread and better bread"

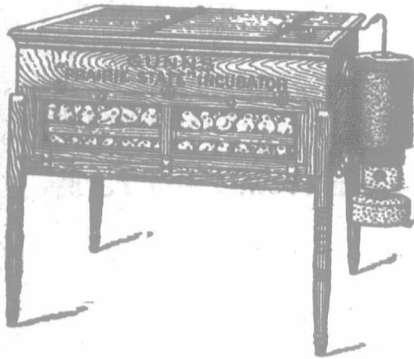
WHEN WRITING ADVERTISERS MENTION THE FARMER'S ADVOCATE.

The Remarkable Success of GUNNS PRAIRIE STATE INCUBATOR

is due largely to its moistened Sand Tray just beneath the egg tray.

By regulating the amount of water poured on this Sand Tray you can supply exactly the degree of humidity needed in the air surrounding the eggs at the different stages of incubation. Thus you can prevent the eggs from drying up, and secure big, healthy chicks.

Before hatching begins the Sand Tray is removed, a burlap mat slipped in, and you have a warm, roomy nursery.



Write for our book on Practical Poultry Raising. Besides telling all about the "Prairie State" line of poultry equipment, it gives a lot of valuable information. It's free for the asking.

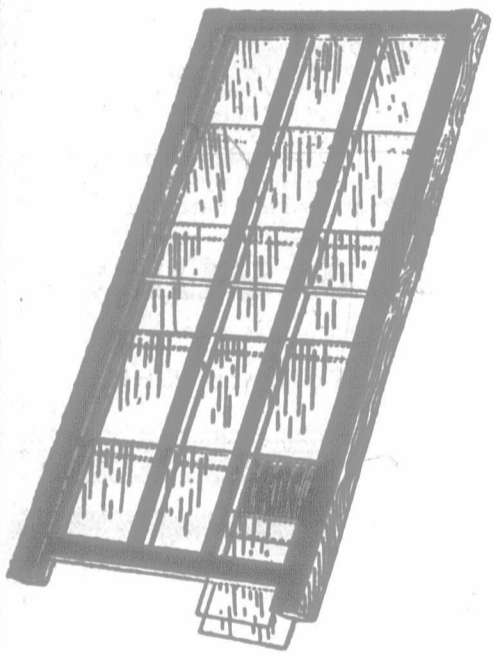
GUNNS
Prairie State Incubator
No. 0.—100 hen eggs—\$18.00
No. 1.—150 " " — 22.50
No. 2.—240 " " — 32.00
No. 3.—390 " " — 38.00

GUNNS Universal Hover
With lamp, lamp case
and smoke conductor \$7.00

**GUNN, LANGLOIS & CO., LIMITED, 235 ST. PAUL STREET,
MONTREAL.**
"Gunns Prairie State Incubator Gets Chix." 13

HOT-BED SASH

For Vegetable
and Flower Growers



Big money saved by growing your own plants from seed with double-glass sash. Plants grow larger and quicker. No worry of boards or mats for covering. Always gets the sunlight. Sizes 3 ft. 6 ins. by 5 ft. 11 ins., at \$1.05 each. Made from best material. Write for booklet.

THE
M. Brennen & Sons
Mfg. Company
LIMITED
Hamilton, Canada.

Cyclone Diamond Mesh Gate

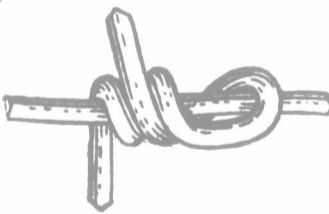
This gate has three uprights one inch in diameter. The lower corners are connected by heavy malleable elbows. This is a strong, durable gate of very neat design.

Cyclone Field Fences

The fact that the lock we use in our fence is part and parcel of the stay, makes our fence a ready seller. Every buyer will appreciate this essential feature. Any fence is as strong as its weakest link. Examine the strength of our lock, and we know you will buy our fence. If your district is not represented, write for our agency proposition.

The Cyclone Woven Wire
Fence Co., Limited,
137 Youville Sq., 1170 Dundas St.,
Montreal, Toronto, Ont.

Fully illustrated
catalogue and sam-
ple lock cheerfully
sent upon request.



CYCLONE DIAMOND MESH GATE.

CYCLONE
FAMOUS
HOLD-TIGHT
ONE-PIECE
LOCK.

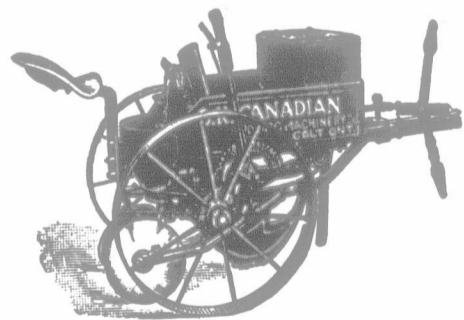
Potato Planter.

If you want durability, reliability and simplicity, you get them in the O. K. CANADIAN.

It requires only one team and man to plant your crop. Its automatic cup device does not puncture or bruise the seed in any way; handles it almost as carefully as by hand.

Write for our 1911 Catalogue.

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



GOSSIP.

Farmers and barn framers are requested to read the advertisement of the Galt Art Metal Company in this issue.

At an auction sale of Hereford cattle, at Kentland, Indiana, February 22nd, the property of W. T. McCray, seventy head sold for an average of \$206, the highest price being \$550, for a four-year-old cow, with bull calf at foot.

E. D. George & Sons, write, on March 2nd, as follows: Am pleased to renew our contract for another year with the old reliable ("Advocate"). Have used it almost continuously since '89, with splendid results. "The Farmer's Advocate" reaches a people that are able to buy.

In another column of this issue, Jos. W. Holman, Columbus, Ont., advertises a pair of young Clydesdale mares for sale. One of them is in foal. They are full sisters, sired by Corner Stone (11016), nicely matched, work well together, and will be a bargain for someone.

SALE DATES CLAIMED.

March 14th.—Estate of E. A. Garnham, Stratfordville, Ont.; Shorthorns and Clydesdales.

March 10th.—Richard Ward, Balsam, Ont.; Shorthorns.

March 14th.—Union Stock-yards, Toronto; Clydesdales.

March 21st.—John & Wesley Wise, St. Thomas, Ont.; Shorthorns, Clydesdales and sheep.

March 22nd.—A. Kennedy & Son, Vernon, Ont.; Ayrshires.

March 29th.—William Hamilton, Bright, Ont.; Shorthorns.

May 18th.—Dr. D. McEachran, Ormstown, Que.; Clydesdales.

Capt. T. E. and J. M. Robson, of Spring Grove Stock Farm, Ilderton, Ont., have sold to W. H. Mancell, of Fletcher, in Kent County, Ont., the three-year-old Clydesdale stallion, King's Cup Bearer, first three-year-old and champion Clydesdale stallion at the Western Fair, London, 1910. King's Cup Bearer is an exceptionally well-bred horse, with very superior type and quality. He was sired by Boreland Pride, by Baron's Pride, while the grandsire of his dam was Prince of Wales. His acquisition by Mr. Mancell is a decided boon to the breeding interests of Kent County.

BRAMPTON JERSEYS.

B. H. Bull & Son, Brampton, Ont., are not only breeding, but also cultivating Jerseys, for Brampton Lady George has just finished her two-year-old official test, giving over 11,001.95 lbs. of milk, and 586 lbs. of butter. She was two years and 66 days old at commencement of test, and due to freshen within two months of completion, and milked 29.3 lbs. per day at Ottawa Winter Fair, when over 11 months in milk. Her dam is by the great old Brampton Monarch, her sire by Blue Blood, a cross which, ten years ago, demonstrated its showing ability, and is now doing yearly Record-of-Performance work. This lady is a combination of showing beauty and long-distance ability in production. A customer from British Columbia writes: "We still have Canada's King's Daughter, and her daughter, Happy Hollow Queen. The latter is now giving 50 lbs. milk daily, testing 5.1 per cent. butter-fat. We will enter her for Record of Performance when she freshens again."

TRADE TOPIC.

In addition to the branch offices mentioned in the advertisement of Amateite Roofing in this issue, the Paterson Manufacturing Company have offices at St. John, N. B., and Halifax, N. S.

Chicago.

Hogs.—Mixed and butchers', \$6.85 to \$7.15; good, heavy, \$6.70 to \$7.10; rough, heavy, \$6.70 to \$6.80; light, \$6.90 to \$7.20; pigs, \$7 to \$7.25.

Cattle.—Beeves, \$5.25 to \$7; cows and heifers, \$2.70 to \$6; stockers and feeders, \$4 to \$5.90; Texans, \$4.40 to \$5.80; calves, \$7 to \$9.25.

Sheep and Lambs.—Native, \$3 to \$4.80; Western, \$3.25 to \$4.80; lambs, \$5 to \$6.25; Western, \$5.25 to \$6.25.

\$40.00 Per Acre

Half cash, will buy 200 acres of choice clay loam, the kind that has the strength and sub-soil, but yet won't bake and get hard. 100 acres under cultivation; 80 acres brush, mixed soft wood; a goodly portion of the price can be taken out of this. 20 acres pasture. Barn, 8-roomed frame house; good stone cellar. Barn, 40x60; good stable underneath. Second barn, 24x50; piggyery under this. Sheep pen, 16x24; drive shed, 18x24; silo, 10x23. One acre orchard; 9 acres aslake, which grows to perfection on this soil; 15 acres alfalfa. Four miles from town; 40 miles from Toronto. Convenient to school, on a good road; abundance of water. If you want a good farm, on which it will be a pleasure to work, don't miss seeing this. For further particulars, write Philip & Boston, Whitevale, Ontario.

REAL ESTATE

200 acres choice clay loam, Oxford County, West Zorra Township, 2 1/2 miles from station, 1/2 mile from post office and school, 13 miles from Woodstock, Stratford, Ingersoll. Very rich, productive soil; 150 acres cultivated; 10 acres wheat, 20 acres timber; about 600 tapping maples; flowing spring near barn and in pasture. No better stock farm can be found. The barn is magnificent; all painted red, and cement floors all through, except some box stalls and root bin; water basins. Barn was built 1901; good as new; size, 100x48. Barn joining, L shape, 46x50. Four drive floors in barn. All stone basements. Implement building, 1 1/2-story frame house; woodshed, kitchen, parlor, dining-room, 6 bedrooms, cellar. Good large orchard, usually brings over \$100 cash yearly. Price is low for this fine stock and grain farm. Situated on county road, and best part of Oxford County. \$12,000 if sold in a week or two. Could take a small farm as part pay. From \$5,000 to \$6,000 required to take this farm. R. Waite, Oxford Street, Ingersoll. Independent phone 229. Send messenger for Bell phone.

O. A. C. NO. 21 SEED BARLEY and Short-horn Bulls.—Look up our ad in Want and For Sale column if you want a supply of the best barley ever grown in Ontario. It is as cheap at \$1 per bush, as other varieties at nothing. We have still four Shorthorn bulls left, fit for service; one a grand two-year-old, with both weight and quality, and an extra dark red calf 10 months old. Jno. Elder & Son, Hensall, Ont.

Registered Canadian-bred Clydesdales Matched pair of mares, full sisters; one rising five years—in foal; one rising three years; sired by Corner Stone—3505—(11016). Jos. Heimes, Columbus, Ont. Brooklyn, G.T.R.; Myrtle, C.P.R.

TWO Imported Clyde Stallions for Sale.—Sired by Pride of Blakein, he by Baron's Pride. Must be sold by March 20th. Snap for quick purchaser. Apply to: Wm. Bell, Blyth, Ont.

Admiral Lord Fisher, on his arrival in New York on the Baltic, charmed the reporters with his hilarity. "You young reporters are very alert," he said, at the end of an interview. "You are not like the editors they tell about in Tallis street. A newspaper proprietor in Tallis street hired a new editor. That very night there was a fire in the Strand, a vast fire, which all London turned out to see. The proprietor saw it himself, with its thrilling rescues, tragedies and escapes, and early the next morning he opened his paper with the pleasant expectation of reading a fine, graphic account of the terrible conflagration. Not a line about the fire had his new editor printed. The man could hardly believe his eyes. He tore in a taxicab to Tallis street. He burst in on the editor like an explosion. 'Why didn't we have a story of the fire?' he asked. The new editor looked calmly through his spectacles, and replied: 'What was the use of printing anything about it? Everybody in town was there to see the whole thing for themselves.'"

They tell of a Missouri man who played a mean trick on his hens. He tacked up a large sign reading: "Eggs, nine cents a dozen," in his chicken house, and the hens have been laying steadily all winter.

MR. FARMER!

We want to get in touch with good, live, hustling barn-carpenters to act as agents for our

"GALT" Galvanized Steel Shingle

The shingle that is building up trade on its merits. We manufacture a reliable line of goods, and we want an agent who has your confidence, and the confidence of your neighborhood, a man with whom you would be willing to do business.

Will you recommend or bring this to the notice of such a man, and have him fill out the coupon below:

Name.....
P. O.....
Occupation.....
and send to
The Galt Art Metal Co., Ltd., Galt, Ont.

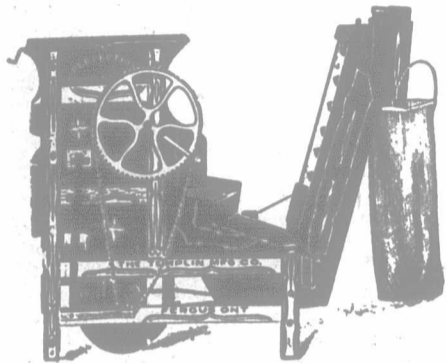
NORTHWEST FARM LANDS

Half a million acres of wild and improved lands near railway. All specially selected in the most fertile districts.

Special excursion in the spring to see these lands.

Write now for particulars as to prices and location.

STEWART & MATHEWS CO., LIMITED
A few good agents wanted. Galt, Ontario.

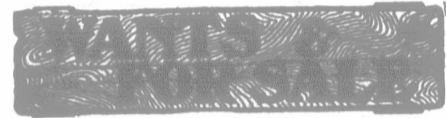


PERFECTION Seed and Grain Separator

(Patented 1901)

The only mill manufactured that will not blow clover, timothy and weed seeds out with the chaff. Other mills are being discarded everywhere that they come into competition with the Perfection. Grain travels over eight feet of screen before the fan-blast strikes it. A child can turn it. Has compound shake, end motion, galvanized deflectors, and many other advantages too numerous to mention here. See nearest agent, or write for circular "C," giving full particulars to

THE TEMPLIN MFG. CO.,
G.T.R. FERGUS, ONT. C.P.R.



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

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

ARMSTRONG, B.C.—The Garden District of the Okanagan Valley; an established, self-supporting and unboomed district, with mildest winters; permanent markets and unlimited pure water supply; no irrigation; no syndicate land holdings; fruit-growing, dairying, mixed farming, poultry and market gardening. Booklet sent on application to Secretary Board of Trade, Armstrong, B.C.

ESSEX-GROWN White-cap Dent Seed Corn, \$1.00 per bushel. Correspondence solicited. Jos. J. Totten, North Ridge, Ontario.

FARM FOR SALE OR RENT—Daniel Dill, Windsor, Nova Scotia.

FOR SALE OR TO LET—In Niagara District, 200 acres, general-purpose farm. Good buildings; stone stabling; abundance of water; 16 acres fruit; 25 acres bush. Near station and good market. (Mrs.) G. B. Hubbard, Main St., Hamilton, Ontario.

FOR SALE—Iron, Pipe, Pulleys, Belting, Rails, Chain, Wire Fencing, Iron Posts, etc.; all sizes very cheap. Send for list, stating what you need. Agents wanted; good commission. The Imperial Waste & Metal Co., Queen St., Montreal.

FOR SALE—Chopper, Vessot Champion, 11-inch plate, used three months. Guaranteed in perfect condition. Sell for \$80. Installed larger machine. Write: Bickle Elevator, Petrolia, Ontario.

FOR SALE—145 acres, in Oxford County. Clay and sandy loam. About 100 acres cultivated; balance in bush and pasture. Good house, stone bank barn, straw shed and drive house. Five miles to good market. Post office, store and school close by. This is a splendid chance for a renter to acquire a good homestead at a big bargain and on easy terms of payment. Apply to A. O. Jeffery, Barrister, Market Lane, London, Ontario.

FOR SALE—5½ acres on South St. West in Aylmer, on which is a good 1½-story brick house, with coal hot-air furnace, acetylene lighting, good cellar with cement floors; barn, hog and henhouse. Orchard of apples, pears, plums, peaches and cherries. Small fruits, grapes, thimbleberries, blackcaps, raspberries, gooseberries and strawberries; black, red and white currants; asparagus and rhubarb, with abundance of good water. Suitable for retired farmer or market gardener. Apply on premises. R. S. Watt, Aylmer West, Ontario.

FOR SALE—Cheap, Hurst 4-row potato and orchard sprayer, 10-gallon capacity, almost new; also Acme harrow. Apply: R. S., "Farmer's Advocate," London.

GOVERNMENT STANDARD SEEDS FOR SALE—O. A. C. No. 21 Barley, 90c.; Golden Vine Peas, \$1.00; Banner White Siberian, Silver Mine, Scottish Chief Oats, 50c.; Red Clover, \$9.00; Alfalfa, \$13.00; bags extra. Ask for samples. Caledonia Milling Co., Ltd., Caledonia.

MEN WANTED—Age 18-35, for firemen, \$100 monthly, and brakemen, \$80, on all Canadian Railroads. Experience unnecessary; no strike positions guaranteed competent men. Promotions. Railroad Employing Headquarters—over 400 men sent to positions monthly. State send stamp. Railway Association, Dept. 34, 227 Monroe Street, Brooklyn, N.Y.

O. A. C. NO. 21 SEED BARLEY—Fine sample; extra free from weeds. Price, \$1.00 per bushel. Sacks free. John Hayward, Eastwood, Ontario.

O. A. C. NO. 21 SEED BARLEY—1,200 bushels, grown for seed purposes. We increased one pound to nine hundred bushels in three crops. This is the best yielder, longest, brightest and stiffest-strawed barley ever grown in Ontario or Quebec. We are the leading growers, and furnish good, plump, clean seed, true to name. We had a yield of seventy-two bushels per acre. Price, \$1.00 per bushel. Best cotton bags, 25 cents. Jno. Elder, Hensall, Ont., Huron County.

POTATOES—Empire Stats; registered seed; 3 years' selection; \$1.50 bag. Siberian oats from hand-selected seed; 60c. bushel. Emmet, the new seed grain, 75c. bushel. A. Hutchinson, Mount Forest, Ontario.

PERSONAL—FRANK TIDD—Should this meet the eye of Frank Tidd, he is requested to communicate at once with 295 George Street, Toronto. Money is awaiting him from his friends in England, who are anxious to have him home again.

SEED OATS—Selected Banner seed oats, 50 cents per bushel. Samples on application. Chester Nicholson, Mt. Forest, Ontario.

SITUATION as farm manager or foreman; thoroughly experienced; good stockman; best of references. Box P, "Farmer's Advocate," London.

SITUATION WANTED as manager or herdsman on large dairy farm; lifetime experience in all its branches. Can furnish highest references. Box J. K. S., "Farmer's Advocate," London.

STRAWBERRY PLANTS—Stocky and well-rooted. All tested varieties. Catalogue and price-list free. S. H. Rittenhouse, Jordan Harbor, Ontario.

WANTED—Persons to grow mushrooms for us in waste space in gardens, yards, sheds or cellars, \$15 to \$30 per week. Send for illustrated booklet and full particulars. Montreal Supply Co., Montreal.

WANTED—TILE-LAYERS and MACHINISTS—Several experienced tile-layers wanted at once; to lay tile after ditching machine. Also, two machinists to run ditchers. Must have experience with ditcher or thrashing machine. Apply: Box D, "Farmer's Advocate," London.

WANTED—Two experienced stockmen, married or single, April 1st. Yearly engagement. One to take charge of cattle herd; one to take charge of Clydesdale and Hackney stud. Apply: Oak Park Stock Farm Co., Brantford, Ontario.

WANTED—Single man to drive a team, and good at all kinds of farm work. Address: The Eaton Farm, Islington.

WANTED—Man to take full charge of twelve acres orchard. Must understand pruning, spraying, truck-gardening. Give references and wages expected in first letter. W. Chessor, Box 271, Eglinton, Ontario.

WANTED AT ONCE—Up to 50 guinea pigs. State price. Apply: E. Silcox, Gravenhurst.

WANTED—Married man, experienced, to work on fruit farm. House found. Must be sober and active. Apply, stating wages expected and references: George Willis, Waterdown, Ontario.

WANTED—Situation on farm by man and wife. No encumbrances. Good amongst horses. Apply: Thos. Tams, 233 Pruden St., Fort William, Ontario.

The Delhi Tannery Wanted—2,000 hides to tan for robes, coats, etc. All kinds of hides, skins and furs dressed soft and pliable. Deerakin for buck, or with the hair on. Send them to me and have them dressed right. B. F. Bell, Delhi, Ont.

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

BARRED ROCKS EXCLUSIVELY. CANADA'S CHAMPIONS.

The world's best FIVE-DOLLAR COCKERELS Birds of all ages for sale. Satisfaction guaranteed or money refunded. JOHN PRINGLE, LONDON, ONTARIO.

ANCONAS, White Leghorns, Fertile Eggs. New circular free. Use my germ killer. Twenty-five cents, postpaid. Saves little chicks. Edmund C. Apps, Box 224, Vice-President International Ancona Club, Brantford, Ontario.

A GRAND lot of Barred Rock cockerels and pullets. Exhibition and laying strain. Eggs from best pens, \$1.00 per setting. A. E. Donaghy, Colborne, Ontario.

BARRED ROCK EGGS—Choice stock, one dollar for thirteen. Satisfaction guaranteed. Nelson Smith, Jerseyville, Ontario.

BUFF ORPINGTONS, Barred Rocks, White Wyandottes. Pure-bred, carefully mated, and bred to lay. Farm-raised, strong, vigorous stock. Eggs that hatch. Write for price card. "Inglefield Farm," Hamilton, Ontario.

BUFF ROCKS—Highest-quality prizewinners; egg producers. Write for mating list. E. L. Lane, Port Arthur, Canada.

BUFF ORPINGTONS—150 pure-bred cockerels and pullets, bred from exhibition stock, splendid breeders; prices reasonable; eggs in season; satisfaction guaranteed. Hugh A. Scott, Caledonia, Ontario.

B. P. ROCK EGGS—One of the best laying strains in Canada. One dollar per setting. Mrs. J. R. Henry, Waterdown, Ont.

BABY CHICKS—Single-Comb Black Minorcas, Rose-Comb Brown Leghorns, and Barred Rocks, \$6.00 for 25; \$11.00 for 50; \$20.00 for 100. These chicks will be from pure-bred stock. J. H. Rutherford, Box 62, Caledonia East, Ontario.

CANADA'S BEST BARRED ROCKS—Winners wherever shown. Bred for beauty and utility. Prices moderate. Thos. Andrew, Pickering.

EGGS FOR HATCHING—Rhode Island Reds, Wyandottes, Dark Brahmans, Rocks, Leghorns. 15 eggs, \$1.00; 100 eggs, \$4.00. Rouen and Mammoth Pekin duck eggs, 13, \$1.00. Satisfaction guaranteed. Wade & Son, Sarnia, Ontario.

EXCLUSIVE breeder of pure Barred Plymouth Rocks, Pringle strain. Heavy winter layers, \$1.00 per setting. Riverside Poultry-yards. Jas. E. Metcalfe, Hanover, Ontario.

EGGS for hatching, of several varieties, \$1.00 per 15. Send for mating list. Robert Houser, Canboro, Ontario.

EGGS FOR HATCHING—Rose-Comb Brown Leghorns, \$1.50 per 15; \$2.75 per 30. Rouen duck eggs, \$2.00 per 15. Mammoth Bronze Turkey eggs, \$3.50 per 9. Guaranteed fertile. J. H. Rutherford, Box 62, Caledonia East, Ontario.

FOR SALE—Bronze Turkeys, won first, second and third, first, third hens, London Show. Also choice Partridge Wyandottes. R. G. Rose, Glasgow, Ontario.

FORTY BARRED ROCK COCKERELS FOR SALE—From prize stock, one to three dollars. Write for egg record. Jas. Coker, Jerseyville, Ontario.

FOR SALE—Pair White Orpingtons, \$4.00. Will exchange for Black Leghorns or Anconas. Four good Barred Rock cockerels, \$1.50 each. Barred Rock eggs from winter-laying hens, large size, \$1.25 per setting. H. A. Hovey, Clinton, Ontario.

FOR SALE—A few nice Rose-Comb Brown Leghorns. Four Golden-faced Wyandotte cockerels from prizewinning stock. Prices right. Eggs in season. Peter Daley & Son, Box 26, Seaford, Ontario.

FOR SALE—Cheap, one hundred and twenty egg Chatham incubator, used short time; installing larger size. Lock Box 203, Glenora, Ontario.

FOR SALE—Pure-bred White Wyandotte cockerels and eggs. V. M. Stanley, Granton.

LEGHORNS (Single-Comb White, Single and Rose-Comb Brown), White Plymouth Rocks, Columbian Wyandottes. Eggs, two-fifty per thirteen; express paid. Kedwell Bros., Petrolia, Ontario.

LOCHABAR STOCK FARM offers a few choice pairs of Pekin and Rouen ducks and Toulouse geese. Prices right. D. A. Graham, Wanstead, Ontario.

EGGS FOR HATCHING—One pen fine White Wyandottes, headed by imported cockerel, from Rynes; record layers, headed by cockerel from Goodes' prizewinners, Scotland; \$5.00 per 15. Also, pen 2, 3, 4, White Wyandottes, Barred Rocks, Rhode Island Reds, respectively; all heavy winter layers, \$2.00 per 15. Baby chicks, from all pens except No. 1, 25c. each. M. C. Laing, Corwhin, Ontario.

LONDON-VIEW POULTRY-YARDS—Eggs for hatching from Rose- and Single-Comb Rhode Island Reds. These birds are a good winter as well as summer layers, of large brown eggs, and are an excellent market fowl. Orders booked as cash received. Per setting of 13 eggs, \$1.50; two settings, \$2.50; \$7.00 per hundred. T. J. Smith, care Southam Ptg. & Litho. Co., London, Ontario.

MINORCAS—Record layers; Rose-Comb Black; winners of lots of prizes. Eggs, \$3.00 per 15; \$5.00 per 30; \$15.00 per 100. Guaranteed to hatch. Square dealing. Walter Bowron, care Sandford Co., Hamilton.

ONE DOLLAR A SETTING for eggs from well-bred P. R. birds; bred from Guelph College laying strain. Also pure-bred Rhode Island eggs. Mrs. Berry, Box 22, Guelph.

POTTER PEAS, good yielders, \$1.00 per bushel; bags extra. Also White Wyandotte cockerel, grand bird, \$3. Wm. Pepper, Walton, Ontario.

PRIZE BARRED ROCKS, with egg record. Eggs, one to three dollars for fifteen; six dollars hundred. Pekin duck eggs, one and two dollars for twelve. Jas. Coker, Jerseyville, Ontario.

PRIZEWINNING Single-Comb Brown and White Leghorns. Eggs, two dollars per fifteen. Utility, one dollar, or five dollars per hundred. Arthur Master, Highgate, Ontario.

ROSE-COMB RHODE ISLAND REDS—Heavy laying imported stock. Eggs for setting, one dollar for fifteen. Fred Colwell, Cooksville, Ontario.

REGAL strain, Rose-Comb White Wyandotte roosters, \$2.00 and \$3.00; splendid birds, from prizewinning stock. Fertile eggs; 15 eggs, \$2.00. Mrs. Percy Clapp, Tecumseh, Ontario.

STOCK AND EGGS—Black Minorcas, Barred Rocks and Houdans. Winners at Guelph, Toronto, Montreal, Nanapan, Port Huron, Ridgeway, Highgate, Rodney and Essex. Sunnyside Poultry-yards, Highgate, Ontario.

WHITE ROCK Cockerels, three dollars. Eggs from imported Black, Buff Orpingtons, two dollars; from White Rocks, headed by first-prize cock, Toronto, three dollars, fifteen eggs. Fred A. Andrews, London, Canada.

45 VARIETIES Standard-bred Fancy Poultry. Handsome 1911 catalogue free. S. A. Hummel, Box 23, Freeport, Ill.

\$6.41 A YEAR PER HEN—Our catalogue tells how it is done. Write for one. It's free. L. R. Guild, Rockwood, Ont.

S. G. HANSON'S STANDARD WHITE LEGHORNS

The breeding hens for the season 1911 are part of the flock of 402 pullets which in January, February and March established a record for flocks of that size, by laying 23,522 eggs. The cockerels heading the breeding pens are bred from trapped hens with individual records in their pullet year of 200 eggs and over. Birds from these matings must give exceptionally good results. Book your orders for hatching eggs well in advance, if you want early-laying pullets.

EGGS FOR HATCHING
March and April—\$3.00 per 15; \$15.00 per 100.
May—\$2.50 per 15; \$12.50 per 100.
June—\$2.00 per 15; \$10.00 per 100.
Prices of day-old chicks on application.

S. G. Hanson, Hillcrest Poultry Farm, Box 147, Duncan, B. C.



SHOEMAKER'S BOOK ON POULTRY
and Almanac for 1911 has 224 pages with many colored plates of fowls true to life. It tells all about chickens, their prices, their care, diseases and remedies. All about incubators, their prices and their operation. All about poultry houses and how to build them. It's an encyclopedia of chickenhood. You need it. Only 15c. C. C. SHOEMAKER, Box 959, Freeport, Ill.

A train was reported forty minutes late, and after the time had elapsed, a would-be passenger inquired:
"How late is that train?"
"Oh, about an hour late."
The hour passed, and the query was repeated.
"Well, they'll be about an hour and twenty minutes late here."
Patience reigned until the query was justly renewed, and the railroad man replied:
"Well, sir, I think that train will be near two hours late."
Whereupon the passenger said:
"Say, mister, will you kindly tell me which way that train is going?"



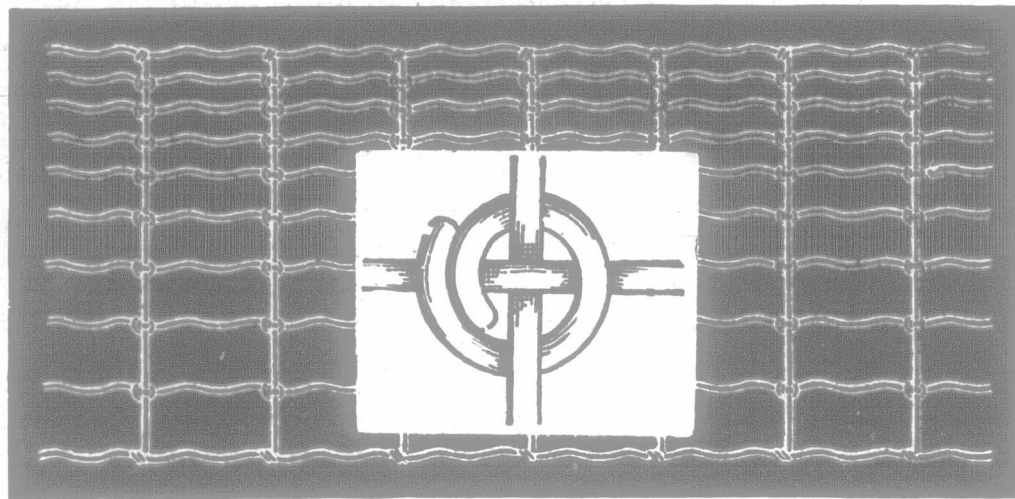
THE KING OF ALL SEEDS
 Steele, Briggs' "LION" RED CLOVER
 SUREST - PUREST - BEST
 ALSO
 Steele, Briggs' "ERMINE" TIMOTHY
 These two brands represent the best values produced in seeds. Ask your merchant for these brands. He'll have them. If he hasn't, send to us direct.
STEELE, BRIGGS SEED CO.
 TORONTO HAMILTON AND WINNIPEG LIMITED

ROYAL BRAND
FARM FENCING

SOLD DIRECT TO THE FARMER.

The Sarnia Fence Company, Sarnia, Ont.

Buy direct from the factory, and save dealers' profit and agents' commissions. We pay the freight to your nearest railroad station. ROYAL BRAND FENCE is made of all No. 9 hard steel wire, heavily galvanized. The line wires are waved, as in coil spring, to allow for give and take. Agents are making unwarranted statements about our fence, in an endeavor to, if possible, induce you to purchase from them a fence from which they can make a commission. In answer, we will say, our wire is all No. 9 perfectly galvanized. Every bale is inspected by the Canadian Customs before they will permit it to come into Canada. We GUARANTEE if ROYAL BRAND FENCE is not the best you ever purchased, both in quality of wire, as well as in perfection in weaving, you may return it, and we will pay freight both ways, and refund every cent of your money. Our prices are not dominated by the fence combine. We sell for cash. We have no bad debts to ask our customers help wipe out. Our policy is endorsed by every Farmers' Organization in Ontario. Buy ROYAL BRAND fence, and tell your neighbors about it. A pleased customer is our best advertisement. THE BEST FENCE MADE AT ANY PRICE.



THE ABOVE CUT REPRESENTS OUR 10-50 AT 35c. PER ROD.

To assist ROYAL BRAND FENCE customers, we will sell a thoroughly efficient "fence stretcher" at actual cost of manufacture. Its capacity is 5,000 lbs. Made of the best malleable iron, with hardwood patent clamp, and 8 1/2 feet of heavy chain. Sold with fence orders only. \$4.50, freight prepaid. The following styles we carry in stock, and we can ship you a 20-rod bale, or a carload. We further agree to protect the farmer from any advance in price of fence, up to July 1st, 1911. We have contracts with our wiremakers for all we can use at the present price. No danger of our not being able to fill your orders. Buy the fence that gives the farmer a square deal. ORDER TO-DAY.

6-40-0—has 6 line wires, 40 in. high, 22 in. apart. All No. 9 hard steel wire. Spacing 7, 7, 8, 9, 9. Price per rod..... **21 1/2c**

7-40-0—7 line wires, 40 in. high, stays 22 in. apart. All No. 9 hard steel wire. Spacing 5, 6, 6, 7, 7 1/2, 8, 8 1/2. Price per rod..... **24c**

8-40—8 line wires, 40 in. high, stays 16 1/2 in. apart. All No. 9 hard steel wire. Spacing 3, 4, 5, 6, 7, 8. Price per rod..... **29c**

7-48-0—7 line wires, 48 in. high, stays 22 in. apart. All No. 9 hard steel wire. Spacing 5, 6, 7, 9, 10, 11. Price per rod **25c**

8-48—8 line wires, 48 in. high, stays 16 1/2 in. apart. All No. 9 hard steel wire. Spacing 4, 5, 6, 7, 8, 9, 9. Price per rod..... **30c**

9-48-0—9 line wires, 48 in. high, stays 22 in. apart. All No. 9 steel wire. Spacing 3, 4, 5, 5, 6, 8, 8, 9. Price per rod... **30c**

9-48—Same as 9-48-0, with stays 16 1/2 in. apart. Price per rod **32 1/2c**

10-50—10 line wires, 50 in. high, stays 16 1/2 in. apart. All No. 9 hard steel wire. Spacing 3, 3 1/2, 3 1/2, 4 1/2, 5 1/2, 6, 8, 8, 8..... **35c**

The above prices include freight prepaid to railroad points west of Toronto, in Old Ontario. East of Toronto, add 1c. per rod to the price. To points in New Ontario, Quebec, Maritime and Western Provinces, deduct 2c. per rod from the printed price; customer to pay his own freight from Sarnia. All fence put up in 20-, 30- and 40-rod rolls. Remit cash with your order, by registered letter, post-office or express order, to

THE SARNIA FENCE COMPANY

MAKE ALL DRAFTS OR CHECKS PAYABLE AT PAR, SARNIA. **Sarnia, Ont.** NO DISCOUNT TO ANYONE FOR ANY QUANTITY FROM THESE PRICES.

GOSSIP.

SCOTCH SHORTHORNS AND ENGLISH YORKSHIRES.

The great herd of Scotch Shorthorn cattle, the property of H. J. Davis, of Woodstock, Ont., are coming through the winter in good flesh and heart. This is one of the most renowned herds of the country, from which have gone many of the leading prizewinners on both sides of the line. For a great many years, annually strengthened by fresh importations from the leading herds in Scotland, by which they were kept up to a high standard of individual merit and breeding, the writer never remembers seeing the herd stronger in modern type than now. This is particularly true of the younger things, practically all of which are the get of the thick, low-set, mellow stock bull, Westward Ho (imp.), bred by Duthie, and a Missie-bred son of the great Merry Morning. Westward Ho is proving admirable as a sire, his get showing remarkable uniformity of the thick, soggy type, that are in such great demand. Another bull in service is the red three-year-old, Imp. Diabola, a Brawith Bud-bred grandson of the renowned Bapton Diamond. This bull is proving an excellent sire, and is for sale; a high-class herd-header for someone fortunate enough to get him. Another young bull for sale is a red fourteen-months-old son of Westward Ho, and out of Imp. Duchess; another is a ten-month-old red, by the same sire, and out of a dam belonging to the noted old Ballantyne strain, that has produced so many winners, and this youngster is a showy bull all over; the other is a red seventeen-months-old Puckingham, by the same sire. Parties wanting a stock bull should certainly see this lot. Eighteen big, strong, thick cows, make up the breeding end of the herd, a part of them being imported, nine of them with calves at foot, on blood lines representing such very fashionable and popular strains as the C. Butterfly, Rosewood, Beauty, Broadhooks and Duchess. In younger ones are a number of one-, two- and three-year-old heifers, sired by Westward Ho, that look good for show purposes. An extra good one is a three-year-old Butterfly, by the stock bull, and out of Imp. Butterfly. Any of these heifers are for sale. The Yorkshires are up to the usual standard of excellence, numbering just now about fifty head. The breeding stock are all either imported, or bred from imported sire and dam. The stock boars in service are Worsley's Duke (imp.), bred by the Earl of Ellesmere, and Dalmeny Woodstock (imp.). Twelve sows are in breeding, three of them imported, the balance daughters of theirs, the whole making an aggregation of breeding Yorkshires of a high-class standard of type, size and merit seldom duplicated in any one herd. For sale, are a number of young sows bred, and young boars fit for service; also younger ones of both sexes, about four months of age. Mr. Davis reports a steady and extensive demand for Yorkshires from all over the country, and from the other side of the line.

TRADE TOPIC.

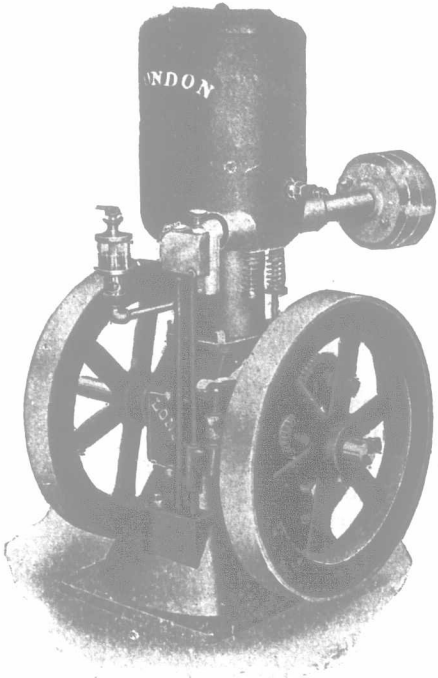
UP-TO-DATE STABLE CONSTRUCTION.—The construction of an up-to-date dairy barn to-day is strikingly different to what it was six years ago. Improvements in stable construction have come very rapidly in recent years, and a number of causes have contributed. Most dairymen want cleanliness for its own sake, and many of them keep their stables in a thoroughly sanitary condition. Others will wait until some Milk Commission or Board of Health gets after them. One thing is sure, every dairyman will be serving his best interests to fit up and keep his stable in the most sanitary condition. The use of cement for stable floors, the swinging steel stanchion and steel stall, have made it easy to build a thoroughly sanitary stable at a small cost. Where the Beatty Patented Alignment Stanchion is used, it is an easy matter to line all the cows up on the gutter, so that all droppings will be confined to the gutter, and the cattle stand will remain clean. The Steel Stall costs very little more than the wood stall, and is a permanent fixture when once installed. To those building or remodeling their stable, the BT advertisement, on page 391 of this issue, will be of especial interest.

When Writing Advertisers Mention this Paper.

Cutting Out the Kicks

THE "LONDON" Engine

The "LONDON" is designed and constructed to avoid the annoyances common to gasoline engines. It is built to do business. Simple, substantial, economical. Catalogue 18G.



London Gas Power Co. (Limited). London, Canada.

Standard Wire Fence



In the "Standard" Wire Fence, you get the durability that comes with strength. Made of all No. 9 Hard Steel Wire, well galvanized—which means no rust and long wear.

"The Tie That Binds" hooks on the running wire and locks smooth on both sides.

Then—there's the Standard Steel Fence Posts that hold the wires without staples—won't rot and are very durable.

We make a specialty of Galvanized Gates, too. Our new books are chock full of fence facts. Write for free copies and sample lock.

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



QUESTIONS AND ANSWERS. Miscellaneous.

CASTRATING LAMBS.

What is the best method of castration of lambs, and at what age; whether to cut everything away clean, or cut the sack in half and draw the testicles? F. S.

Ans.—Castration should be performed when the lambs are about ten days old. The usual practice is to cut off the end of the scrotum, and draw the testicles out with a pair of forceps, or with the teeth of the operator, which is the common method of shepherds. It is claimed that it is quite safe to clip the scrotum with its contents clean off with a pair of sharp shears when the lambs are only a few days old, but not having practiced this, we do not advise its adoption.

CUTS ON HORSES—WHEN ATLANTIC CABLE WAS LAID—WHEAT VS. OATS LODGING—GROWING CABBAGE PLANTS.

It is very amusing to read the different opinions of farmers. In the first-prize essay on the cost of horse-power, the value of one horse's manure is estimated at thirty dollars. Now, we are hauling the manure from over two hundred horses. According to above estimate, this would be worth six thousand dollars a year. These horses being military, stand in the stable the best part of their time with straw to their knees, certainly make a large supply of manure.

1. What is the best way to treat horse-flesh when it is cut, such as a deep calk from the hock to the ankle, on the inside, toward the front, part of the cut reaching the bone?

2. Who laid the cable across the Atlantic?

3. In what year was it laid?

4. Would wheat be inclined to lodge more than oats on clean, rich soil, such as garden land?

5. What is the best way to grow late cabbage plants? J. S. K.

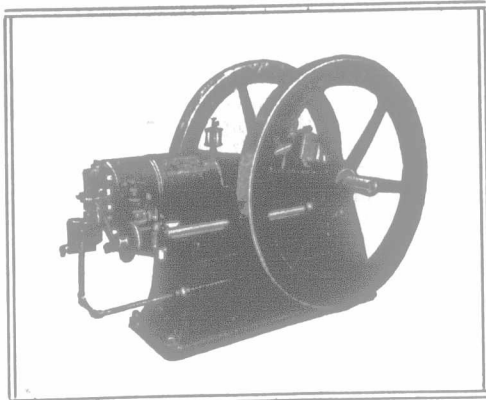
Ans.—Gaping wounds in horse-flesh should be brought together, or the sides brought towards each other by stitches, and the wound dressed with antiseptics.

2 and 3. The first Atlantic cable by means of which messages were actually

GAS AND Gasoline Engines FOR FARMERS

From 3 H.-P. upwards.

The ideal power for the farm.



SIMPLE. ECONOMICAL. DURABLE.

We manufacture only one grade: THE BEST

Purchase our engines and get longer life of machines, and save money by buying at our prices. Write us for prices and descriptive circulars.

The Canada Producer & Gas Engine Co., Ltd., Barrie, Ontario, Canada. Reliable Agents Wanted.

Please Mention this Paper.

Vanco Lime Sulphur Solution
Means Big Fruit And Big Prices

You have got to spray the fruit trees to get any kind of a crop. The most effective spray means the biggest crop and the biggest profits. VANCO LIME SULPHUR SOLUTION is a thoroughly reliable fungicide.

It is a clear liquid—no sediment—free from small particles—sprays easily and does not clog the nozzle. You could not possibly get a greater amount of Sulphur in Solution than you get in the "Vanco" Barrel. This is the Spray to use for San Jose Scale, Aphis, Scab, Blight, Mildew and many other parasites and fungi that ruin trees and fruit.

VANCO LIME SULPHUR SOLUTION is better than any home-made spray, because always of the same strength and uniform quality. Specific Gravity stencilled on every barrel. One barrel makes 12 barrels for spring or 40 for summer spraying.

VANCO Lead Arsenate Kills All Chewing Insects
Safest and surest spray for Apple Worms, Codling Moths, Potato Bugs, Asparagus Beetle and other leaf-eating, fruit-destroying insects. More effective and more lasting than Paris Green—safer to handle—easier to spray—sticks longer—strength guaranteed—NEVER BURNS. Made in Canada. This insures standard quality at lowest prices, because there is no duty to pay on it.

Write for prices and free copy of our new book on sprays.

FERTILISERS—We also sell Nitrate of Soda, Muriate of Potash, Sulphate of Potash and Acid Phosphate.

Chemical Laboratories Limited
126-136 Van Horne Street, TORONTO.

sent across the ocean, was laid in 1858, but it worked only a few weeks, and then was silent. It was not till 1866 that the next successful attempt was made, and the cable laid that year by the "Great Eastern," worked satisfactorily. Cyrus W. Field, who had been a prosperous New York merchant, was the moving spirit in the great project.

4. Wheat does not lodge so readily as oats in rich soil.

5. For the cabbage plants, sow the seed in a drill just as you would sow turnips.

[Note.—Without discussing the valuation on manure referred to, it is appropriate to point out that manure is less valuable per ton the more plentifully it is applied. Ten tons per acre is worth more than half as much as twenty tons applied to the same area.]

TRADE TOPICS.

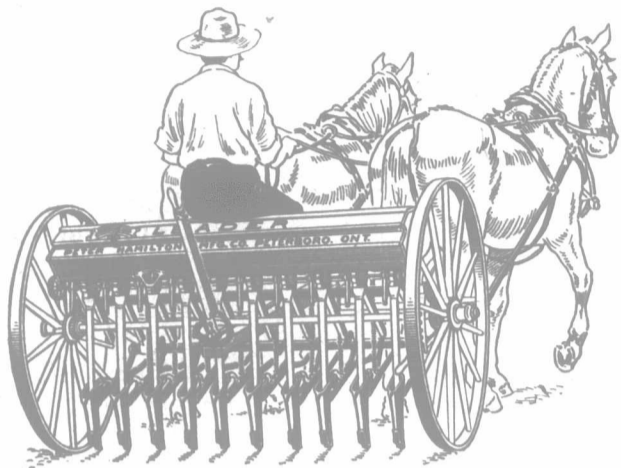
The season for setting out strawberry and raspberry plants is approaching, and farmers and gardeners contemplating the planting of these comforts will do well to order their supplies early, thus securing first selections, which are invariably the best. C. P. Newman, Lachine Locks, Que., in their advertisement in this paper, call attention to the standard varieties which they are prepared to supply. Their catalogue and price list may be had on application.

A horse and cattle clipping machine is not expensive, and can be used to good purpose on every farm, in clipping the working or driving horses, enabling them to do more work with greater comfort, while for clipping the udders, thighs and flanks of the cows, in order to keep the milk clean, the machine is well worth all its costs. The Chicago Flexible Shaft Company make a specialty of these clipping machines, and their long experience in that line has enabled them to produce the best and most satisfactory device for the purpose. Their Stewart Ball-bearing machine is no longer an experiment, but a tried and proven success. See their advertisement, and write for particulars.

Dashaway—You have splendid-looking clothes, old man. Who is your tailor?
Cleverton—He's the first man you meet as you go out.

BE SURE YOU ARE RIGHT

When investing your money you want some assurance that the investment will give you returns that will prove profitable to YOU.



FARM MACHINERY represents an investment of capital, and the better the machine the surer the returns—other things being equal. In these days of keen competition the man who has the best machinery is the one who WINS.

Peter Hamilton Machinery has always given satisfaction—ask any farmer who has used it—and it will continue to do so.

We offer you a machine of durability, accuracy and uniformity of operation. Such a machine of light draft with all the other good points will prove a profitable investment.

You make no mistake in buying **Peter Hamilton Machinery**

See our agent, or write for Catalogue A to-day.

The Peter Hamilton Co., Limited
Peterborough, Ontario.

Attention

Paid to the Mechanical Construction of the

Cream Separator

You buy will save you costly repairs and loss of cream.

Notice

The driving gear, see that it is square gear, strong and durable.

Avoid

Cheap worm gear drive in a fast-running machine like a cream separator; it soon wears, causing the bowl to wobble, hence poor skimming and loss of butter-fat.

Avoid

A bowl supported at one end only—it soon wobbles, gives poor skimming and loss of cream.

Examine

The square-gear MAGNET, built strong, will run steady and skim perfectly, and will not wear out in 50 years.

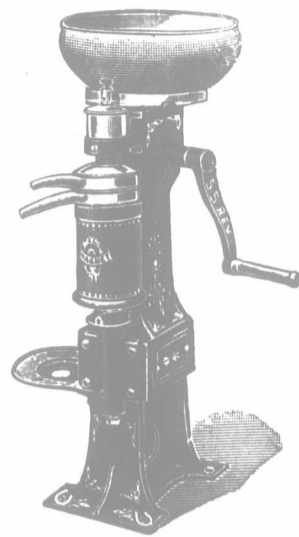
Attention

Children can operate any size MAGNET with ease. It is perfectly constructed. Clean all parts in less than five minutes.

Sanitary Strainer (Magnet Patent) on each tank.

Buy

The Square-gear MAGNET, with its double-supported bowl, will not wobble, and saves all the butter-fat.



**The
Petrie
Manuf'g
Company,
Limited,**

Winnipeg.
Regina.
Vancouver.
Calgary.
St. John.
Hamilton.
Montreal.

GOSSIP.

HILL AND CENTRE VIEW HOLSTEINS

The largest herd of Holstein cattle in Canada, and with more in the Record of Merit than any other, is the Hill and Centre View herd of P. D. Ede, of Oxford Centre, Ont., six miles south-east of Woodstock. One hundred and fifty head now make up this great herd, and well up to 100 of them have official records that range from 11.1 to 17.39 lbs. butter in seven days, for two-year-olds; 13.3 to 21.71 lbs. butter in seven days, for three-year-olds, and 16.1 to 22.80 lbs., for mature cows. Twenty-two of these were put in the record last year, and a failure to pass is almost unknown in the herd of late years, so thoroughly is the breeding of the herd established on producing lines. This has not been done in a year or two, but is the result of years of systematic testing, breeding and culling. The stock bulls in service, and the sires of the majority of the herd, are Brookbank Butter Baron, whose dam and sire's dam's records average 21 lbs. butter in seven days, and butter-fat test, 4.64 per cent.; Sir Sadie Cornucopia Clothilde, whose dam, sire's dam and grandam's records average for seven days, 662.85 lbs. milk, and for thirty days, 2,750.80 lbs.; butter, seven days, 30.585; thirty days, 114.151 lbs., and his dam, after being in milk eight months, made a seven-day butter record of 21.75 lbs. Bonheur Statesman, whose dam, sire's dam and grandam's records for seven days, average: milk, 583 lbs.; butter, 25.02 lbs. Sir Shadeland Segis, whose fourteen nearest dams have seven-day butter records that average 24.4 lbs. He is a grandson, on his sire's side, of the great King Segis, and his dam is a daughter of the renowned Homestead Albino. Many of the females of the herd belong to the great Maud of Kent strain, noted for their persistency of milk production. Maud of Kent 2nd, 258 days after freshening, made a seven-day record of 363.4 lbs. milk, and 13.755 lbs. butter; Maud of Kent 4th, 353 days after freshening, made 250.5 lbs. milk, and 10.185 lbs. butter, in seven days; Sara De Kol Veeman, at two years of age, 255 days after freshening, made of milk, 263.5 lbs., and of butter, 11.3 lbs., in seven days. This same heifer, at freshening, after being five weeks dry, made another record at three years of age of 18 lbs. butter in seven days. These are only representative of the persistent production of very many of the herd. In young bulls, for

OUR FENCE IS THE BEST

This claim in some form is made in every fence advertisement and makes the subject very difficult for you to decide. You have the right to ask for some proof other than the simple statement. We have not space enough here to give it but the details are given in our 48 pages of catalogue, showing why we claim the **Selkirk Fences** are strongest, most durable and economical for the fence user.

PROOF

We guarantee that everything we sell is exactly as represented or we give money back. Do not buy your fence for 1911 without reading our catalogue. A post card will bring it.

Fence Agents Make Money and Build Business handling a first-class article when so **Guaranteed**. Satisfied customers are the most valuable asset in any business. If we are not represented in your section you should write now for our Agent's Terms.

SELKIRK FENCE COMPANY
Box 200 Hamilton, Canada

Selkirk Fence Company, Hamilton, Canada.
I want to examine for myself the merits of Selkirk Stiff Stay Fencing and Gates. Send a free sample piece of the fence with descriptive catalogue A and Agent's Terms.

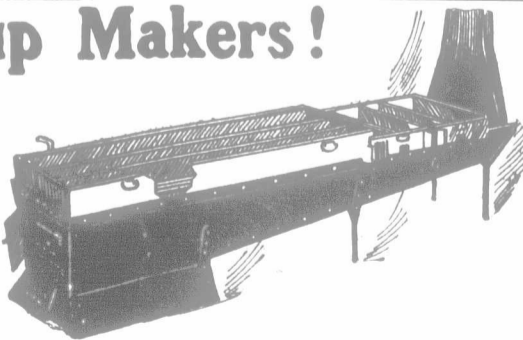
Name..... P.O..... Prov.....

Maple-Syrup Makers!

Do Not Lose the First Runs of Sap, as they are the Most Profitable.

As we make 22 different sizes of Evaporators, and they are made both right and left handed, it is impossible for us to carry a complete line of all sizes in stock, so orders are filled in rotation as received. If your order comes in first you will get your machine first. Each season we experience a great rush of orders in the month of March. Don't put off placing your order until it is too late. Write us TO-DAY for our free booklet, giving you all information in regard to sugar and syrup making.

The Grimm Mfg. Co., Ltd., 58 Wellington St., Montreal, Que.



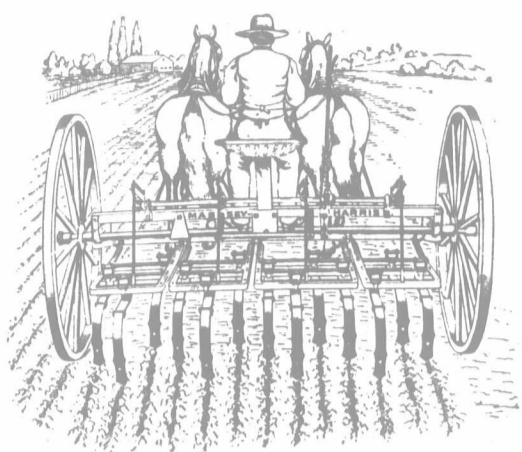
sale, are three from seven to ten months of age, sired by Bonheur Statesman, and three about the same age, sired by Butter Bank Baron, all out of R. of M. dams, and about a dozen bull calves, all out of record dams, and got by Sir Sadie Cornucopia Clothilde. Also, for sale, are females of all ages.

BOOK REVIEW.

A BOOK FOR AUTOMOBILE USERS. Many readers of "The Farmer's Advocate" may not be aware that motor or self-propelled vehicles date as far back as 1769, in France, when a three-wheel steam conveyance was devised and used by Capt. Cugnot, and that there was a Golden Age of steam road coaches in England during the early twenties of the 19th century, and on, till about 1840. They proved practical, popular, and profitable, but adverse legislation reserving the use of the roads to horse vehicles shut them off. The enterprise died, and, until re-awakened about 1885, by the perfecting of the high-speed gasoline motor, by Gottlieb Daimler. These introductory facts appear in a 675-page treatise, containing some 500 illustrations, by Jos. E. Homans, A.M., on the theory, construction, operation, care and management of all forms of modern automobiles, whether propelled by steam, gas, or electricity, published by Theo. Audel & Co., New York, and may be ordered through this office, post paid, at \$2.25. The most cursory examination of the book shows how complicated is the mechanism of the motor vehicle, and the expert knowledge required in their management and care. No wonder that, in the hands of amateurs, such large numbers of them are speedily disabled and discarded. The wear and tear of tires alone is a most costly item, aggravated chiefly by excessive speed, changing directions at high rates of speed, and excessive use of the brake. The book, which is a seventh edition, sheds a flood of useful light on the whole subject.

EXTRAVAGANCE.

Two oysters were in a big pot full of milk, getting ready for stew. Said one oyster to the other:
"Where are we?"
"At a church supper," was the reply. Whereupon the little oyster said:
"What on earth do they want of both of us?"



**Clean
Fields
Mean
Increased
Crops**

By all means do everything possible to make and keep the soil productive—**BUT—WEEDS FLOURISH IN A RICH SOIL AS WELL AS YOUR CROPS**, so it is important to keep your fields free from weeds.

**Cultivate Early and Often with a
Massey-Harris
Cultivator**

And you will get rid of the most obstinate weed pests. Thorough cultivation at any desired depth, and the depth remains uniform regardless of dead furrows, ridges, etc.

MASSEY-HARRIS CO., Limited

Toronto Montreal Moncton Winnipeg Regina
Saskatoon Calgary Edmonton

GOSSIP.

**SPRINGHURST SHORTHORNS AND
CLYDESDALES.**

As a herd of big, thick-fleshed, extra good-doing Shorthorns, few herds in Canada can compare with the Springhurst herd, the property of Harry Smith, of Hay, Ont., about two miles from Exeter Station, G. T. R. The superior excellence of this herd has, year after year, been demonstrated at the Toronto and London Exhibitions, where, from championships down, they have won the laurels in competition with the best representatives of the breed. Probably the greatest source of fame for this herd resulted from the many years' use as chief stock bull of that greatest of Canadian-bred bulls, Gold Drop, the Brawith Bud-bred son of Imp. Golden Drop Victor. His get has won more prizes, and sold for bigger prices, than that of any other one bull of his time imported or Canadian-bred, and the herd as constituted at present, contains a number of his daughters, representing on blood lines such exceptionally good-doing and heavy-fleshed tribes as the Cruickshank Butterfly, Vanity, Strathallan, Diamond, Lancaster, Golden Drop, etc., in ages from ten months to three years. The majority of these heifers are show propositions of a high order, low-down, very thick and even. All are for sale, and all in good condition. Among the older ones is the great cow, Springhurst Gem, a Golden Drop, one of the few great cows in the country, immensely thick, and of superb quality, she was second at Toronto last fall in a very strong class. Princess Mayflower, the dam of Mutineer, who was the junior champion bull at Toronto last fall, has another bull calf, by the present stock bull, Ben Wyvis, that looks like another coming champion, being very thick, smooth and even. His dam was sired by Imp. Royal Prince. Diamond Ring, a daughter of Gold Drop, also has a bull calf that looks particularly good. He is sired by Royal Commodore, a Clara-bred son of the Duthie-bred bull, Blood Royal (imp.), the head of the great Cargill herd. The present stock bull, Ben Wyvis, is one of the best-fleshed bulls in the country, he is wonderfully thick from end to end, and as mellow as a dove, and is proving a remarkable son, quite as good as his great sire, Gold Drop, while his dam is the thick, mellow cow, Imp. Butterfly 32nd. At

**INVESTIGATION OF ALL
SEPARATORS EMPHASIZES
IHC SUPERIORITY**



You cannot afford to buy any separator before comparing it with others. You should not take chances. The closer you investigate all separators, the more you will be impressed with IHC superiority. You will then know how much closer the IHC skims, how much longer it lasts, how much easier it is to clean, and how much easier it is to turn. There are no weak spots in an IHC Cream Harvester.

You cannot afford to buy any separator before comparing it with others. You should not take chances. The closer you investigate all separators, the more you will be impressed with IHC superiority. You will then know how much closer the IHC skims, how much longer it lasts, how much easier it is to clean, and how much easier it is to turn. There are no weak spots in an IHC Cream Harvester.

IHC Cream Harvesters are the only separators with dust-proof and milk-proof gears, which are at the same time easily accessible. The frame of an IHC Cream Harvester is entirely protected from wear by phosphor bronze bushings. The IHC has large shafts, bushings, and bearings; it has a perfect oiling system; the flexible top-bearing of

IHC Cream Harvesters



is the strongest and most effective found in any separator; it has only one spring. IHC Cream Harvesters always run steady—without vibration. IHC Cream Harvesters are equipped with a patented dirt-arrester which removes the finest particles of dirt from the milk before the milk is separated. The crank is at the right height for easy turning, and the tank is at an easy height to fill.

IHC Service Bureau
The Bureau is a clearing house of agricultural data. It aims to learn the best ways of doing things on the farm, and then distribute the information. Your individual experience may help others. Send your problems to the IHC Service Bureau.

The IHC local dealer will be glad to point out the above features and many others. Made in two styles—Dalrymald and Bluebell—in four sizes. Write direct for catalogue, or nearest branch house.
CANADIAN BRANCHES—International Harvester Company of America at Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London, Montreal, North Battleford, Ottawa, Regina, Saskatoon, St. John, Weyburn, Winnipeg, Yorkton.
International Harvester Company of America
Chicago (Incorporated) USA

LARGE CLEARING AUCTION SALE

**Clydesdale Horses, Shorthorn Cattle,
Oxford and Shropshire Sheep**

And other farm stock, property of John and Wesley Wise, at the farm, one mile west of Traction Station 84, two miles south of St. Thomas, Ont., on

TUESDAY, MARCH 21ST.

26 HEAD of registered Shorthorns; deep-milking strain; 23 females and 3 bulls. Also 20 head of high-grade cows, heifers and steers. Three Clydesdale mares and 6 colts, ranging 1 to 3 years old. Also a number of Oxford and Shropshire sheep. Sale to commence at 1 p. m. For terms and catalogue address:

LOCKE & McLAUGHLIN, Auctioneers, St. Thomas, Ontario. **JOHN & WESLEY WISE, Props., R. R. 4, St. Thomas, Ontario.**

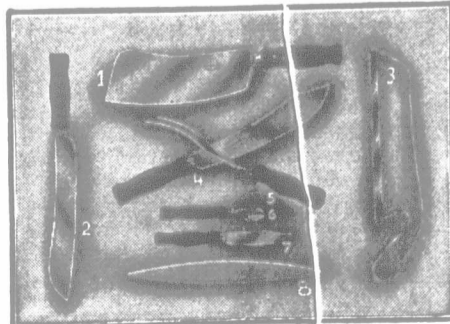
**AUCTION SALE 40 HIGH - CLASS
Registered Ayrshires**

WEDNESDAY, MARCH 22, 1911, AT 1.30 P. M.

AT HILLVIEW FARM, VERNON, ONT., WINCHESTER STATION, C. P. R.

Conveyance will meet morning trains. To be sold, without reserve, the entire herd, consisting of 20 females either in milk or in calf, 10 heifers from 1 to 2 years old, 10 calves (bulls and heifers), herd bull—Glenhurst Mains, 2 years old. Terms: 8 months' credit on bankable paper, or 4% off for cash.

THOS. IRVING, Auctioneer. A. KENNEDY & SON, VERNON, ONT.



**Agents Make
Big Money**

Selling this fully guaranteed, eight-piece Kitchen Set. Write to-day for our agents' offer.

May Mfg. Co., Elora, Ont.

London, last fall, in a very strong class, he was first, and, afterwards, champion, beating his stable mate, Mutineer, the Toronto junior champion. Second in service is his half-brother, Lancaster Victor, a roan, by Gold Drop, out of Lancaster 5th, by Imp. Sittyton Victor. He is an exceptionally choice young bull, put up on winning lines. Mr. Smith is also offering several choice Clydesdale fillies, all eligible for registration, being out of imported dams, all but one. One is a bay, rising two, by the renowned sire, King Thomas; another is a full sister, rising one. These are out of Imp. Maggie 4th of Boreland. Another is a black, rising one, out of an imported daughter of The Rejected (imp.), and sired by Prince Romeo (imp.). Another is a brown, rising three, Canadian-bred, sired by Imp. Lord Wolseley. These fillies are all for sale, and are right good buying.

Robert Miller, Stouffville, Ont., has a good portrait of the great Shorthorn sire, Superb Sultan =75418=, one of the best sons of the peerless Whitehall Sultan (imp.) =55049=, dam Secret Sultan 2nd, by Baron Lavender (imp.) =18952=, both of which bulls were imported by Mr. Miller. Superb Sultan is the sire of the calf that headed the list of bulls at the late Toronto sale, and is now at the head of the Ontario Agricultural College herd. Superb Sultan promises to rival his great sire as a getter; his calves are selling well, and as soon as old enough. It would be a wise thing to secure one of them while they last; or, if a cow or heifer is wanted, get one by him, or in calf to him. The cows in the Stouffville herd are fit companions for such a sire, and the progeny is likely to make its mark.

To those interested in Shire horse, attention is drawn to the advertisement of Alex. F. McNiven, of St. Thomas, Ont., in which he is offering for sale an imported Shire stallion, rising three years of age, first-prize winner in the two-year-old class, and reserve champion, at the late Guelph Horse Show. This is a horse of outstanding merit, and certainly should soon be picked up; also, for sale, is a 1,800-lbs. imported Shire mare. Look up the advertisement, and write Alex. F. McNiven, St. Thomas P. O., for particulars.



"Why, It Looks Like A New Room"

That's what everybody says when you decorate your home with Muresco.

Its soft and delicate tints turn a room with dingy walls and ceilings into a place of charm and beauty.

Muresco is an artistic wall finish that can be applied direct over smooth, hard plaster surfaces, or over metal or hardwood. It comes in many tints and shades, and it can be applied by anyone.

MURESCO

For Walls and Ceilings

Muresco is used in thousands of artistic homes. It gives a restful background for pictures and wall decorations. Decorative effects may be produced by stencils

Ask your paint or hardware dealer for Muresco, or write to us for suggestions and designs.

Moore's Pure House Colors

We are makers of a large line of paints and varnishes for every purpose—sold ready to use. Moore's House Colors touch the highest quality possible in paint-making.

BENJAMIN MOORE & CO.

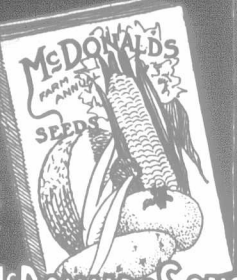
Brooklyn, N. Y.
Cleveland, O.

Carteret, N. J.
Toronto, Can.
Chicago, Ill.

FARMERS! GARDENERS!

YOU NEED THIS BOOK

IT TELLS
ALL ABOUT
THE SEEDS
THAT BRING
THE DOLLARS
MAILED FREE
WRITE TO-DAY



KENNETH McDONALD & SONS
DEPT. C - OTTAWA

Don't Throw It Away

Use **MENDETS**

They mend all leaks in all utensils—tin, brass, copper, graniteware, hot water bags, etc. No solder, cement or rivet. Anyone can use them; fit any surface, two million in use. Send for sample pkg., 10c. COMPLETE PACKAGE ASSORTED SIZES, 25c. POSTPAID. Agents wanted. Collette Mfg. Co., Dept. K, Collingwood, Ont.

AGENTS—To sell lubricating oils, belts, hose, paint, varnish to factories, mills, stores, threshers, outside large cities. Exclusive territory to right party. Experience unnecessary.
Manufacturers' Oil & Grease Co.
Cleveland, Ohio.

QUESTIONS AND ANSWERS. Miscellaneous.

TOMATO-PLANT BOXES.

Could you kindly let me know where I could procure boxes in which to sell cabbage or tomato plants?

GARDENER.

Ans.—The gardeners in the vicinity of London get the pieces for their tomato-plant boxes from a local box company, and nail them together themselves. This company puts up bundles containing material for 100 boxes, which they sell for \$1.25 each. No doubt there are box-manufacturing companies in other cities which do a similar trade.

PHILO SYSTEM.

I would like to get some information regarding this Philo system of raising poultry; how the coops are built, and what size they are. I would be very thankful for any information you could give me.

W. N.

Ans.—The Philo system of poultry-handling is especially suited for town or city dwellers, who like to have fresh eggs and chickens for themselves. Laying fowls are kept in coops 3 x 6 feet, six in a coop. When well attended to, they lay well, but experts think that such fowls would not answer well as breeders. It would be trenching on patent rights for us to explain construction of coops.

TROUBLE WITH HYDRAULIC RAM.

In your issue of "The Farmer's Advocate," February 2nd, information is asked for by a Huron County correspondent, under the heading, "Installing a Hydraulic Ram." In your reply, you state that the impetus valve falls of its own weight after the valve in the bottom of air-chamber has opened, allowing a percentage of water to pass into the air-chamber, and so be forced by compressed air to barn. During the past summer I have had a No. 4 ram placed on my farm to supply stock at barn, but we have trouble with it. After working a short time, the impetus valve will stick after it closes, and will not fall completely, stopping the machine. I will try to give an outline of the way my ram is placed. The water is taken from a spring creek about twenty rods from the barn. I built a low dam across the creek, and from the pond formed, carried the water through a three-inch drain tile about two hundred feet along the bank of creek (tile as near level as possible) to a cement tank, 2 feet 2 inches square, and of about same depth. Six inches from bottom of tank the inlet end of drive pipe is placed. This pipe is 1½ inches in diameter, and 19 feet long between tank and ram. The supply pipe is ¾-inch, and 350 feet long. There is a globe valve in this pipe about 8 inches from the ram, to hold the water when the air-chamber is being emptied. The rise from ram to tank in barn is 22 feet, and the fall in the 19 feet of drive pipe 2 feet 10 inches. We have to weight the impetus valve in order to make it fall, and have also reduced the size of inlet to drive pipe to one inch. This seems to help some, but it has not overcome the trouble. The speed of the valve, without a weight, is 150 strokes per minute. Would the rise and fall of water in a running stream make the machine more difficult to regulate?

W. A. R.

Ans.—I have taken this matter up directly with a firm who manufacture hydraulic rams, and they reply as follows: "Our impression is that a great deal of the cause of trouble with you is the globe valve which you have in your feed pipe. You will note that the passage of water through the globe valve is checked very materially, and in order to secure proper working of a ram, it is necessary that the water through the feed pipe should run with an unobstructed flow, and, therefore, the only valve we would advise using in the feed pipe is what is known as a gate valve. This gives a clear opening, and we are satisfied that if you would take off the valve referred to, you would have no difficulty with the outfit as installed. We cannot understand why the valve does not fall if it is working properly, and we would therefore suggest that you shut off the water, turn the valve around to every point, and see if, when it is raised up, it will drop of its own accord. If it does this, there is nothing wrong with it, and with the removal of the valve to which we have above referred, we think that satisfaction would result."

WM. H. DAY.

Amatite ROOFING

Saskatoon Fair Buildings, covered with Amatite Roofing, Saskatchewan, Can.

60,000 Feet of Amatite Roofing

The accompanying view shows a series of buildings at the Saskatoon Exposition, all of them covered with Amatite Roofing.

Amatite was selected because it was inexpensive, easy to put on, required no care or attention or expense afterwards, and would give excellent durability.

If ordinary smooth roofing had been used, these roofs would require painting every year or two at considerable expense and trouble. Amatite, however, has a mineral surface which requires no painting.

Use Amatite for every roof where you want to save expense. It is the most economical solution of the whole roofing problem.

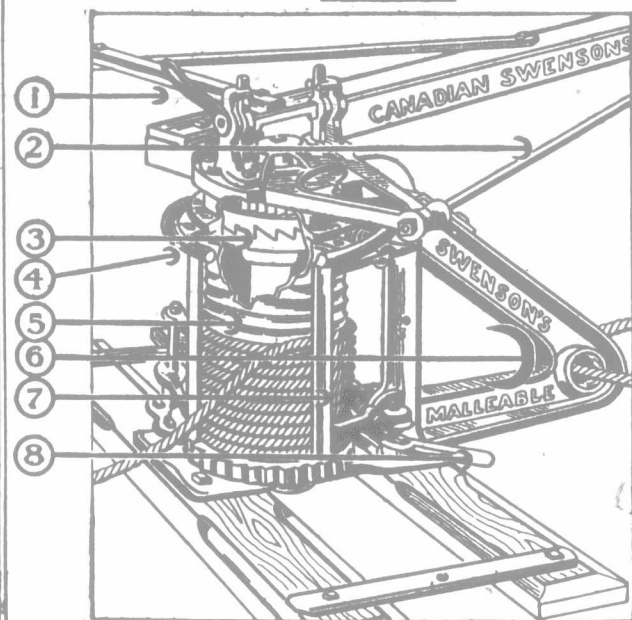
Amatite Roofing requires no skilled labor to apply; it costs no more, (in fact much less) than other roofings; and the fact that it requires no painting makes the total expense far below that of any other type of roof covering.

You can use Amatite for every kind of steep roofed building. We supply galvanized nails and liquid cement for the laps free of charge.

Send for free sample and booklet. Address our nearest office.

The
PATERSON MANUFACTURING CO., LIMITED
Montreal, Toronto, Winnipeg, Vancouver

THE ONLY STUMP-PULLER SOLD WITH A REAL GUARANTEE



The only Malleable Stump Machine made, and the only one sold on a positive guarantee that it will do more than any other. Now it does not matter what kind of stump-pulling work you have to do, we make the right Machine for the purpose.

THE ONE WITH ALL THE GOOD POINTS

- 1—Rocker Shaft puts machine in and out of gear from either end of sweep, without lifting the sweep or sweep casting.
- 2—Truss Rod full length of sweep. Takes the strain off the sweep, puts it on the sweep casting.
- 3—Gear Clutch raises and lowers on hub by a half-turn of the hand lever.
- 4—Hand Wheel takes up the slack cable in a jiffy. Saves team, men and time.

- 5—Large Diameter Grooved Drum takes absolute care of the cable and makes it last many times longer.
- 6—Heavy Anchor Frame is so constructed that the strain is equalized on the machine whether the cable is high or low on the drum, and holds the machine in a rigid position.
- 7—The Rope Guides, adjustable hinged, held by springs, take absolute care of cable, prevent it from over-lapping, crossing, or shearing.
- 8—Back Ratchet takes strain off of team when pulling big stumps, and makes whole machine safe.

This is the only Machine in which every casting is warranted for one year, **FLAW OR NO FLAW**. Try this Machine under our Guarantee—that it far **EXCELS** any other—or you pay nothing. Hundreds of your friends and fellow farmers have tested and approved this Machine. So will you once you try it.

REMEMBER YOU RISK NOTHING

If you have land to clear of stumps, standing trees or willows, standing or burnt over, or poplars, or scrub of any kind, this is the machine you want, and the only one you will buy after you see it work. For it has every good point a Stump Puller should have, not merely one or two. We ask you just to test it for yourself under our most positive guarantee, that it will do the work better, easier, and quicker, that it will clear your land cheaper than any other machine on this earth. Isn't that plain? 11

Ask for catalogue showing the five different sizes, etc.
Canadian Swenson's, Limited, Ridout Street, Lindsay, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

ENLARGEMENT AFTER CUT — BLISTER FOR RINGBONE — CRIMSON AND MAMMOTH CLOVERS.

1. Two-year-old gelding had fetlock cut open diagonally last fall; also a gash put in leg above fetlock joint. Wound has healed, but scars remain; also enlargements. What would reduce scars and enlargements? Would it be advisable to wear a boot on it? After exercising in snow, scar becomes somewhat raw.

2. What is a good blister for ringbone, contracted last spring?

3. Can you give any information regarding Crimson clover (annual)? When is it sown; when maturing and feeding value?

4. Mammoth Peavine? M. B.

Ans.—1. After wounds are completely healed, enlargements may be reduced by rubbing well, once daily, with a liniment composed of 4 drams each of resublimed crystals of iodine and iodide of potassium, and 4 ounces each of glycerine and alcohol.

2. The blister usually recommended for ringbone is made of 2 drams each of biniodide of mercury and cantharides, mixed with 2 ounces of vaseline.

3. Crimson clover is a Southern plant, and seldom ripens its seed in this country. It is valuable principally as a catch crop to furnish pasture in late fall, or as a cover crop for orchards. It is usually sown alone, in July, at the rate of 10 to 20 lbs. per acre. Sown with spring grain, it is a failure.

4. Mammoth clover is the largest variety of red clover in America. The plants are stronger than those of the common red clovers, and the stems are much larger. The roots are also larger and stronger, and have more power to gather food in the soil. Notwithstanding these differences and others that might be named, it is difficult to distinguish between them when growing together. It blooms later than the common red, and makes much less growth after cutting.

RHODES GRASS.

I saw an article in Hoard's Dairyman, from a dairyman in Australia, praising the merits of Paspalum and Rhodes grass, stating that it was far superior to alfalfa for pasture, and, after correspondence with Hoard's Dairyman, I secured the name and address of Mr. Harrison, whose letter I enclose. I would like to know if you think that Rhodes grass would grow here, or whether it has ever been tried here. I notice he says that it grows from underground roots, like quack grass, so, perhaps, it would be hard to kill out.

H. M. R.

Ans.—We have not tested the Rhodes grass at the Ontario Agricultural College, but I have ordered both seed and roots from two different sources in Australia, and hope to test this grass as soon as possible. It should be remembered that the Rhodes grass has a creeping root-stalk, something like twitch and some of our other troublesome weeds. It is evidently being grown in Australia on land which is not required for the rotation of crops, but which is to be left in grass permanently. For the grass lands of Australia, I notice that ribgrass and couch grass are recommended. These are both avoided in this country as being troublesome weeds. It would be wise, therefore, to test the Rhodes grass carefully in this country, and use caution in its introduction. C. A. ZAVITZ.

NO DUTY ON FURS TO ENGLAND —DUTY ON ENGLISH CLOTHING IMPORTED—HOMESTEAD LAWS.

1. What is the duty on a set of furs being sent to England?

2. The duty on clothing from England?

3. Can a homesteader do all his improvements in his third year? W. H.

Ans.—1. There is no duty on furs going into England.

2. The duty on ready-made clothing entering this country from England is 25 per cent. of value for linen or cotton goods, and 30 per cent. for those composed wholly or in part of wool, worsted, the hair of the goat or other animal, or made of silk.

3. When?

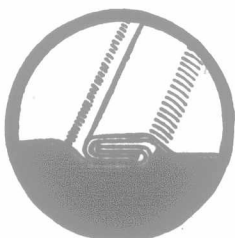
Why is a roof

to protect—

Unless it fully protects what it covers, a roof is not really a roof. And only a metal-shingled-roof can possibly really protect the contents of the building it covers. For no other roofing is proof against all the elements or nearly so long-lived — or so economical.

which metal shingle?

There are several makes of metal shingles to choose from. Any one is better than wood, slate, or ready roofing of any kind. Any one of them will outlast these roofing materials and give far better service. But—as with all things man makes—there is one better than the rest. We make it.



The principle of this side-lock makes a big difference in roofing. May we tell you about it by mail.

why Preston surpasses

Preston Safe Lock Shingles will give you better roof-service, bigger value for your money, and complete satisfaction for two reasons. One is that these are the ONLY metal shingles

so made that they pass the harsh (almost unreasonable) tests the British Government

Metal Shingle & Siding Company, Limited

Queen St. Factory PRESTON, ONTARIO, and MONTREAL, QUE.

G. Dolph Manager

exacts of galvanized sheet metal that it buys. One detail of these tests requires a coating of 98% pure zinc. Another, that the metal stand bending double without cracking the galvanizing a particle. A third, that the metal must stand FOUR dippings into acid without showing signs of corrosion. There are still other tests and ONLY the PRESTON SHINGLES, of them all, can pass these tests.

yet the cost is the same

You pay about the same price for the ordinary metal shingle as for ours. And it is a little price, considering the roof-service they give. But you, naturally, would prefer to get most-for-your-money—as we all do. Therefore, you should, before you roof at all, learn about all the other metal shingles—and about ours. The book that will inform you is ready to mail to you.

Just a post card from you will bring it.



The Preston top-lock—where the big strain comes on a metal shingle—is worth knowing about. Ask.

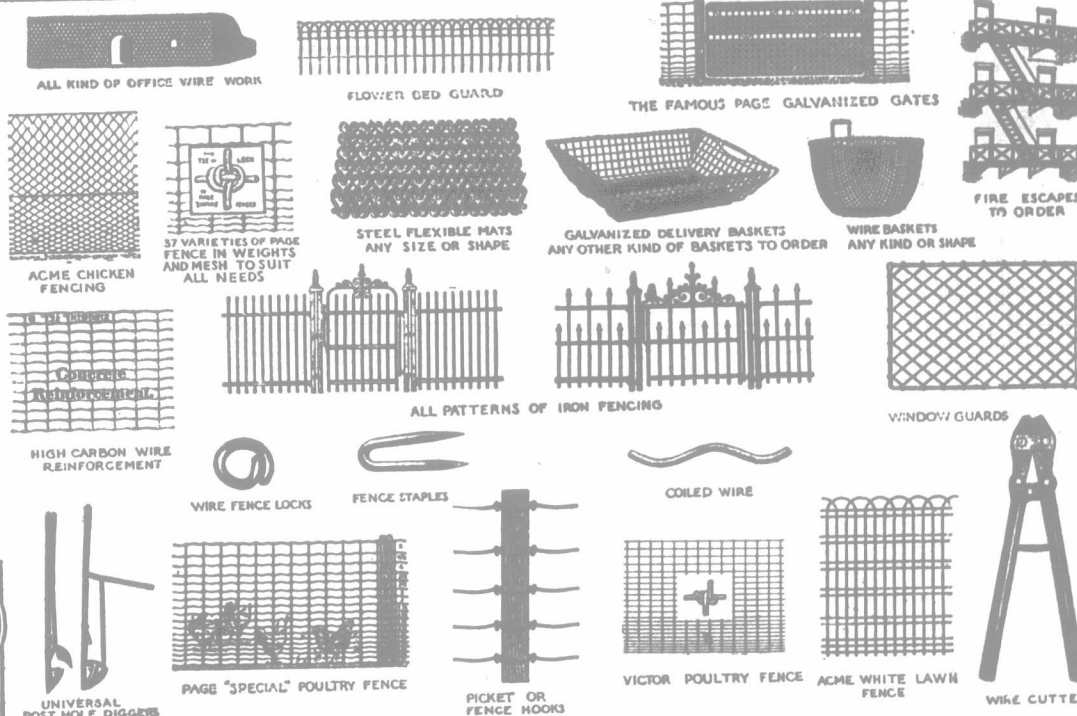
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Cut out, fill in and send this coupon to us by next mail and you will receive by return mail a most interesting and instructive book for dairymen. Act promptly.

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For horses, cattle, hogs and poultry—not a stock food, but a scientific blending of roots, herbs and barks; makes good solid flesh naturally, not artificially. Makes pure blood and cleanses the system. Try it for coughs, scratches, distemper and worms. Two cans guaranteed to put your horse in first-class condition. One large can, 50c., prepaid, at most dealers, or

Palmer Medical Co., Windsor, Ont.
Veterinary booklet sent free on application.

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THE SALVATION ARMY Immigration & Colonization DEPARTMENT

For several years recognized as the leading Immigration Society in Canada, will, during next season, 1910-11, continue its efforts to supply the demand for

FARM HELP

and Domestic Servants. Conducted parties are now being organized to sail early in the spring. Apply at once for application forms and information to

BRIGADIER H. MORRIS,
Head Office: James and Albert Sts.,
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or Major J. M. McGillivray,
Office for Western Ontario,
396 Clarence St., London, Ontario
Correspondence Solicited.

Up-to-Date Specialties For Farmers And Gardeners

Things you need—implements and tools that should be on every truck garden and farm. Our way of making these specialties assures adaptability, strength and service at the minimum price for the best goods of their kind on the market.



Without wings and ladder, it is a perfect wagon box. With them, it is the best Hay, Stock, Wood, Poultry, Corn or Fruit Rack ever invented. Adjusted to any position in a minute without wrench, hook or rope.

"Eureka" Sanitary Churn
Barrel of finest stoneware—top of clear pressed glass. Churns by hand lever. The only sanitary churn made. 3 sizes—8, 10 and 12 gallons.

"Eureka" Root Cutter
will slice or shred from 1 to 2 bushels per minute. Fastest machine made—easiest running. Tapering cylinder—10 best steel knives.

"Eureka" Combination Anvil
Best iron anvil, with vice, pipe vice and drill attachment, and saw clamps. Just what you need for repairing tools and machinery. Weighs 60 pounds.

The "Bacon Seed Drill"
will handle the most delicate seed without bruising or breaking, and will sow evenly to the last seed.

Write for Catalogue
Every farmer, who wants to make money out of his farm, ought to have our new catalogue. It shows our TOOLS, Rakes, Hoes and Machines as they are, and describes their construction in detail. Write for free copy.

**The Eureka Planter Co., Ltd.,
Woodstock, Ont. G1**

**A FLOOD OF LIGHT
FROM KEROSENE COAL OIL**
THE ALADDIN MANTLE LAMP generates rates, with Coal oil (Kerosene), a light far more brilliant than gas or electricity. It is simple, durable, portable, odorless and safe. Satisfaction guaranteed.
AGENTS MAKE BIG MONEY
by showing the lamp, the light makes the sale. It revolutionizes rural lighting; needed in every home. The SUNBEAM burners fit all ordinary lamps. Ask for Agency proposition or how you can obtain a lamp FREE to introduce it.

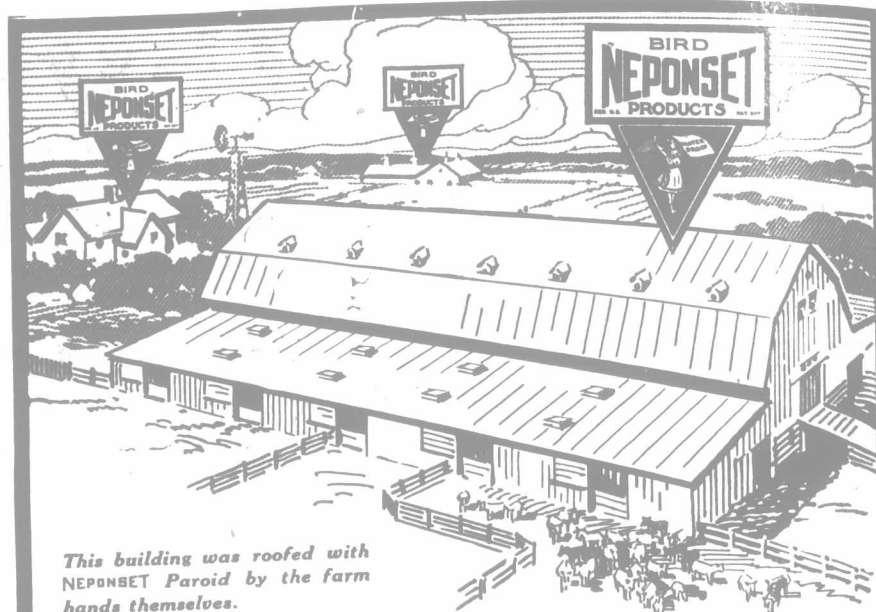
The MANTLE LAMP CO. of America, Chicago, Winnipeg and Dept. B MONTREAL.

GOSSIP.

"LES CHENAUX FARMS."

Beautifully situated on the north shore of Vaudreuil Bay, an extension of the Ottawa River, and two miles north of Vaudreuil Station, on the G. T. R. and C. P. R., in the Province of Quebec, lies the well-arranged and splendidly-equipped Les Chenaux Stock and Dairy Farms, the property of Dr. Harwood, 50 Sherbrooke street W., Montreal. Dr. Harwood is a striking example of those brilliant French-Canadians whose natural ambition and ability carry them to the front in whatever they undertake. Enjoying, as the Doctor does, one of the most extensive and lucrative practices in Montreal, as a mind-diverter he purchased the splendid Les Chenaux Farms, determined to get together a herd of dairy cows second to none on the continent. After thoroughly investigating the merits of the several breeds, he chose the Holsteins as best suited to his particular taste, and immediately set about to purchase as foundation stock those particular strains whose great producing abilities have made the Holstein famous the world over. That he selected wisely and well, is evident to anyone qualified to judge. On looking over the fifty-odd head now so comfortably housed in their commodious stables, the long rows of big, typical wedge-shaped dairy-type cows, carrying large, evenly-balanced udders, their contour indicating robust constitutions, great assimilative abilities, coupled with their rich breeding, backed as they are for generations with the blood of the breed's most notable sires and producers, they leave nothing to be desired as a herd of first quality, type and breeding. The chief stock bull in service is the intensely-bred Sir Aggie Beets Segis, a son of the famous King Segis, acknowledged to be the greatest bull of his age, with 53 A. R. O. daughters, at six years of age, 13 of them with two-year-old records of 20 lbs. each, 5 of them with records of 27.94 lbs. each, at three years of age, he by Mercedes Julip's Pietertje's Paul, with 14 A. R. O. daughters, he again by Johanna Rue 2nd's Paul De Kol, with 26 A. R. O. daughters, 7 of them with records over 20 lbs. The dam and grandam of King Segis have records that average 28½ lbs. each in seven days. The dam of Sir Aggie Beets Segis is Aaggie Lily Pietertje Paul, who held the world's junior four-year-old record of 29.36 lbs., her age being four years and two months. Her dam and grandam have records that average over 19½ lbs. each, and she is sired by the great Paul Beets De Kol, with 95 A. R. O. daughters, one with a record of over 32 lbs., six with records over 25 lbs., and 29 with records over 20 lbs. He also has eleven sons with 35 A. R. O. daughters, and is a brother to Aaggie Cornucopia Pauline, the world's senior four-year-old champion, with a record of 34.32 lbs. Thus, in this bull is combined the blood of those two world-renowned bulls, King Segis and Paul Beets De Kol. Assistant in service is the no less renowned-bred bull, Prince Hengerveld of the Pontiacs, sired by King of the Pontiacs, regarded by some as the greatest living sire to-day, he being the youngest bull to have a 30-lb. official record daughter, and being sired by Pontiac Korndyke, the world's most famous sire of to-day, he being the sire of Pontiac Clothilde De Kol 2nd, who has lately proven her title to the world championship by producing in seven days the great record of 37.28 lbs. butter. He is also sire of that famous cow, Pontiac Ragapple, with a record of 31.62 lbs. The dam of Prince Hengerveld of the Pontiacs is Pietertje Hengerveld Belle, an untested daughter of the renowned Pietertje Hengerveld Count De Kol, who has nearly 100 daughters in the Record, three of them with records over 30 lbs. each, one of his daughters is the world-famed De Kol Creamella, with a one-day milk record of 119 lbs., and a 100-day record of 10,017 lbs. Thus, in this bull is a combination of the great Pontiac and De Kol blood, a combination of the blood of these two bulls along the lines in which breeding is being carried on at Les Chenaux Farms is certain to produce record results. Among the many great breeding matters of this herd are such high-class cows as the Toronto and Ottawa champion, Pauline, with a seven-

(Continued on page 429.)



This building was roofed with NEPONSET Paroid by the farm hands themselves.

No Saving in First Cost Can Pay a Fractional Part of the Cost of the First Leak

When it comes to roofing, you need *the best*—the kind that has *proved* it will not leak—proved it in all climates, through many years of service to thousands of farmers and manufacturers throughout the country, to Governments and all leading railways.

NEPONSET PAROID ROOFING

For Barns, Stables, Poultry-Houses and Other Farm Buildings

NEPONSET Paroid Roofing is becoming each year more and more recognized as the most thoroughly satisfactory roofing and siding. More lasting than shingles; easier to lay, and a safeguard against fire.

For the residence NEPONSET Proslate Roofing gives a handsome effect, and saves you from repair bills and all roofing troubles.

Write for the Bird NEPONSET Book

which gives full information concerning the different NEPONSET Roofings for different types of buildings. Also describes NEPONSET Waterproof Building Papers, which keep out cold and dampness from your house and reduce the fuel bill.

There are NEPONSET Roofing Dealers everywhere. If you do not know the one in your locality, write us and we will tell you. We will also tell you the buildings nearby where NEPONSET Roofings have been used.

F. W. BIRD & SON, 481 Lotteridge Street, Hamilton, Ontario

Established 1795. Originators of Complete Ready Roofings and Waterproof Building Papers.
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BRUCE'S BIG FOUR FIELD ROOT SPECIALTIES

BRUCE'S GIANT WHITE FEEDING BEET—The most valuable Field Root on the market, combines the rich qualities of the Sugar Beet with the long keeping, large size and heavy cropping qualities of the mangel. ¼ lb. 13c., ½ lb. 19c., 1 lb. 30c., 4 lbs. \$1.10, postpaid.

BRUCE'S MAMMOTH INTERMEDIATE SMOOTH WHITE CARROT—The best of all field Carrots. ¼ lb. 23c., ½ lb. 39c., 1 lb. 60c., postpaid.

BRUCE'S GIANT YELLOW INTERMEDIATE MANGEL—A very close second to our Giant White Feeding Beet, and equally easy to harvest. ¼ lb. 13c., ½ lb. 19c., 1 lb. 30c., 4 lbs. \$1.10, postpaid.

BRUCE'S NEW CENTURY SWEDE TURNIP—The best shipping variety, as well as the best for cooking; handsome shape, uniform growth, purple top. ¼ lb. 18c., ½ lb. 24c., 1 lb. 40c., 4 lbs. \$1.40, postpaid.

FREE—Our handsomely illustrated 104-page catalogue of Vegetable, Farm and Flower Seeds, Plants, Bulbs, Poultry Supplies, Garden Implements, etc., for 1911. Send for it.

John A. Bruce & Co., Ltd., Hamilton, Ontario.
Established Sixty-one Years.

GOSSIP.

(Continued from page 428.)

day record of 20 lbs.; Inka De Kol Posch Beets, with a 2-year-old record of 15 1/2 lbs.; Rooney Belle 2nd, with a seven-day record of 26.717 lbs., and a thirty-day record of 108.183 lbs.; Buckeye Maid 3rd, with a one-day milk record of 92 lbs., and a seven-day butter record of 20.18 lbs. This cow was winner of second place at Ottawa and Sherbrooke, and at Sherbrooke won the silver medal as highest in the butter-fat contest. Several of those in the herd are closely related to the late dethroned world's champion, Grace Fayne 2nd's Homestead; also two are daughters of the renowned Pietertje Hengerveld Count De Kol; others are granddaughters of the great King Segis De Kol 2nd's Mutual Paul, Paul De Kol Jr., etc., the herd containing the blood of the past and present world's champions. From such breeding as this, for sale, are several young bulls, which, under the skillful management of D. Boden, are in prime condition.

Vol. 2, of the Canadian Hackney Stud-book, compiled and edited in the office of the Canadian Live-stock Records, Ottawa, has been issued, and a copy received at this office. It is a creditable publication of 192 pages, containing pedigree records of stallions numbering from 246 to 555, and of mares from 301 to 623; also a list of members, the constitution and rules of entry, and a list of inspected mares from foundation stock.

AYRSHIRES AT AUCTION.

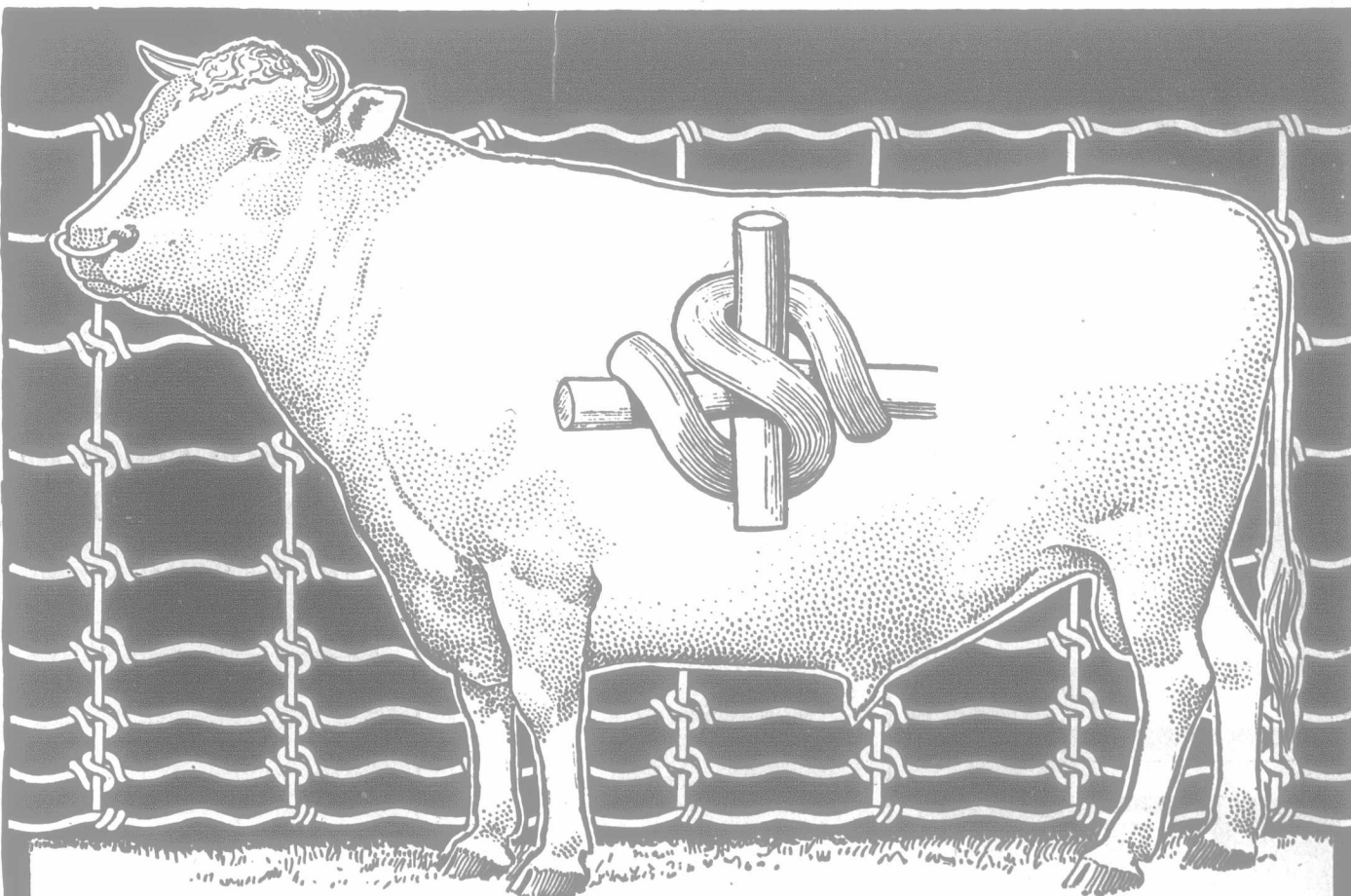
Forty head of registered Ayrshires, as stated in the advertisement in this issue, the entire herd of A. Kennedy & Son, Hill View Farm, Vernon, Carleton Co., Ont., Winchester Station, C. P. R., will be disposed of by auction, on March 22nd. Included in the sale are 20 females in milk or in calf, and 20 heifers, heifer calves, and young bulls; also the herd bull, Glenhurst Mains, two years old, bred from deep-milking stock.

MONKLAND YORKSHIRES.

The great Monkland herd of Large English Yorkshire swine, the property of Matthew Wilson, of Fergus, Ont., is still to the front as one of the best herds in Canada, which means there are few better in any country. Usually from one to two hundred strong, the herd is now somewhat reduced, owing to the extraordinary demand for breeding stock that has prevailed for the last year or two. The reputation for honest representation, and the strictly high-class character of the Monkland Yorkshires, has created a demand on the herd for breeders from one end of the country to the other, as well as across the line, with entire satisfaction to the hundreds of customers. Mr. Wilson is just now making a special offer of something over fifty young sows, all bred, and safely in pig. They are an exceptionally choice lot, big and growthy, averaging about 200 lbs. each, from six to seven months of age, not a mean one in the lot, and nearly all of the famous Hollingworth tribe. The breeding sows are certainly a splendid lot, about seventeen of them, that, in breeding condition, will average from 500 to 600 lbs. each. The stock boars in service are Monkland Joe 2nd, a son of Imp. Broomhouse Madrate, and on his dam's side he belongs to the noted Minnie tribe; the other is Monkland Lad, a son of Imp. Holywell Cardiff 6th. There are also for sale a limited number of young boars, about five months of age. Other lines of pure-bred stock bred on this famous farm are Clydesdale horses and Shorthorn cattle. Among the Clydesdales are such splendid breeding mares as Black Belle (imp.), by Baronson; Niobe (imp.), by Drumflower; Lady Kildrochat (imp.), by Baron Clyde. In younger ones are several fillies, one, two and three years of age, daughters of these mares. The Shorthorns are of the ever-popular Ceehla, Clementina, Beauty, Fashion, Golden Drop, and Miss Ramsden tribes, imported and Canadian-bred, big, thick, melting cows. Three young bulls are coming on that later will be for sale.

TRADE TOPIC.

The Ham & Nott Co., Brantford, Ont., manufacturers of Beekeeper's supplies, indicate in their advertisement in this paper, that they pay best market prices for best grade beeswax.



Is Anything On Your Farm Stronger Than A Bull ?

YES! If your fences are "IDEAL" Woven Wire, made of large gauge No. 9 HARD STEEL wire, heavily galvanized and with the verticals and horizontals clamped together with the Ideal Lock—that CANNOT SLIP. Bull-strong; hog-tight; horse high—a REAL fence.

NO! If you have wire fences of the ordinary kind—fairly good for a few years, but with no reserve strength to stand hard usage—because poorer wire makes them, and stretching them taut takes the utmost of their little strength to start with.

All Large Gauge Number 9 Hard Steel Galvanized Wire

From top to bottom Ideal Fence is all the same—large gauge No. 9 hard steel wire, heavily galvanized and therefore rust-proof. Note lock and its uniform smooth curve—no sharp turns to weaken the strength of the lock and yet a most positive grip—in FIVE different places. This is the fence that has ample springiness, immense strength, and the ONE LOCK THAT'S GOOD. Drop us a card and get our catalog telling all about the many styles and merits of IDEAL FENCE. Sample lock comes with it. Write us today.

McGREGOR BANWELL FENCE COMPANY, LIMITED, WALKERVILLE, ONTARIO

HURST SPRAYERS ON FREE TRIAL NO-MONEY-IN-ADVANCE PAY AFTER IT HAS PAID FOR ITSELF LET US SEND YOU ANY OF THESE SPRAYERS—to try for 10 days, then if you buy, you can pay us cash or we'll wait till you sell your crop, then you can pay us out of the "extra profit." We pay freight. Wholesale dealers' prices.

<p>Man-Power Potato and Orchard Sprayer. Sprays "anything"—potatoes or truck, 4 rows at a time. Also first-class tree sprayer. Vapor spray prevents blight, bugs, scab and rot from cutting your crop in half. High pressure from big wheel. Pushes east. Spray arms adjust to any width or height of row. Cheap in price, light, strong and durable. GUARANTEED FIVE FULL YEARS. Needs't send-a-cent to get it "on trial." You can get one free if you are first in your locality. Write today.</p>	<p>Horse-Power Potato and Orchard Sprayer. For big growers. Most powerful machine made. 80 to 100 gallon tank for one or two horses. Steel axle. One-piece-heavy-angle-iron frame, cypress wood tank with adjustable round iron hoops. Metal wheels. "Adjustable" spray arms and nozzles. Brass ball-valves, plunger, strainer, etc. Big pump gives vapor spray. Warranted for five years. Try this machine at our expense with "your money in your pocket." See free offer below. Write today.</p>	<p>Fits-All Barrel Sprayer. Fits any barrel or tank. High pressure, perfect agitation, easy to operate. Brass ball-valves, plunger, strainer, etc. Automatic strainer. No "cup leathers or rubber" about any of our sprayers. Furnished plain, mounted on barrel, or on wheels as shown. Five year guarantee. It don't cost you "a cent" to try it in your orchard. Get one free. See below. Write today.</p>
---	--	--

FREE—Get a sprayer FREE.—After you have tried the sprayer and are satisfied that it is just as we recommend it, send us a list of the names of your neighbors and we will write them and quote them price and have them call and see your machine work, and for every Fits-ALL Sprayer we sell from your list we will credit you with \$2.00 or send you check if you have paid cash.
For every Man-Power Potato and Orchard Sprayer we sell we will credit you with \$3.50 or send check.
For every Horse-Power Potato and Orchard Sprayer we sell we will credit you \$8.50 or send check.
We do all corresponding and selling. All you need do is to show the sprayer. Many have paid for their sprayer in this way. This offer is good for only the first order in each locality. Don't delay. Send the coupon or post card NOW.

COUPON—Fill Out and send to-day This Coupon will not appear again.
THE ONTARIO SEED CO., Successors, 128 King Street, Waterloo, Ontario
Send me your Catalogue, Spraying Guide, and "special offer" on the sprayer marked with an X below.
— Man-Power Potato and Orchard Sprayer.
— Horse-Power Potato and Orchard Sprayer.
— Fits-All Barrel Sprayer.
NAME.....
ADDRESS.....

THE ONTARIO SEED COMPANY, SUCCESSORS, 128 KING STREET, WATERLOO, ONTARIO

Present Your Daughter With a Bank Account

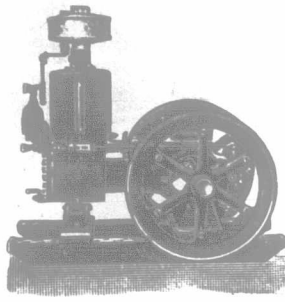
Present your daughter with a bank account and a monthly allowance. Have her pay her accounts by check. Tell her what she saves will be hers.

3 1/2 %

This will teach her to be thrifty, and give her an education in the value of money—knowledge every girl should have.
\$1 opens an account; 3 1/2% interest, according to agreement. Obliging clerks.

Agricultural Savings & Loan Co., 109 Dundas St., London, Ont.

Grind Your Feed at Home



If you would investigate you would find that you could grind all your feed, cut all your straw and pump all your water at home with a

STICKNEY Gasoline Engine

and save the price of the engine in a very short while by saving the miller's toll, and the hire of the man who owns a portable engine. Think of it—Without leaving your barn you could do all your work that requires power. And the Stickney never balks. It is ready at all times. No trouble. No tinkering. The cost of the gasoline is very small. We carry all sizes from 3 to 16 horse-power. Write for our catalogue.

The Ontario Wind Engine & Pump Co.
(LIMITED),
Winnipeg. Toronto. Calgary.

"ELECTRO BALM"
CURES ECZEMA.

Also Piles, Burns, Scalds, Chapped Hands and Face.

Gentlemen use it after shaving. This Balm is handled by the best firms, and is highly recommended by those who have used it.

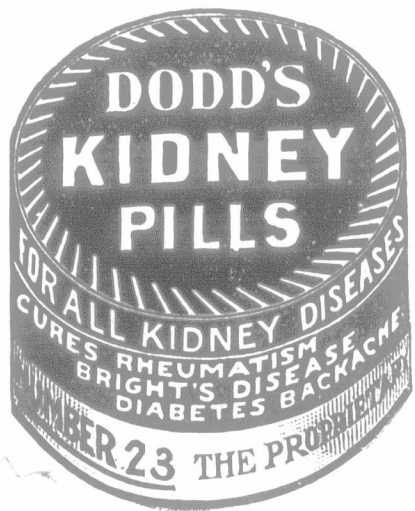
Write for Free Sample

ENCLOSE 2c. STAMP FOR POSTAGE

50c. a Box at all dealers or upon receipt of price from

THE ELECTRIC BEAN CHEMICAL CO.,
Ltd., OTTAWA.

As a doctor was showing some friends over a lunatic asylum, he drew their attention to a stately old woman wearing a paper crown. He explained that she imagined she was the Queen of England, and, thinking to amuse his visitors, he advanced toward her with courtly bow, and said: "Good morning, your majesty." Looking at him, she scornfully uttered: "You're a fool, sir!" The doctor was greatly astonished, but totally collapsed when one young lady innocently remarked: "Why, doctor, she was sane enough then!"



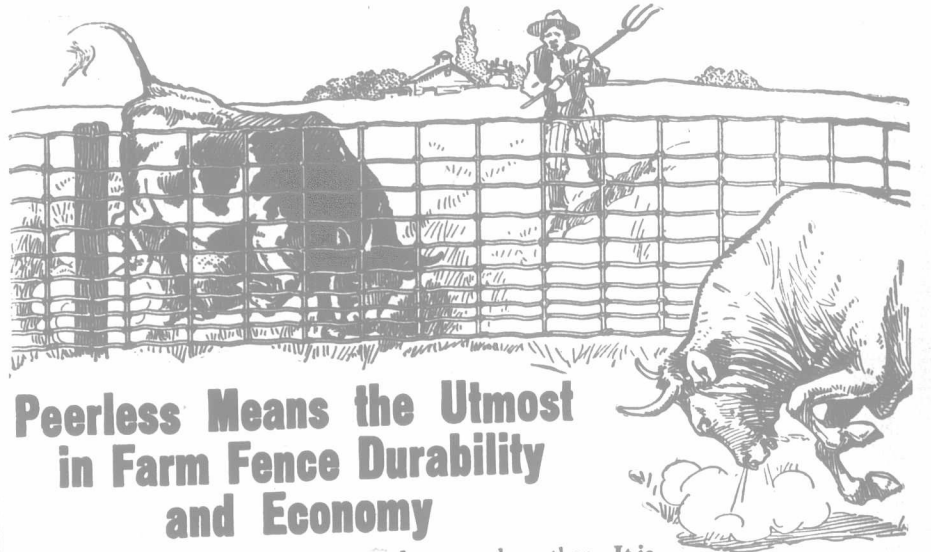
GOSSIP.

THE CARGILL SHORTHORNS.

The Cargill herd of over 100 head of Scotch Shorthorns, were never seen by the writer in better fit than this winter. Recognized as it is by all competent authorities as one of the world's greatest and best-bred herds, the demand for breeding females and herd-headers is continually on the increase. So great is that demand, particularly this year, over any previous year, that there are only six young bulls left, out of a total of seventeen of last year's crop. They are a roan Lancaster, by the Duthie-bred Broadhooks bull, Imp. Blood Royal, dam Imp. Lancaster Pet; a red Welcome or Lady Ann, by the Broadhooks bull, Imp. Red Star, dam Lady Ann C. 2nd; a roan Fragrant, by Imp. Red Star, dam Flower Girl 13th; a red Beauty, by Imp. Blood Royal, dam Imp. Beauty 34th; a roan Miss Ramsden, by Imp. Red Star, dam Lady Lucy; a roan, by the Clipper-bred bull, Imp. Proud Hero, dam Julia Lyndoch. High-class breeding and individuality are dominant features of these young bulls. The great majority of the fifty-odd breeding cows are imported, immensely thick-fleshed, many of them up to 1,800 lbs. in weight, representing the best and most fashionable blood of the breed. There probably never was a year since the foundation of the herd that it contained so choice a lot of heifers, particularly the yearlings, the get of the present stock bulls, Imp. Blood Royal, Imp. Proud Hero, and Imp. Red Star, with an odd one got by the Missie-bred bulls, Imp. Lord Mistletoe and Imp. Merchantman, practically all reds and roans. High-class show material is extensively in evidence in the herd.

DALGETY BROS.' NEW IMPORTATION

Dalgety Bros., of London, Ont., and Dundee, Scotland, have found it necessary to make another importation of Clydesdale stallions and fillies to fill the increasing demand for the season of 1911. This importation landed about three weeks ago, and already all the fillies and a couple of the stallions have been sold. We believe we are well within the mark in saying that of all the importations made by this firm in their many years' experience, they have never had so choice a lot of big, ton horses, of such good breeding and so much quality, as are now in their stables in London. Baron Johnnie is a bay four-year-old, by the renowned Cairnbrogie Chieftain, dam by Knight of Banff, grandam by Lawer's Baron Johnnie. This is one of the best horses to-day in Canada, up to a ton in weight, he combines great style, and the flashiest kind of underpinning; he has won many prizes in Scotland, including the Cup for best animal on the ground at the Aberdeen Show. Highland Laddie is a brown four-year-old, by the noted breeding horse, The Dean, by Royal Gartly, dam by General Lockhart. This is another horse up to the ton, on great, strong, flat, flinty bone, with draft character all over, and, withal, is very smooth and toppy. Strathearn Style is a black four-year-old, by the great sire of champions, Baronson, dam by the Cawdor Cup champion, Royal Gartly. This is a low, thick, smooth horse, showing immense strength all over, strong, flat bone, a natty good-moving horse, of the cart type. Lauriston Pride, by Royal Favorite, a bay five-year-old, is a big, toppy horse of style and quality, up to a big size, with character and the best of underpinning, a horse that will do well in any section, sired by the good breeding horse, Royal Favorite, dam by Baron's Pride. Dan Leno is a brown five-year-old, by Hillhead Chief, dam by Sir Archie, grandam by Pandora's Prince, with many prizes to his credit won in Scotland. He is the kind that wins in any company, up to the ton in weight, he has the proper draft character, with the toppy, rangy style, and big, flat bone, that go to make the ideal draft horse. Diogenes is a brown, rising three, a topper all over, a coming champion. He combines the size, character, quality and style so much desired in a draft horse, sired by the great King of Kyle, dam by Royal Edward, grandam by Royal Reward. All these horses, except the two-year-old, have been tried, and proved sires of worth. They are the kind the country wants, and are for sale, on most favorable terms.

Peerless Means the Utmost
in Farm Fence Durability
and Economy

The Peerless Fence is made to stand wear and weather. It is made of carefully selected, fully galvanized, spring steel wire. Stays springy and strong, always taut, never sags. Put a Peerless Fence around your farm and you'll get real service.

Read what users have to say about the Peerless:—

Concerning the quality and galvanizing of your fence, I think it perfect. I have compared it with other makes and every person where I put up your fence is well pleased with it and will not have any other fence on the place. I was at a farmer's not long ago and he stated that he was going to have three hundred rods of it in the Spring. I put up ninety rods for his neighbor four years ago and there is no sign of rust or slackness yet. The wire in your fence is tempered so as to suit the cold and warm weather and I have never had to go back to tighten one rod of fence that I have put up yet. I could mention different makes of fence, from firms well known, that their fences have rusted badly inside of three years. The Peerless is the farmers' favorite around here.
—P. FOGAL, Cedar Valley.

I have been comparing some of the Peerless Fencing that I put up the first year I sold fence and every wire is just as bright as ever, while some other makes put up about the same time have from one to three rusty horizontal wires running through it. I have always found the wire in Peerless Fencing first class.
—EZRA FOX, Kingsville.

In regard to the durability of the Peerless Fence for the length of time it is up, I find on examination by myself and the parties I have put it up for, it surpasses any other wire fence for not rusting. Also the people I have dealt with give the Peerless Fence the preference before any other and if they were buying again would buy no other.
—W. H. Van ALSTYNE, Atkinson.

Peerless Fencing is the best galvanized fence and when put up properly is the best fence on the market today. I have some Peerless Fence, put up some four or five years ago, which is as bright as ever and tight, standing O. K.
—HOWARD BRUSH, Pitts Ferry.

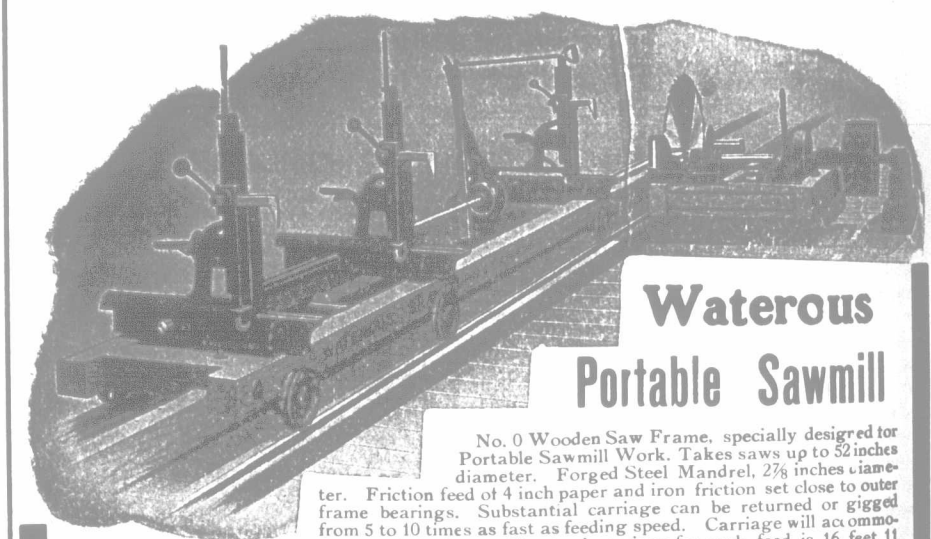
Farmers speak well of your fence and I know of no fence that looks better for the years that it has been erected than the Peerless. I have never heard a farmer say that the Peerless showed any sign of rust yet.
—GEO. DAVIS, Clinton.

Wherever I have seen Peerless Fencing that was erected five years ago there was no sign of rust and it seems to be as good as the day I put it up and I know of other fences that have been up only two or three years that are very badly rusted. This I am prepared to prove to anyone who wishes to see the fence for themselves, as the fences are here for inspection. I am well pleased with the material that you have used in your fences.
—O. M. PASTORIUS, Harrow.

The best fence for you to put around your farm is the Peerless—it will last longest, give you the most satisfaction and save you money. Write for particulars. Agents wanted in all unoccupied territory.

THE BANWELL HOXIE WIRE FENCE CO., Ltd.

Makers of Farm, Poultry and Ornamental Fence and Gates of exceptional quality
Dept. B, Winnipeg, Man., Hamilton, Ont.

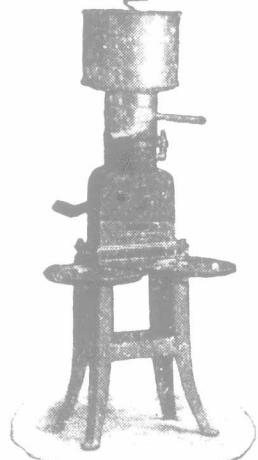
Waterous
Portable Sawmill

No. 0 Wooden Saw Frame, specially designed for Portable Sawmill Work. Takes saws up to 32 inches diameter. Forged Steel Mandrel, 2 3/4 inches diameter. Friction feed of 4 inch paper and iron friction set close to outer frame bearings. Substantial carriage can be returned or giggered from 5 to 10 times as fast as feeding speed. Carriage will accommodate good size logs. Standard carriage for rack feed is 16 feet 11 inches long; rope feed 17 feet 6 inches long. Frame extra wide, of heavy red pine stringers, edges bound with heavy iron. Log seats heavy web. Six-inch eye-beams. Knees and rack cast in one piece. Knees have 3-inch independent taper movement, and are fitted with our patent upper and lower steel hook. Peel Dogs, operated by overhead, single-acting ratchet set works, having large ratchet wheel. Peel Dogs, operated by overhead, single-acting ratchet set works, motion and permit a set of 1-16 inch. Steel-set shaft 1 15-16 inches diameter and 16 feet long. Carries pinions which operate knees, and is fitted with heavy cast iron hand-wheel for hand setting. Track 54 feet long. This is one of the finest portable sawmills made. It will pay you to send for our free catalogue, which describes it, as well as many others, in detail. Drop us a card to-day.

THE WATEROUS ENGINE WORKS CO., LTD.,
BRANTFORD, ONT.

\$15.00 and Upwards

We Give a Free Trial



of the DOMO CREAM SEPARATOR, which excels any other separator in the world. The DOMO SEPARATORS are of the highest quality, well built and durable. They are close skimmers, turn easy, handsomely finished, and guaranteed. Prices cut in two.

We gladly send a machine to you on free trial, FREIGHT PREPAID, and if you are not perfectly satisfied, return it to us at our expense. This liberal offer enables you to prove our statements, and that's what we mean. TEST IT AT OUR EXPENSE. We take ALL the risk. Can we offer anything more fair?

Write to-day for Circular "A," which gives full particulars of our machine, trial offer, a few of many testimonials received from users, prices and easy terms of payment. It's FREE.

DOMO SEPARATOR CO.

Brighton, Ont.

St. Hyacinthe, Que.

Wagon Paint

Makes the Wagon last longer

The wagon maker smiles when he sees the way some farmers neglect their wagons—it means more business for him. But he admires the fellow with foresight enough to keep his wagon well painted—it means longer life for the wagon. The wagon maker knows the value of paint—that is why he covers the wagons he makes with the best wagon paint he can get, so it will protect the wood and iron during the life of his guarantee.

MARTIN-SENOUR WAGON PAINT

is made expressly for painting lumber wagons, sleighs and all kinds of farm implements and tools. It readily flows from the brush, is of good body and dries hard—will not blister—resists the wear and tear to which wagons are subjected—stays bright and makes the old wagon look new.

Cut out the coupon, present it to any Martin-Senour agent for a free half-pint can of paint. If no agent near you, send coupon to us—we will see that you receive can and farm book free. Be sure to write today

The
Martin-Senour Co., Limited
Montreal

A Can of Paint FREE

This coupon entitles you to a free can. Be sure you get it.

COUPON

Present this coupon to any Martin-Senour Dealer, and receive free a half pint sample can of RED SCHOOL HOUSE PAINT To Dealer—You are authorized to honor this coupon when presented. The Martin-Senour Co., Limited

DO YOU KNOW

THAT WORN-OUT LANDS MAY BE MADE PRODUCTIVE AND PROFITABLE BY THE JUDICIOUS USE OF THE RIGHT KIND OF FERTILIZER?

NOW IF YOU HAVE A PIECE OF LAND THAT WON'T GROW ANYTHING BUT WEEDS, TALK WITH US ABOUT IT AND LET US SUGGEST THE RIGHT FERTILIZER

WE FEEL VERY SURE THAT WE CAN SHOW YOU HOW TO USE FERTILIZERS WITHOUT GREAT EXPENSE SO YOUR LAND WILL PAY

CONSULT US FREELY IT IS OUR BUSINESS TO KNOW ENQUIRIES FREELY ANSWERED AGENTS WANTED FOR TERRITORY NOT TAKEN UP THE W.A. FREEMAN CO. LIMITED HAMILTON ONTARIO

A DRY SADDLE WHEN IT RAINS IF YOU WEAR



TOWER'S FISH BRAND POMMEL SLICKER

The long service and the comfort it gives makes it the Slicker of Quality Sold Everywhere

TOWER CANADIAN OILED CLOTHING CO., LTD. Toronto, Canada. 111

QUESTIONS AND ANSWERS. Miscellaneous.

SECURITY FOR DEPOSITORS AND NOTE-HOLDERS.

What security, if any, have depositors in a chartered bank if it fails? Also, what security is there for the holders of the bank bills? A. C.

Ans.—The depositors are protected under Clause 125 of the Bank Act, which reads as follows:

"In the event of the property and assets of the Bank being insufficient to pay its debts and liabilities, each shareholder of the Bank shall be liable for the deficiency to an amount equal to the par value of the shares held by him."

Under Clause 131, the bank notes shall be the first charge upon the assets of the bank.

AN AILING SHEEP.

I have a valuable two-year-old Shropshire ewe, which, three days ago, seemed to lose power in one hind leg, and the next day her other leg was affected. She also went off her feed, and holds her head high and to one side, and it seems very hard for her to get up. R. N.

Ans.—The cause of her lameness is difficult to determine. Her feet should be carefully examined to discover whether the trouble is there. The holding of her head to one side indicates grub in the head, the result of larvae deposited by the gad fly in the nostrils in summer. For this, there is no reliable cure acknowledged, though some persons claim to have secured the dislodging and expulsion of the grubs by injecting spirits of turpentine into the nostrils with a syringe, causing violent sneezing.

COCOONS.

F. S., Pembroke, makes inquiry respecting: (1) Good places to look for cocoons; (2) Best way of keeping them through winter. He describes a large cocoon containing what he thinks a prematurely-developed moth.

Ans.—The description of the cocoon makes it probable that it was either a Cecropia or a Promethea. Both insects are found on wild cherry, and construct tough, papery cocoons—the former sometimes four to five inches long, and one and a half to three inches wide in the widest part. The former may be sought for any time in winter or spring, in the orchard and on various wild trees, as the larva is a general feeder; the latter favors ash, lilac, cherry, sassafras, and buttonwood. The Polyphemus also makes a large cocoon, which may be sought when the snow goes off, among leaves, particularly under oak and elm trees. Cocoons kept in the temperature of living-rooms, develop and emerge prematurely. They should be kept at temperature and under conditions similar to those they experience in nature. J. D.

HOLSTEIN MILK.

1. Is any explanation offered why some Holsteins yield between 4 per cent. and 5 per cent. butter-fat, while the majority run from 3 per cent. to 3.5 per cent.?
2. Is it possible to increase the productivity of a Holstein in butter-fat? NOVICE.

Ans.—1. Similar differences occur in the percentages of fat yielded by various cows of other breeds.

2. By selection, it is undoubtedly possible to develop high-testing strains of any breed. An individual cow cannot, by any system of feeding, be made permanently to give milk richer than her normal standard, though it is held that by feeding a cow up into high condition before freshening, and then after she has commenced her lactation period, suddenly withholding part of her ration, she can be forced to draw upon the fat in her system, thus, for a few weeks, yielding not only abnormally rich milk, but actually a larger amount of butter-fat, during that limited period, than if carried along on full feed. Whether this will work in all cases or not, we have certainly heard of some such remarkable instances.

A school superintendent of Washington says that the brightest wrong answer ever given by a school child in that city was this:

"Algebra was the wife of Euclid and the mother of Geometry."

Buy the Cheapest Form of Nitrogen

Nitrate of Soda

Contains 15⁸⁵/₁₀₀% AVAILABLE nitrogen.

Get Our Prices

on this necessary plant food. It is the most effective form of nitrogen, because immediately available.

It Will Pay You

to use Nitrate of Soda both as a Top Dressing—100 lbs. to the acre, and as a supplement to a complete commercial fertilizer.

CHEMICAL LABORATORIES, LTD.

148 Van Horn Street,

Toronto, Canada.

Be Sure

Not Sorry

When you buy seeds you are investing not the price of the seeds only, but the value of the land for a year and the season's work as well. That makes it most important that you should buy

EWING'S Reliable Seeds

That is the first and perhaps the most important step towards a good crop. Ewing's Seeds are clean, vigorous, healthy, true to type, and sure to grow if they get any kind of a chance. For over forty years they have been making Canadian farms and gardens famous.

Write for our handsome Illustrated Catalogue, and if your dealer hasn't Ewing's Seeds buy from us direct.

WM. EWING & CO., Seedsmen
McGILL ST., MONTREAL. 12



Weston, Ont., and Brandon, Man.

IMPORTING BARNS

J. B. HOGATE, Proprietor,

IMPORTER OF

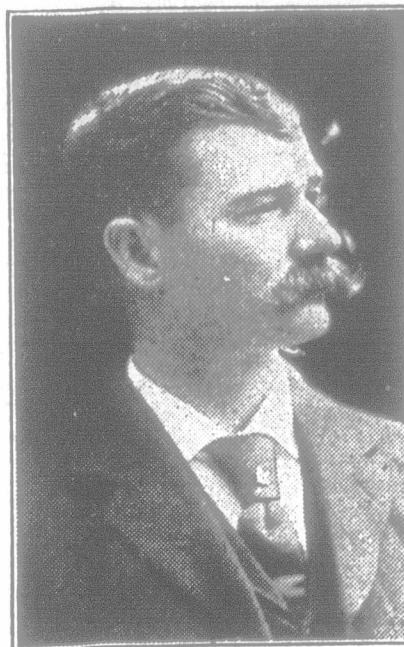
Clydesdale and Percheron STALLIONS

Clydesdales sired by such noted sires as Hiawatha, Baron of Buchlyvie, Baron Winsome and others. Dams equally as good.

Percherons of the best blood of France.

I can sell you a ton stallion for less money than any man in the business. Don't buy undersized stallions and think you will breed draft geldings and mares from them. Come and see my ton horses and get prices. I will surprise you and save you plenty of money. Weston is reached by the G. T. R. and C. P. R. For further particulars write:

J. B. Hogate, Weston, Ont.



J. B. HOGATE, Weston, Ont.

CLYDESDALES—Imported and Canadian-bred

Our several importations per year place us in a particularly favorable position to meet all demands for the best and most fashionably bred representatives of the breed. We are never undersold, and give favorable terms. ROBT. NESS & SON, HOWICK, QUE.

A FEW CLYDESDALE SELECTS LEFT. I have one 6-year-old Clydesdale stallion that is hard to beat for size, quality and breeding; 6 others, rising 3 years, that are big, drafty, character colts, and bred the best; 3 Percherons rising 3. There is no better selection in Canada, nor no better prices for a buver. T. D. ELLIOTT, BOLTON, ONT.

Mount Victoria Stock Farm, Clydes and Hackneys.

We are just now offering exceptional values in Clydesdale and Hackney stallions and fillies, of all ages; prizewinners and champions, highest-class types of the breed, to make room for our new importation. T. B. MACAULAY, Prop. Hudson Heights, Que. ED. WATSON, Manager.



Part of Trinidad Asphalt Lake

The costliest roofings are the roofings that don't last.

The roofing that *does* last is made of Trinidad Lake Asphalt—

Genasco

the Trinidad-Lake-Asphalt Roofing

Other roofings all have their drawbacks: Shingles crack, split, and rot; tin rusts; slate breaks and blows loose; coal-tar gets brittle and cracks; so do the many so-called "asphalt" roofings, because they lack the "live" lasting qualities of natural asphalt.

Genasco has the natural oils of Trinidad Lake asphalt sealed in it; and they keep the roofing always pliable and strong and defensive against all weathers. Genasco doesn't crack, rot, rust, or break. It is *permanently* waterproof. That means real economy.

It pays to cover the roof of every building on the farm with Genasco. Fully guaranteed.

The **Kant-leak Kleet** prevents nail-leaks, and waterproofs the roofing-seams without cement. Makes Genasco easier to apply than ever.

Ask your dealer for Genasco mineral or smooth surface Roofings with Kant-leak Kleets packed in the roll. Write us for the Good Roof Guide Book and samples.



The Barber Asphalt Paving Company

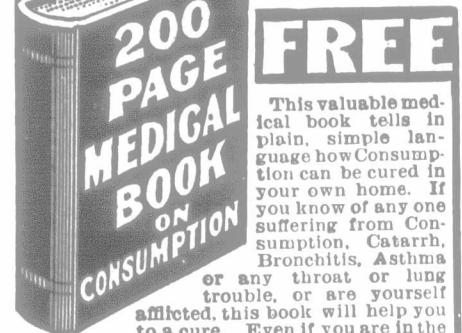
Largest producers of asphalt, and largest manufacturers of ready roofing in the world

Philadelphia

New York San Francisco Chicago
Caverhill, Learmont & Company, Montreal.
D. H. Howden & Co., Ltd., 200 York Street,
London, Ont.



Consumption Book



This valuable medical book tells in plain, simple language how Consumption can be cured in your own home. If you know of any one suffering from Consumption, Catarrh, Bronchitis, Asthma or any throat or lung trouble, or are yourself afflicted, this book will help you to a cure. Even if you are in the advanced stage of the disease and feel there is no hope, this book will show you how others have cured themselves after all remedies they had tried failed, and they believed their case hopeless.

Write at once to the **Yonkerman Consumption Remedy Co.**, 1632 Rose Street, Kalamazoo, Mich., and they will send you from their Canadian Depot the book and a generous supply of the New Treatment, absolutely free, for they want every sufferer to have this wonderful cure before it is too late. Don't wait—write today. It may mean the saving of your life.

PLEASE MENTION THE ADVOCATE.

QUESTIONS AND ANSWERS. Veterinary.

BRAIN TROUBLE.

Cow takes fits. She staggers around, froths from her mouth, and sometimes falls. She will be due to calve in the spring.

C. A. McK.

Ans.—This is due either to a growth on the brain, or congestion of the blood-vessels of the brain, due to stomachic trouble. If due to the first-mentioned cause, nothing can be done. If to the latter cause, a brisk purgative of 2 lbs. Epsom salts and 1 ounce ginger will tend to give relief. To treat an attack, bleed from the jugular vein. If she lives to have her calf, I would advise you to allow her to dry as soon as possible, and, if possible, fit her for the butcher. V.

RESULT OF OPERATION ON TEAT.

Cow's teat gradually became closed until no milk could be drawn. I operated on end of teat with a penknife, and kept the opening plugged between milkings for a week, when the udder became hard and hot, and very little milk can be got from that quarter.

L. A. C.

Ans.—The present inflammatory action is the result of the operation. None but a veterinarian, with instruments especially designed for the purpose, should attempt to enlarge the milk duct, or remove obstructions from the same. If the inflammation remains confined to one quarter, you may be thankful. Treatment consists in giving a purgative of 1½ lbs. Epsom salts and 1 ounce ginger. Apply heat to the part by poulticing, or long-continued and frequent bathing with hot water. Draw what fluid you can from the teat, and rub quarter well with camphorated oil four times daily. If abscesses form, open, and flush cavities out three times daily with a five-per-cent. solution of carbolic acid. Feed lightly on dry food for a time to temporarily check the secretion of milk. It is probable the quarter will become inactive. The fluid might be extracted by a teat syphon, but it is probable it consists of curds which will not flow through syphon. V.

Miscellaneous.

SHETLAND PONIES WANTED.

Would you be kind enough to put me in touch with some of the breeders and importers of pure-bred Shetland Ponies in Canada. Kindly give the name and address of one or two who are making a specialty of breeding these little pets.

W. H. B.

Ans.—Shetland pony breeders should note this inquiry, and advertise.

SIZE OF TILE—DRAINAGE BY WELL.

1. Have fifty acres to tile, with wood-lot at back end, of about ten acres. The fall is about four feet in two hundred and fifty rods, with about eighteen in fall across. What size tile would it require for a main drain the length of lot, and size to cross-drain into it? The land is a clay loam, with no sand on it.

2. Can surface water be drained into a deep well, say two hundred feet deep, or deeper?

W. L. H.

Ans.—1. You would need a 12-inch tile at the outlet, then drop to 10-inch, 8-inch, 6-inch and 4-inch, farther up. The proper length of the different sizes would be somewhat as follows: 95 rods of 12-inch, 70 rods of 10-inch, 55 rods of 8-inch, 30 rods of 4-inch. The reason that such large tile are required is, that the slope is very slight,—4 feet in 250 rods is just a shade over 1 inch in 100 feet.

2. It all depends upon the well. If it is one that has only a small supply of water—that is, one that can be pumped dry—then it would be useless to drain into it, but if it is one which cannot be pumped dry, but always maintains the water at the same level, no matter how much pumping is done, then it is probable that this well is connected with some underground or surface lake, or other large body of water, and therefore, if we were to drain into it, the water would disappear and flow backward to the reservoir.

W. H. DAY.



Clip Horses

Before the spring work begins, clip off the long winter coat of hair. Your horses will sweat less, they will dry off quickly at night and get better rest. They will get more good from their feed, feel better, look better, and do better work.



Clip Cows

Clip the flanks and udders every three or four weeks. It is easy then to clean the parts before milking. Insures clean and sanitary conditions. One large dairy company recently purchased 100 Stewart machines for its stables.

Do Both with this Machine

Anyone can Clip with this machine

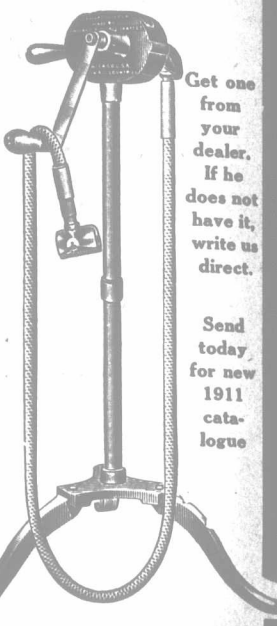
It turns easy, clips fast and will last a lifetime. This

Stewart Ball Bearing Clipping Machine

has all gears cut from steel, file hard and enclosed and protected from dust and dirt. They run constantly in oil. Clips both horses and cows without change. There is 6 feet of new style, easy running flexible shaft on this machine and the famous Stewart single tension nut clipping knife. Price of machine complete, \$9.75 at your dealers, is only

CHICAGO FLEXIBLE SHAFT CO.

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Get one from your dealer. If he does not have it, write us direct.

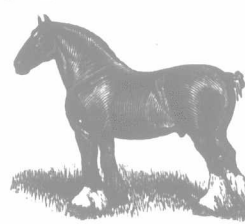
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To Buyers Looking for a Good Stallion:



I have imported **Percheron Stallions** for years. Always bought from the best breeders in France, and beg to call the attention of prospective buyers to the fact that I have won this year at Toronto first and second aged class sweepstakes and silver medal. Also at Ottawa Fair, first and third in aged class, first, second and third in 3-year-old class, sweepstakes and gold medal. Those horses are beautiful dapple-greys and blacks, three to four years old, weighing 1,800 to 2,000 lbs., with feet and legs that cannot be beat, beautiful heads and necks, the kind that good buyers are looking for. I do not intend, and I will not allow, if I can help it, any one to give more quality breeding for a fixed price than I will. Come to the home of the champion prizewinners and judge for yourself.

JOHN HAWTHORNE, Simcoe, Ontario.



UNION HORSE EXCHANGE

Union Stock-Yards, TORONTO, ONT.

The Great Annual Auction Sale of 75 Imported and Canadian-bred

REGISTERED CLYDESDALES

Stallions, Mares, Mares in foal and Fillies, will be held this year on

Tuesday, March 14th, 1911.

J. HERBERT SMITH, Manager.

Clydesdale Stallions and Mares

Our new importation has just arrived at our stables here. All the animals are in good condition, of big size and quality. Come and inspect them.

Dalgety Bros., London, Ont.

SCOTLAND'S BEST IN CLYDESDALES

I believe I can show intending purchasers of Clydesdale stallions or fillies a bigger selection, better breeding, bigger horses, more character, more quality, more right-down high-class individuality, and will sell them for more reasonable prices, and give better terms, than any other man in Canada. Let me hear from you if you want a topper.

T. H. HASSARD, MARKHAM, ONT.



7 Imported Clydesdale Stallions 2, 3, 4 and 5 years of age, selection, with type, quality, breeding and character unexcelled. We are showing a choice and our terms are made to suit. Phone connection. **Crawford & McLachlan, Widder P. O., Ont.** THEDFORD STATION.



NEW IMPORTATION ARRIVED
Our 1910 importation of **Clydesdale Stallions and Fillies** are now at our stables. We can show some of the best individuals and best breeding sires imported. Our prices are right, and terms to suit. **JOHN A. BOAG & SON, Queensville, Ont.**



IMP. CLYDE STALLIONS AND FILLIES
Imported Clyde stallions and fillies always on hand, specially selected for their size, type character, quality, faultless action and fashionable breeding. Prices right. Terms to suit. **GEORGE G. STEWART, Howick, Que.**

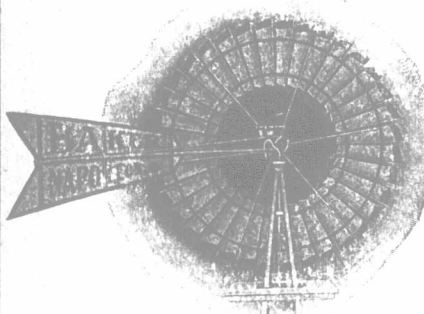


Imported Clydesdales
1910 have arrived. They were selected to comply with the Canadian standard, combining size, style, quality and faultless underpinning with Scotland's richest blood. They will be priced right, and on terms to suit. **BARBER BROS., GATINEAU PT., QUEBEC.**

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"BAKER"

Ball-bearing Wind Engines for Pumping, the most satisfactory and economical power and the easiest-running mill made.



We make a full line of steel towers, galvanized steel tanks, pumps, etc.

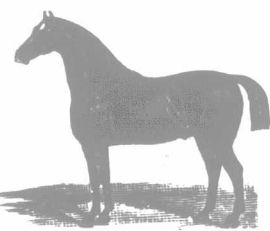
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The Heller - Aller Co., WINDSOR, ONTARIO.

Dr. Page's English Spavin Cure

For the cure of Spavins, Ringbones, Curbs, Splints, Windgalls, Capped Hocks, 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. Frederick 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.

Clydesdales and Hackneys

I have some stallions of both breeds and of recent importation for sale. The Clydesdales are of the most fashionable breeding and character, up to weight and guaranteed breeders. My horses won two breed championships at Ottawa last fall. Write me for particulars and prices on stallions ready for service.

B. ROTHWELL, Hillsdale Farm, Ottawa Post Office, Ont. Farm three miles east of Ottawa.

MESSRS. HICKMAN & SCRUBY Court Lodge, Egerton, Kent, Eng.

Exporters of Pedigree Live Stock of all Descriptions. From now on we shall be shipping large numbers of horses of all breeds, and buyers should write us for particulars before buying elsewhere. If you want imported stock and have not yet dealt with us, we advise you to order half your requirements from us, and obtain the other half any way you choose; we feel confident of the result, we shall do all your business in the future. Illustrated catalogues on application.

FOR SALE: TWO CHOICE, SMOOTH IMP.

CLYDESDALE STALLIONS

Four and six years old. Both dark brown. Sound and right, with best of breeding.

Wm. Meharey, Russell, Ontario.

Percheron, Belgian, Shire and Hackney Stallions and Mares.

As fine a lot as there is in America; 3 to 4 years old; with lots of quality and good individuals; weighing or maturing 1,900 to 2,200 lbs. Prices on imported stallions, \$1,000 to \$1,200; American-bred stallions, \$600 to \$900. Importations to arrive February 18 and March 1.

Lew W. Cochran, Crawfordsville, Ind. Office 109 1/2 South Washington St.

FOR SALE OR EXCHANGE.—Imported Clydesdale stallion; weight about a ton. A grand stock horse. Reason for disposing his fillies are breeding. BOX O, FARMER'S ADVOCATE, LONDON, ONT.

Clydesdales FOR SALE—Imp. and Canadian-bred stallions and mares, ranging in age from foals upwards. Seven imp. mares in foal. Keir Democrat (imp.) (12187) [7018] at head of stud. Also a number of work horses. Long-distance phone. R. B. Pinkerton, Essex, Ont.

Clydesdales AND TAMWORTH SWINE For sale: Reg. Clydesdale stallion rising 3 years, bred from best blood in Scot' and also a few Tamworths, both sexes, bred from the best blood in England. Write, or call on: Chas. Currie, Morriston, Ont.

QUESTIONS AND ANSWERS. Veterinary.

SWOLLEN SHEATH.

Aged gelding, with failing teeth, has had a badly-swollen sheath for a month. A. W. G. C.

Ans.—This condition, like swollen legs, is due either to want of exercise, or old age. The system of old horses sometimes loses vigor to such an extent as to render such conditions common. I would advise you to get his teeth dressed by a competent veterinarian, give him a purgative of 8 drams aloes and 2 drams ginger, and follow up with 1 dram iodide of potassium, twice daily, for two weeks, and after the purgative has ceased to act, give him regular exercise or work. V.

LAME HORSE.

Horse went lame in hind leg last May. My veterinarian diagnosed bone spavin, and treated him, without results. About the end of November, I took the horse to him again, and he treated his back tendons with blisters, but he is no better. He is quite lame all the time. He treads on his toe, and knuckles over at the fetlock joint. I have never been able to detect any heat or swelling. J. E. C.

Ans.—This is a case of obscure lameness, and very hard to diagnose, even by a personal examination. I am of the opinion your veterinarian was correct in diagnosing spavin at first. I think it is an occult spavin, one in which the true hock joint is involved, and in which no enlargement is present. Successful treatment is doubtful. I would advise firing and blistering the hock at once, in order that it may be healed in time for spring work. Do not be too greatly disappointed if even this does little or no good. V.

ENLARGED HOCK.

I recently wrote you re a weanling colt that was highly fed and allowed a little exercise every second day, having slipped on the ice and developing a bog spavin and thoroughpin. You recommended blistering. In the meantime, some of the bones of the hock protruded out of place as though enlarged. I blistered the hock and reduced the amount of grain, and the puffs disappeared, but the bony enlargements remain. I think the high feeding is responsible for the whole trouble, and do not think the colt will ever be a salable horse. A. J. S.

Ans.—High feeding and want of exercise predispose to swelling of the legs and puffy enlargements, but will not cause, or even predispose, to bony enlargements. No doubt the slipping was the exciting cause of the trouble. If there be bony enlargements, they will remain. If no lameness be present, leave alone, but if lame, repeat the blister. Is it not possible that you are mistaken in thinking there is enlargement of the bones? Time alone will tell whether or not he will make a salable animal. It would require a personal examination to enable a man to give an opinion on this point. V.

PARTIAL DISLOCATION OF PATELLA.

Eight-months-old colt got kicked on stifle. The swelling and lameness have disappeared, but there is a small, puffy swelling just below the joint, and the stifle bone seems to come out of place. He has a hitch when walking, and a crack can be heard at each step. J. D. G.

Ans.—The patella (stifle bone) slips partially out of place and in again. This causes the cracking sound. It is not probable he will ever be exactly right, but should make a useful animal. The joint should be blistered repeatedly, and the colt kept as quiet as possible. Get a blister of 1 1/2 drams each of biniodide of mercury and cantharides, mixed with two ounces vaseline. Clip the hair off the front and inside of the joint. Tie him so that he cannot bite the parts. Rub well with the blister once daily for two days; on the third day apply sweet oil. Turn loose in a box stall now and oil every day. As soon as the scale comes off, tie up and blister again, and after this blister once every month for three or four months. V.

Gombault's Caustic Balsam

The Worlds Greatest and Surest Veterinary Remedy

HAS IMITATORS BUT NO COMPETITORS!

SAFE, SPEEDY AND POSITIVE.

Supersedes All Caustery or Firing. Invaluable as a CURE for

FOUNDER, WIND PUFFS, THRUSH, DIPHTHERIA, SKIN DISEASES, RINGBONE, PINK EYE, SWEENEY, BONY TUMORS, LAMENESS FROM SPAVIN, QUARTER CRACKS, SCRATCHES, POLL EVIL, PARASITES.

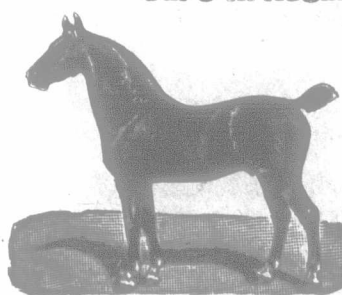
REMOVES BUNCHES OF BLEMISHES, SPLINTS, CAPPED HOCK, STRAINED TENDONS.

SAFE FOR ANYONE TO USE.

We guarantee that one tablespoonful of Caustic Balsam will produce more actual results than a whole bottle of any liniment or spavin mixture ever made. Every bottle sold is warranted to give satisfaction. Write for testimonials showing what the most prominent horsemen say of it. Price, \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use.

The Accepted Standard VETERINARY REMEDY

Always Reliable. Sure in Results.



See genuine without the signature of The Lawrence-Williams Co. Sole Importers & Distributors for the U.S. & CANADA. CLEVELAND, O.

THE BEST FOR BLISTERING. I have used GOMBHAULT'S CAUSTIC BALSAM quite a good deal, and for a blister it's the best I ever used. I wish your remedy every success. CHAS. MOTT, Manager, Hayfield Stud Farm, Leesburg, Va.

CURED CURB WITH TWO APPLICATIONS.

Have used your GOMBHAULT'S CAUSTIC BALSAM to cure curb. I blistered it twice, and there is no sign of it any more. The horse is as good as ever.—DAN SCHWAB, Evingson, Ill.

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We have more prizewinning Clydesdale fillies for sale than any other firm. We have them any age or color you want. Also Hackney and Clydesdale stallions.

Hodgkinson & Tisdale

Simcoe Lodge, Beaverton, Ont.

Long-distance 'phone. G. T. R. C. N. R.

PERCHERON STALLIONS

We still have on hand a few very choice two and three year old Percheron stallions of the big, drafty, heavy-boned type that will make ton horses when finished. Greys and blacks in color, and by the best French sires. All buyers looking for a good Percheron stallion, at a reasonable price, will do well to get our price, as we are in a position to sell below competition. We also have a splendid Hackney stallion, by Gordon Duke, that we will sell well worth the money. We invite correspondence of intending purchasers.

R. HAMILTON & SON, SIMCOE, ONTARIO

ORMSBY GRANGE CLYDESDALE FARM

We import extensively from Scotland the best Canadian types of the breed. We make a specialty of filling orders. We have now on hand a big selection, from foals up to 5 years of age, both stallions, mares and fillies.

DR. D. McEACHRAN, ORMSTOWN, OUE.

Salem Stock Farm

offers for a quick sale the grand four-year-old SHOW STALLION, LORD BANCHORY, IMP. (8441) (14478). He is one of the very best Clyde stallions in Canada. Could take in part payment a few Scotch Shorthorns or good work horses. J. A. WATT, SALEM, ONT.; ELORA STATION, G. T. R. AND C. P. R.

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Any person, however inexperienced, can readily cure either disease with Fleming's

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—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 over- fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in Fleming's Vest-Pocket Veterinary Adviser.

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100 SAVES HIM!



Cure your horse of any Spavin, Curb, Splint, Ringbone, Bony Growth or Lameness with a 6¢ bottle of

KENDALL'S Spavin Cure

Used by thousands for 45 years. One man writes—Middle Hainesville, N. B., June 21, 1909—"I have used your Spavin Cure for 15 years and find it the greatest remedy on earth for most lameness."

Dr. B. J. Kendall Co., Esopus Falls, N. Y.

DUNHAMS' PERCHERONS

For forty-six years renowned as the best of the breed. Six large importations since February 1, 1910 (the last arrived October 12th), insure fine selection, as each animal was individually selected for size, bone quality and excellence. If you want choice stallions or mares, write for catalogue, illustrated from life.

W. S., J. B. & B. DUNHAM
WAYNE, ILL.

LAMENESS from a Bone Spavin, Ring Bone, Splint, Curb, Side Bone or similar trouble can be stopped with

ABSORBINE

Full directions in pamphlet with each bottle. Does not blister or remove the hair, and the horse can be worked, \$2.00 a bottle, delivered. Horse Book 9 E Free.

Mr. Robt. Jones, Sr., Marmora, Ont., writes, April 8, 1907: "I had a valuable horse with a big leg, and used one bottle of ABSORBINE, and it cured him completely."

W. F. Young, P. O. F., 258 Temple St., Springfield, Mass.
Lymans, Limited, Montreal, Canadian Agents.

NOTICE TO HORSE IMPORTERS

Gerald Powell, Commission Agent and Interpreter, **Nogent Le Retrou, France**, will meet importers at any port in France or Belgium, and assist them to buy Percherons, Belgians, French Coach horses. All information about shipping, banking and pedigrees. Many years' experience; best references; correspondence solicited.

Clydesdale Stallion

Prince Gartly, registered, grand-sire Baron's Pride; brown; four years. Shorthorn bull, Scotch Chancellor, half-brother to Flora 90; sire Bapton Chancellor, imp. Lee Bros., Galt, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

LEGAL FEES.

1. What is the legal fee for the transfer of farm property (where there are no complications whatever), from father to son?

2. How much for county registration of same?

3. How much is legal fee for drawing a will?

A SUBSCRIBER.

Ontario.

Ans.—1. There is no legally prescribed fee. For the deed of conveyance, in duplicate, attendance on execution thereof, and the necessary affidavit, a very common charge is \$4; but what is to be considered reasonable in the particular case can only be determined upon regard being had to the circumstances of such case.

2. The minimum fee to the Registrar is \$1.40, and the solicitor's fee for attending to register is 50 cents. If he has to make a further attendance to get return of duplicate from the Registry Office, with certificate of registration, he is entitled to 50 cents more.

3. The answer given to question 1, applies to this question as well,—substituting, however, \$5 for the \$4.

A MORTGAGOR.

1. I bought farm from my lately deceased father, and still owe (besides first and second mortgage, to other parties), third mortgage of \$700, to my father, at six per cent. interest. He having no will, how will I proceed legally to pay off said third mortgage? We are five children of age, and one under age (15 years). I agreed to pay \$150 principal, yearly, on first and second mortgages, third, of course, coming last, without any stated sum to be paid, except interest as above?

2. One child being under age, would it hinder my selling farm, or part of it; and how should I proceed to have his share looked after?

3. At my father's death, he had a property valued at about fifteen hundred dollars. Am I liable for any debts contracted by mother since the death of my father, I being the only son of age (and married). The remaining members of family are decidedly hostile to myself, hence my desire to have things legally arranged.

INQUIRER.

Quebec.

Ans.—It will be necessary for you to consult a local lawyer regarding all these questions, and to instruct him for such legal steps as may have to be taken for the protection of your interests; and you should do so without delay.

PLOWING FOR CORN—MANURING TURNIPS OR MANGELS—SCURVY CALF.

1. When corn land is not plowed in the fall, is it better not to plow it in the spring, but work it well?

2. For turnips, is it better to plow down the manure, or put it in the drills?

3. Will it pay to sow phosphate for turnips or mangels, at \$25 a ton?

4. I have a calf whose hair is coming off. It appears to be scurvy. What will cure it?

J. M.

Ans.—1. If this land is intended for corn the coming season, by all means plow in the spring. If it is land on which corn was grown last season, and to be sown to spring grain, surface work only.

2. Some prefer manuring turnips in spring in the drill. There is probably not much choice, however, between that and plowing under not too deeply.

3. Depends on the analysis and availability of the fertilizer. Fertilizers vary in value as widely as feeds. Acid phosphate, sometimes known as superphosphate, can be purchased in quantity in Ontario, at in the neighborhood of \$14 to \$16 per ton; though some grades may run higher. Small dressings of, say 200 pounds acid phosphate, often prove profitable on turnips, supplementary to dressings of farmyard manure.

4. Take one ounce powdered cantharides and one pound vaseline, mix, and apply with smart friction once daily. If it commences to blister, discontinue the application for a few days.

ELLIMAN'S Embrocation



FOR USE ON ANIMALS.

Sprains, Rheumatism, Curbs, Splints when forming, Sprung Sinews, Capped Hocks, Bruises, Cuts and Wounds.

Broken Knees, Sore Throat, Sore Shoulder, Sore Udders of Cows not in Milk, For Sore Mouths in Sheep and Lambs, Fur Foot Rot in Sheep, Sprains in Dogs, Cramp in Birds.

Elliman's Royal Embrocation.

ELLIMAN, SONS & CO., SLOUGH, ENGLAND.

FOR HUMAN USE.

Rheumatism, Lumbago, Sore Throat from Cold, Cold at the Chest, Neuralgia from Cold, Chronic Bronchitis.

Sprains, Backache, Bruises, Slight Cuts, Cramp, Soreness of the limbs after exercise, Eczema.

Elliman's added to the Bath is Beneficial.

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To be Obtained of all Druggists Throughout Canada.

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We have been importing Scotland, winners at New York, and winners at Guelph and Ottawa. They are the best types of the breed, with size, character, quality, action and breeding, and we sell them as reasonably as inferior ones can be bought, and give terms to suit. Clydesdale stallions and fillies and Hackney stallions.

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Our barns are situated at Bedford Park, 3 miles north of Toronto. Take Yonge Street car. Address all correspondence, Bedford Park P. O., Ont. Send telegraph messages to Toronto, Ont. Telephone North 4483, Toronto.

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There you are always welcome, and can always see first-class **CLYDESDALE STALLIONS AND MARES** of all ages, and moderate prices.

MYRTLE, C. P. R. Long-distance 'phone. BROOKLIN, G. T. R.

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MR. JOHN SEMPLE, of the firm of Semple Bros., Spring Hill Stud Farm, Milverton, Ont., and Luverne, Rock Co., Minn., U. S. A., importer of high-class Clydesdales, Shires and Percheron Horses, sails for Europe on Jan. 6th for his second shipment since August, 1910. This shipment will never have been equalled for their high-class breeding and individual merit. Intending buyers should see this shipment before purchasing elsewhere. By doing so they will save hundreds of dollars. Please note their arrival.

It Is Miserable To Be Dyspeptic.

Dyspepsia is one of the most prevalent troubles of civilized life, and thousands suffer untold agony after every meal.

Nearly everything that enters a weak dyspeptic stomach, acts as an irritant; hence the great difficulty of effecting a cure.

The long train of distressing symptoms, which render life a burden to the victim of dyspepsia, may be promptly relieved by the use of Burdock Blood Bitters.

Mrs. John Sherrett, Fortier, Man., writes: "I was troubled with dyspepsia for years. A friend of mine told me about Burdock Blood Bitters, so I got a bottle to try, and before I was half finished I could eat anything without suffering, and when I had used two bottles I was sound and well. Now I feel just fine; indeed I can't say too much in favor of your medicine."

Burdock Blood Bitters is manufactured only by The T. Milburn Co., Limited, Toronto, Ont.

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Sows Shoes, Harness, Buggy Tops, Caravan, Grain Bags, Anything. Sells at eight. Astonishing low price to agents. Big profits. To show it means a sale. We want a few good, live hustlers in each county. Splendid opportunity to make big money. No experience needed. Write quick—now—for terms. A postal will do. Send no money.

A. MATHEWS, 5944 Wayne Street, DAYTON, OHIO

ABERDEEN - ANGUS

Will sell both sexes; fair prices. Come and see them before buying. **WALTER HALL,** Drumbo station. Washington, Ont.

Aberdeen-Angus Cattle—Stock all ages, good strains, at reasonable prices. Apply to **ANDREW DINSMORE, Manager,** "Grape Grange" Farm, Clarksburg, Ont.

FOREST VIEW I have lately purchased the **HEREFORDS!** Governlock herd of Herefords, and have for sale sons and daughters of Toronto winners and champions; also Galloways of both sexes. **A. E. Gaultfield,** Mount Forest, Ont. P. O. and Station.

ABERDEEN - ANGUS CATTLE 3 choice yearling bulls for sale at reasonable prices. Also females any age. Parties requiring such will get good value. Correspondences invited. **GEO. DAVIS & SONS,** ALTON, ONT

Have on hand at the present time a choice lot of

Shorthorn Bulls

ready or service, mostly from imported stock, of such families as the Rosewoods, Butterflies, Beautys and Duches. One of the lot is a red imported bull of the choicest breeding. Come and see them during the holidays.

H. J. Davis, Woodstock, Ont. G. T. R. and C. P. R. Long-distance Bell 'phone.

Willow Bank Stock Farm SHORTHORNS AND LEICESTERS.

Herd established 1855; flock, 1848. The great Duthie-bred bull, Imp. Joy of Morning = 32070, and the Missie bull, Royal Star = 72502, heads my herd. Choice selections to offer at all times in both bulls and females. **JAMES DOUGLAS, CALEDONIA, ONTARIO.**

Glenburn Stock Farm A few nice Shorthorn calves of both sexes. Shropshire ram lambs, ewes and ewe lambs. Barred Rock cockerels of Hawkins' strain. **JOHN RACEY** Lennoxville, Quebec.

SHORTHORN FEMALES

OF ALL AGES FOR SALE.

Prices to suit all kinds of customers. Have one red eleven-months-old bull left; a Clipper; price \$100. **J. T. GIBSON, DENFIELD, ONTARIO.**

Shorthorns and Yorkshires—A choice lot of young bulls and heifers at reasonable prices, from such noted families as Miss Ramsden, Crimson Flower, Lady Sarah and others. Also a fine litter imported Yorkshires, prizewinning stock. **ISRAEL GROFF, Elmira, Ont.**

SHORTHORNS AND LEICESTERS.—Present offering: Eight choicely bred one and two year old heifers, and bull calves. Choice shearing rams and ram and ewe lambs. Show material. Write: **W. A. DOUGLAS, Tuscarora, Ont. Caledonia Station.**

QUESTIONS AND ANSWERS. Miscellaneous.

CORD OF WOOD.

A buys wood from B at \$3 a cord, nothing being said about the length. Can A claim 128 cubic feet as a cord? **ONTARIO READER.**

Ans.—Yes.

WORTH OF BUTTERMILK FOR PIGS—FINE VS. COARSE-GROUND GRAIN.

1. What would buttermilk be worth per cwt. to feed hogs, taking all a butter factory would make?

2. Would it be good for pigs eight or ten weeks old, or how old would they have to be before it could be fed them?

3. Is grain, ground fine, better for hogs than cracked up the way it is done nowadays on the most of these cast choppers? **H. A. S.**

Ans.—1. Buttermilk and skim milk are of about equal value for pig feed. If buttermilk is mixed with washings, of course it is not so good. Pure buttermilk should be worth 20 cents per cwt. for pigs, when not fed to excess. Shorts or grain should be fed with it for most profitable results.

2. It would be safe to feed a limited quantity of buttermilk to pigs eight to ten weeks old, and afterwards the amount might be rapidly increased.

3. Finely-ground grain is preferable for hogs. In most cases, soaking the meal is of advantage.

WELL FAILING.

Have a well about 35 feet deep, which has always given an abundant supply of beautiful spring water for some 25 or 30 years, until, about three years ago, it gave out in the dry spell in summer, and since then has been gradually growing worse, until now, we barely get enough for cooking purposes. On the edge of this well is a moderate-sized maple tree, a grand shade for well, but do you think the roots would penetrate ground and thus stop the flow of water. The well is stoned up, and is very narrow. Would you advise drilling lower, or what would be best to do? **R. T. S.**

Ans.—It is very far from likely that the maple tree has anything to do with the gradual failing of well. It is much more probable that the source of supply has been affected by underdraining, or the clearing away of the timber, probably at a distance away. Would certainly advise drilling. By that means a new supply may be struck; or, if not, at least a knowledge of what lies deeper down would be obtained.

ITCHY LEGS—MARE SCOURS—ALSIKE FOR SEED—TESTING CLOVER SEED.

1. A young horse has very itchy legs. What would be the best treatment; would coal oil take it out and not hurt the hair?

2. Mare, over twenty, in foal, getting clover hay and oats, is very bad to scour. I had her teeth dressed a few days ago.

3. Is it advisable to sow pure alsike without any timothy, for the purpose of getting your own seed? How much would you sow to the acre, and is it better to seed with barley or oats?

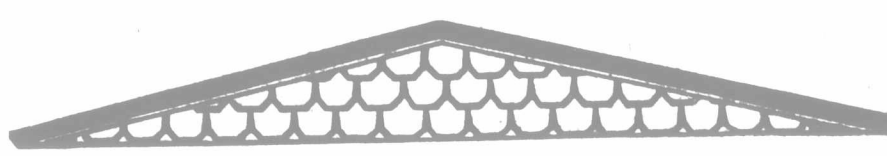
4. Where can I send a sample of clover seed to have it tested free? **ONTARIO READER.**

Ans.—1. Try $\frac{1}{2}$ pint raw linseed oil, $\frac{1}{2}$ pint coal oil, and 4 tablespoonfuls of sulphur; mix well, and rub in well on skin daily. Or use an ointment composed of 1 dram cantharides, mixed with 2 ounces vaseline, rubbed well in once a week.

2. The mare will possibly be better after having her teeth dressed. If scours continue, give a pint of raw linseed oil. Repeat the dose if trouble continues after purging ceases. Be careful to feed only small quantities of good, wholesome food.

3. For your own seed only, it would be scarcely worth while to sow alsike alone, as it grows well with timothy, and they can be harvested, threshed, and sown together. If you sow alone, use from 4 to 7 lbs. of seed per acre. Barley is better than oats to seed down with.

4. Seeds are tested free at the seed laboratory, Department of Agriculture, Ottawa. Samples of seed for testing go postage free.



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By
The Philosopher of Metal Town

Bank your dollars on quality. Inferior quality, whether in building material or farm implements, is the source of constant worry and needless expense. It's poor economy to save on first cost, and then— Pay out two or three times the original cost in repairs, wasted time, inconvenience, etc. In barn roofing much depends on quality—the safety of your crops, your implements and live stock. "Eastlake" Steel Shingles are an absolute assurance of safety. They are made of the finest and toughest sheet steel, perfectly galvanized. The "Eastlake" workmanship is the best—careful inspection at each turn in the big "Metallic" shops guarantees perfection. And perfection means satisfaction—a roof that lasts a lifetime. "Eastlake" Steel Shingles are highest quality, yet cost you no more than inferior roofing that requires replacing or repairing in a few years. And an "Eastlake" roof means clean rain water for household use. Let us send you our illustrated booklet, "Eastlake Metallic Shingles." Write to-day—just your name and address on a postcard.



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OIL CAKE

The finest feed known for stock. Once a user, always a user. Sold either fine or coarse ground. Write: **J. & J. Livingston Brand** **DOMINION LINSEED OIL CO., LIMITED,** 31 Mill St., MONTREAL, QUE.

ORCHARD GROVE HEREFORDS
Young bulls and one- and two-year-old heifers, of show-ring quality and most fashionable breeding; thick-fleshed, smooth and even. **L. O. CLIFFORD, Oshawa, Ont.**

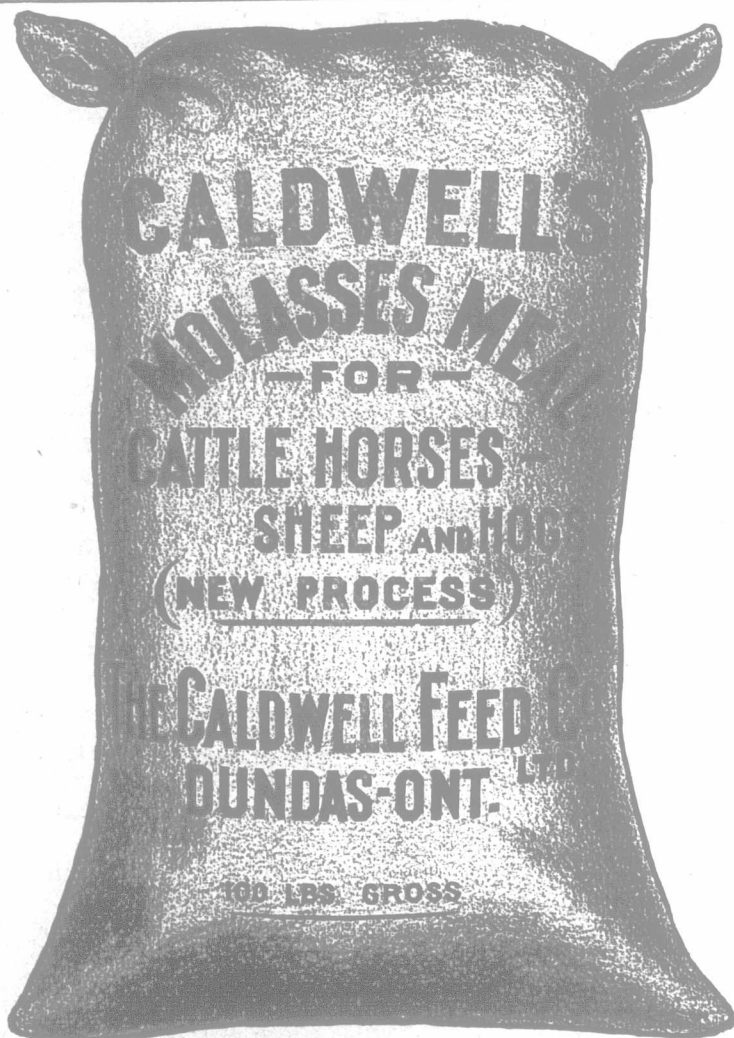
Elmhurst Scotch Shorthorns and Large English Berkshires FOR SALE: Two young bulls, red and roan, fashionably bred with quality. Young sows bred for April litters. **H. M. VANDERLIP, Cainsville, Ont.** Langford Station. B. H. Radial in sight of farm. B ll 'phone

Shorthorns and Clydesdales For sale: 6 bulls 14 to 20 months old (4 reds and 2 roans), 6 bulls from 10 to 13 months (3 reds, 2 roans and 1 white); 15 imported and home bred cows, in calf and with calves at foot. Herd bulls: Bullrush (imp.), a Cruickshank Butterfly; and Royal Winner (imp.), a Marr Bessie. A richly-bred Clydesdale stallion rising two years by imported sire and dam. Visitors always **W. G. Pettit & Sons, Freeman, Ont.** welcome. Burlington Junction station, G.T.R. Bell 'phone.

Maple Hall Shorthorns We have 13 young bulls for sale between 10 and 15 months old, and they are a choice lot. There is not a poor one amongst them. There are two Cruickshank Duches of Glosters, five Cruickshank Butterflies, five Crimson Flowers, one Sheppard Rosemary. **DAVID BIRRELL & SON, GREENWOOD P. O., ONT., CLAREMONT STATION.**

Maple Leaf Shorthorns and Hampshire Hogs Offering for sale, Shorthorn bulls and heifers and young Hampshire pigs. **PORTER BROS., APPLEBY P.O., BURLINGTON STA. 'Phone.**

Springhurst Shorthorns and Clydesdales I am now offering a number of heifers from 10 months to 3 years of age. Anyone looking for show material should see this lot. They are strictly high-class, and bred on show lines. Also several Clydesdale fillies, imp. sires and dams, from foals 2 years of age off. **Harry Smith, Hay, Ont. Exeter Sta**



Are You Getting Your Stock Ready for Sale?

Top prices depend upon finished appearance and perfect condition.

CALDWELL'S MOLASSES MEAL

is a short cut to results without extra cost. SUPERIOR TO LINSEED.

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DUNDAS, ONTARIO.

Write to-day for literature and prices.

10 Scotch Shorthorn Bulls 10

FROM 10 TO 14 MONTHS OLD

The Princess Royal, Secret, Bessie, Village Maid families are represented in lot. First-class herd headers and farmers' bulls for getting market-topping steers. Prices very reasonable.

JOHN MILLER, BROUGHAM, ONT.
Claremont Station, C. P. R., three miles.

Woodholme Shorthorns are of the richest Scotch breeding, modern in type and quality. For sale: One and two-year-old heifers, several young bulls, thick-fleshed, low-down and mellow.

G. M. FORSYTH, Claremont, Ont.
100 yards from station. Phone connection.

IMP. STOCK BULL FOR SALE

Could spare my three-year-old A. T. Gordon bred Sittyton Butterfly (imp.) bull after March 1st; sire Scottish Farmer, dam Beatrice 22nd, which produced Bandmaster, first-prize Royal winner, and sold for 600 guineas. **GEO. D. FLETCHER, Binkham, Ont. Erin Sta., C. P. R.**

MAPLE LODGE STOCK FARM

1854 Very desirable young 1911

SHORTHORN BULLS FOR SALE.

Have best milking strains. LEICESTER SHEEP of highest quality. Lucan Crossing, G. T. Ry. Telegraph, Ailsa Craig. Telephone.

A. W. SMITH, Maple Lodge, Ont.

HIGH CLASS SHORTHORNS

I have on hand young bulls and heifers of high-class show type, pure Scotch and Scotch-topped, sired by that sire of champions, Mildred's Royal. If you want a show bull or heifer, write me. **GEO. GIER, Grand Valley P.O. and station, also Waldemar station.**

SPRING VALLEY SHORTHORNS

If you want a good Short-horn bull, we have them. Canadian-bred and imported. Females all ages. Also a few good YORKSHIRES—boars and sows. Prices right. Phone connection. **Kyle Bros., Ayr, Ont.**

Shorthorns

Present offering: 12 bulls from 5 to 20 months old; 40 cows and heifers to choose from. Nearly all from imported bulls. At prices to suit everyone. Come and see them, or write: **Robert Nichol & Sons, Hagersville, Ont.**

Oakland Shorthorns for Sale

Here is a herd of breeders, feeders and milkers. About 50 to select from. 7 bulls from 8 months up to 2 yrs. Prices from \$90 to \$130. Scotch Grey 72692 at head of herd. G. T. R.

Jno. Elder & Son, Hensall, Ont.

4 Shorthorn Bulls FOR SALE.

of choice breeding, with size and quality. Several females, all bred from heavy-milking dams. **Thomas Graham, Port Perry, Ontario.**

Imp. Scotch Shorthorns

When looking for Shorthorns, be sure to look me up. Young bulls fit for service, and females all ages; bred in the purple, and right good ones. **A. C. PETTIT Freeman, Ont.**

QUESTIONS AND ANSWERS. Miscellaneous.

ABORTING MARE.

Mare, due to foal in April, aborted a few days ago. Would you advise breeding her again this year? C. E. M.

Ans.—It would be tolerably safe to breed her again in two months, but we would advise delaying the breeding until warm weather, say first of June.

POTATOES FOR COWS—ALFALFA SEED PER ACRE.

1. Are potatoes good for milk cows, and how much should one give at a feed?
2. How much alfalfa should you sow per acre? A SUBSCRIBER

Ans.—1. Potatoes are excellent for milk cows if fed in moderation. A half-peck would probably be enough at a feed.
2. Twenty pounds of alfalfa seed per acre should be sown.

STAVE SILO.

1. As I have been thinking of building a silo, and have timber of my own, I would like to know how balsam and spruce would answer the purpose, and how thick and how wide the timber should be cut?

2. If I built it 24 feet high, would the lumber need to be full length, or could I splice it?

3. Would it be of any use painting it with tar inside or out? I would build a round silo. W. A. R.

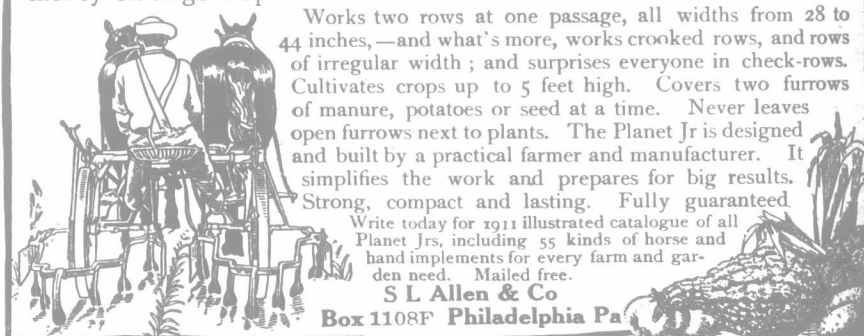
Ans.—1. Balsam and spruce lumber would, no doubt, be quite suitable for silo staves, though they might not last so long as pine. Each piece should be not more than six inches wide and 14 or 2 inches thick. Where convenient, it is usual to have the inner side of staves planed and the edges planed and jointed so that in thickness and width the staves are uniform throughout.

2. Most high wooden silos are made with two lengths in each stave. For a 24-foot silo, 16-foot lumber would be suitable. In such case, one stave would have a 16-foot length below, and an 8-foot piece above. The next stave would have the short length below and the long one above, and so on.

3. Painting is not commonly practiced. It frequently does more harm than good. Would advise you to write to J. H. Gridale, of the Central Experimental Farm, Ottawa, for his bulletin on silo building, which gives very complete directions for erecting stave silos.

Planet Jr. 2-row Cultivator

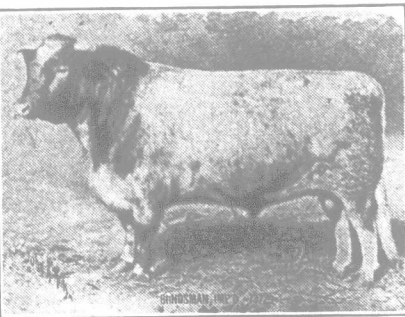
The Planet Jr No 72 two-row Pivot-Wheel Cultivator, Plow, Furrower and Ridger is the greatest implement ever invented for saving time and money on large crops.



Works two rows at one passage, all widths from 28 to 44 inches,—and what's more, works crooked rows, and rows of irregular width; and surprises everyone in check-rows. Cultivates crops up to 5 feet high. Covers two furrows of manure, potatoes or seed at a time. Never leaves open furrows next to plants. The Planet Jr is designed and built by a practical farmer and manufacturer. It simplifies the work and prepares for big results. Strong, compact and lasting. Fully guaranteed.

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WRITE FOR THE NAME OF OUR NEAREST AGENCY.



SCOTCH SHORTHORNS

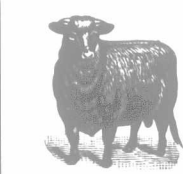
100 HEAD IN HERD.

Headed by the imported bulls: Bandsman, a half-brother to the \$6,500 Count Crystal, the highest priced calf on record in Scotland; and Village Duke, a son of Villager, winner of 18 first and special prizes in Scotland. For sale: 12 good young bulls of the choicest breeding, and 40 young cows and heifers. All of noted Scotch breeding. In calf to our stock bulls.

Farm 1/4 Mile from Burlington Jct. Sta.

Long-distance phone.

Mitchell Bros., Burlington, Ont.



H. CARGILL & SON

have to offer at the present moment an exceptionally good lot of young bulls, which combine all the requisites necessary for the making of superior stock sires, viz.: Quality, Size, Conformation and Breeding. If interested, come and make your selection early. Catalogue on application.

John Clancy, Manager, Cargill, Ontario.

Robert Miller, Stouffville, Ont. Can supply young bulls and heifers of the very choicest breeding, and of a very high class, at prices that you can afford to pay. The young bulls are by one of the greatest sons of Whitehall Sultan. They are good colors, and will make show bulls. I also have two good imported bulls at moderate prices and of choice breeding, and some cows and heifers in calf to Superb Sultan; the calves should be worth all the cows will cost. Some beautiful young imported Welsh Ponies still to spare. It will pay you to write, stating what you want. Glad to answer inquiries or show my stock at any time. Business established 74 years.

PLEASANT VALLEY SHORTHORNS

For Sale: 1 red, 1 roan, 2-year-old show bulls. Several good bull calves, also some yearling heifers. Some show propositions among them. If interested, write or call and see us before buying.

GEO. AMOS & SONS, MOFFAT, ONTARIO.

Farm 11 miles east City of Guelph on C. P. R. 1/2-mile from farm.

SUNNY SLOPE SHORTHORNS

I breed Scotch Shorthorns exclusively. I have some choice young females safe in calf and some good young bulls for sale at present at prices you can pay. Long-distance phone.

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No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use Fleming's Spavin and Ringbone Paste. Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single application—occasionally two minutes application—occasionally two minutes. 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, 15 Church St., Toronto, Ontario.

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INSTANTLY RELIEVED BY THE OLD DR. MARSHALL'S CATARRH SNUFF 25¢

AT ALL DRUG STORES OR SENT PREPAID BY C. H. KEITH, 1127 CLEVELAND, OHIO



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CANADA'S GREATEST Jersey Herd

Does your dairy pay? Get some "producers" from the test people, 200 to select from.

B. H. BULL & SON, BRAMPTON, ONTARIO WE NEED THE MILK

For our milk contract, so all the bull calves from fifteen choice cows and heifers, due to freshen by April 1st, must go. This means attractive prices for you. Write us, you'll be surprised how good a calf you can buy for how little money.

MONRO & LAWLESS, Elmdale Farms, Thorold, Ontario

Riverside Holsteins

Choice bulls 6 to 9 months old, sired by Sir Pieterje Posch De Boer and Prince De Kol Posch. Litter is the only son of champion cow, dairy test, Guelph, 1908 and 1909, and out of R. of M. dams.

J. W. Richardson, Caledonia, Ont.

Haldimand Co. Long-distance phone. THE MAPLES HOLSTEIN HERD

Everything of milking age in the Record-of-Merit. Nothing for sale at present but a choice lot of bull calves sired by King Posch De Kol. Write for prices, description and pedigree.

Walburn Rivers, Falden's, Ontario

Notice! In public test we have the champion and 2nd highest scoring cow; world's record 3-year-old, junior champion 3-year-old in official test. Average per cent. fat 4.55. Herd headed by Grace Fayne 2nd's S.S.

Colantha. Sire's dam and sister with 35 pounds butter records each. M.L. Haley and M.H. Haley, Bull calves for sale. Springford, Ontario.

HOLSTEINS AND YORKSHIRES R. HONEY, Brickley, Ont. Northumberland Co.

Offers a choice lot of boars and sows ready to mate; also orders taken for the coming crop of calves from Prince Posh Calamity Bieske and R.O.P. cows.

Lake View Dairy Farm I have several of noted Francy breeding HOLSTEINS!

Present offering: Bull calves and heifers. W. F. BELL, BRITANNIA BAY, ONTARIO. Springbank Two choice bred bull calves for sale. One is 10 months, the other 8 months. From high-class milkers. Prices reasonable. For particulars and breeding write to Wm. Barnett & Sons, Living Springs, Ont. Fergus, C. P. R. and G. T. R.

Holsteins and Tamworths for Sale—Seven bred, pigs, either sexes, from 6 weeks up. Sixty-five to select from. Phone connection, via Cobourg. BERTRAM HOSKIN, The Gully P.O.

Holstein Cattle—The most profitable dairy breed. Illustrated descriptive booklets free. Holstein-Friesian Ass'n of America. F. L. HOUGHTON, Secy, Box 127, Brattleboro, Vt.

Evergreen Stock Farm offers bulls 2 to 12 months, from high-testing stock, sired by 12 lbs. at 2 years to 22.8 lbs. for mature cows. Sired by Sir Mercena Favorite. Dam and grand dam have average record of 24.60 lbs. butter in 7 days. F. E. PETTIT, Burgesville, Ont.

QUESTIONS AND ANSWERS. Miscellaneous.

SEEDING ORCHARD TO ALFALFA.

Would it be injurious to a young orchard, set out three years, to seed it down with alfalfa, if the trees were dug around every year and mulched?

L. F. B.

Ans.—It would do no great harm to seed a young orchard to alfalfa for two or three years, if the ground about the trees were cultivated for one to three feet beyond the spread of the limbs.

SOWING ALFALFA—UNTHRIFTY MAPLES.

1. What can I do for large maple trees that seem to be dying in the top?
2. When should alfalfa be sown, and how much seed to the acre?

A SUBSCRIBER.

Ans.—1. Not much can be done for feeble-growing maple trees, except to promote thrift by keeping grass down over the roots.

2. Alfalfa can be seeded down in spring grain in early spring, or, if sown alone, may be put in with chances of success any time before July, or even August, in some cases. Summer seeding is most successful in temperate climates. Twenty pounds of seed per acre should be sown.

HOW LONG SEEDS RETAIN VITALITY.

1. How long will clover or timothy seed keep, if kept dry, and yet germinate when sown?
2. Which is larger, Eaton's in Toronto, or in Winnipeg?

W. P. T.

Ans.—1. There is such a difference in different samples of the same kind of seed, that no one answer would apply to all. This can be said, the drier that seed is, the longer it will keep. But the percentage of seeds that are vital, decreases with the years, and the germinating power of those that will grow, lessens also. From various tests made, results from clover seed after 12 years were invariably nil. Clover or timothy seed that has been kept dry, will be fairly good for three or four years.

2. Write to Eaton's. The floor space of the different mercantile establishments is something out of our province.

LUXATION OF PATELLA—TOP-DRESSING WHEAT.

1. I have a big colt, rising three years old, which is a fine animal, but has one fault. On his left hind leg, his stifle joint seems to slip and click. He is not so bad when I work him steadily, but after he has been out with other horses, running with them, it seems to be worse. He can lift his leg up and forward to bite his foot or scratch his head with his toe. I got him shod to haul out manure about five weeks ago, and I told the blacksmith to raise him extra high on the heel calks. Was that right or not? It never seems to bother him to go through snow; he can go through it as well as any horse I ever owned. Is there anything I could do for him, and what?

2. Top dressed a field last winter and sowed barley in it last spring. When barley came up, it looked nice for a while, then it turned yellow. Was it because the manure was too thick?

3. Is there any danger of putting manure on fall wheat too thick this time of year? I intend to harrow it in the spring.

PUNCH.

Ans.—1. The trouble with the colt is partial dislocation of the patella (commonly called stified). Your instructions to the blacksmith were right. It is better to have the foot raised. It will be wise to keep the horse as quiet as possible, not letting him run with the others. If treatment is needed, blister the front and inside of the joint with 1½ drams each of biniodide of mercury and cantharides, mixed with two ounces of vaseline. Clip the hair off, and tie so he cannot bite the parts. Rub blister well in once a day for two days. On the third day apply sweet oil, and let loose in a box stall. Oil every day.

2. You do not say whether the grain entirely recovered its color, as we should expect it would.

3. Manure may be put so thickly on wheat as to smother it, otherwise there is little danger of putting on too much.

NO MORE HARD TUGGING—WHAT A RELIEF!



This from a letter recently sent us by a customer in Ontario:

"It does my heart good to see your Carrier do for me that which is regarded as the most disagreeable task on the farm. No more hard tugging. What a relief!"

Write for catalogue and prices to:

LOUDEN MACHINERY CO'Y Guelph, Ontario.

Manufacturers of Perfect Barn Equipments.

TORONTO, 1815. WALKERTON, 1895

RAW

In any quantity. Ship by freight, express or mail. We pay charges, and remit full market value same day. Send trial shipment, or write for information, prices, tags, etc.:

ALL KINDS WANTED.

FURS

C. H. ROGERS, WALKERTON, ONT. DIRECT EXPORTER AND MANUFACTURER.

Farmers and Cattlemen, Read This!

When you cannot sell your export cattle at satisfactory prices at home, and wish to ship them to the Old Country markets, write or wire for steamer space, market and shipping information to Donald Munro, Live-stock Forwarding Agent and Commission Salesman, 43 St. Sacramento Street, Montreal.

Load your cattle carefully, and bill them to me. I provide the necessary feed, insurance, etc., pay freight and all other expenses from shipping point, and give liberal cash advances on all consignments. Cattle are loaded on steamer under my personal supervision, and placed in charge of capable attendants for the ocean voyage. I represent the most reliable salesmen at all the different British markets. BUSINESS ESTABLISHED 1890. REFERENCES: THE MOLSONS BANK, MONTREAL.

LAKEVIEW HOLSTEINS

Two young bulls, calved March 27th and April 25th, sired by Count Hengerveld Fayne De Kol, whose sire is the sire of D. Kol Creamelle, 10,017 lbs. milk in 100 days, and whose dam is the dam of Grace Fayne 2nd's Homestead, who made 35.55 lbs. butter in 7 days. These two bulls are mostly white, and are smooth and big. Must make room for this season's calves, and will sell reasonably.

E. F. OSLER, BRONTE, ONTARIO

HOLSTEINS AND YORKSHIRES

More high-record cows in our herd than in any other in Canada, including the champion Canadian-bred three-year-old, and the champion two-year-old of the world for yearly production. The sire of these champions is our main stock bull. We have a large number of heifers bred to him that will be sold right to make room for our natural increase. Also bull calves for sale. We are booking orders for spring pigs, also sows safe in pig. We invite inspection of our herd. Trains met at Hamilton when advised. Long-distance Bell 'phone 2471 Hamilton.

D. C. FLATT & SON, MILLGROVE, ONT. R. F. D. NO. 2

Fairview Farms!

We are offering sons of Pontiac Korndyke, sire of the world's record Pontiac Clothide De Kol 2nd, 37.20 lbs. butter in 7 days, and the sire of seven daughters that average 31.13 lbs. each in 7 days, equalled by no other sire living or dead. Also sons of Rag Apple Korndyke, whose dam, Pontiac Rag Apple, 31.62 lbs. butter in 7 days, is a full sister to the world's record cow, making these two full sisters records average for the seven days 34.41 lbs. each, equalled by no other two full sisters of the breed. Also sons of Sir Johanna Colantha Glad, whose dam and sire's dam average 33.61 lbs. each, which is higher than can be said of any other sire of the breed. Dams of many of these calves are high-record daughters of Pontiac Korndyke and Rag Apple Korndyke. Write me for breeding and price. E. H. Dollar, Heuvelton, St. Law. Co., N. Y.

Holstein Bulls

From high-class, officially-tested cows. Ready for service. Also bull calves. R. F. Hicks, Newton Brook, Ont., York Co. Toronto Shipping Point.

Silver Creek Holsteins

We are now offering about a dozen yearling heifers and 3 young bulls. They are all of superior type, and records average for the seven days 34.41 lbs. each, equalled by no other two full sisters of the breed. Write me for breeding and price. A. H. YEEPLE, CURRIES P. O., Ont. Woodstock Station. Phone Connection.

Centre and Hill View Holsteins

We have added to head our herd a young bull from King Segis, world-record sire, and a 26-lb. 4-year-old dam. Have 2 bulls born in January from Bonheur Statesman. Their gran lams have over 21 lbs. butter in 7 days. Also younger ones from good A. R. O. dams. These will be P. D. Ede, Oxford Centre, Woodstock Stn. sold right, considering their backing. LONG-DISTANCE TELEPHONE.

STONEHOUSE Ayrshires

The champion Canadian herd for 1910 at the leading shows. 32 h ad imp. 56 herd to select from. R.O.P. official records, the best and richest bred types of the breed. Anything for sale. Young bulls, female, all ages. HECTOR GORDON, HOWICK, QUE.

BUSINESS-BRED AYRSHIRES

My herd of Ayrshires have for generations been bred for milk production. They are nearly all in the R.O.P. My present offering is several young bulls most richly bred. James Begg, R. R. No. 1, St. Thomas, Ont. Bell 'phone.

AYRSHIRE CATTLE!

Several choice cows and heifers for sale. Good teats; good udders. Record-of-Performance a specialty. One choice bull seven months old. White Wyandotte cockerels, \$2 each. WM THORN, Trout Run Stock Farm, LYN EDGCH, ONTARIO. Long-distance 'phone in house.

PLEASE MENTION THE ADVOCATE. Ayrshires and Yorkshires

Our Ayrshire herd is in fine form. We can fill orders for a number of bulls fit for service, of good dairy breeding, or imported stock for 1911. Females any age. Young calves either sex. Young boars fit for service. Young pigs ready to ship. Write for prices and particulars. Long-distance 'phone. ALEX. HUME & CO., Menie P. O., Ont.

Ayrshires

Bull calves, from 4 months to 9 months, from imported sire and Record of Performance dams. Records 50 to 63 pounds per day. N. Dymont, R. R. No. 2, Hamilton, Ont.

AYRSHIRES

We are now selecting in Scotland our 1911 importation of Ayrshires. Over 20 already secured as a result of our visit in Ont. Write us about young bulls and females. Deepest milking strains. Reasonable prices. Home offering: A few very choice bull calves. Two fit for service. ROBT. HUNTER & SONS, Maxville, Ont.

CONSTIPATION

CURED BY THE USE OF
**MILBURN'S
LAXA-LIVER PILLS**

Constipation is one of the most frequent, and at the same time, one of the most serious of the minor ailments to which mankind is subject, and should never be allowed to continue.

A free motion of the bowels daily should be the rule with every one who aspires to perfect health.

Mrs. Fred. Hall, 299 Hibernia Road, Montreal, Que., writes:—"Having been troubled for years with constipation and trying everything I knew of, a friend advised me to use Milburn's Laxa-Liver Pills. I used four and a half vials and I am completely cured. I can gladly recommend them to all who suffer from constipation.

Milburn's Laxa-Liver Pills are 25 cents per vial, or 5 vials for \$1.00, at all dealers, or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

LINCOLN LONG-WOOL SHEEP And Shorthorn Cattle.

The Riby Grove Flock and Herd, owned by
MR. HENRY DUDDING,

Is the source to which practically all the leading export buyers have resorted from time to time to obtain stud sires and dams, and rams and ewes of unrivalled merit and quality. The record of its show-yard success is unequalled, and so are its sale averages. Selections of Sheep and Cattle always for sale.

Apply: **THE OWNER, RIBY GROVE,
STALLINGBOROUGH, GRIMSBY, ENGLAND.**



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.,
Dept. D, 325 Dearborn St., Chicago, Ill.**

When small Sigrid made her first appearance in a New York school, she was asked the usual puzzling questions, one of which was:

"What is your nationality, Sigrid?"

Sigrid tossed her flaxen braids. "I'm an American of Norwegian design, she said promptly.

GREAT TRIALS ON TRANSCONTINENTAL

Alphonse Jonelle Tells Tale
Filled With Human Interest.

Hardships attending work brought on Kidney Disease which threatened his life.—Dodd's Kidney Pills cured him.

Chicoutimi Ville, Chicoutimi Co., Que., March 6.—(Special.)—The trials of those men who push the great railroads through the obstacles Nature thrusts in their way, have been proclaimed in many a page of fiction. But no story ever told is of more absorbing interest, or teaches a greater moral, than the actual experiences of Alphonse Jonelle, foreman on the Transcontinental, and well known here.

"I contracted Kidney Disease working on the Transcontinental, where I am foreman," Mr. Jonelle states. "My skin had a harsh, dry feeling, and it itched and burned at night. I was always tired. Then came the pangs of rheumatism, and I finally got so bad I could not attend to my work. For five years I suffered, and in the end Bright's Disease developed.

"Then I began to use Dodd's Kidney Pills. Six boxes cured me completely. Dodd's Kidney Pills also cured my wife, who was suffering from Kidney Disease."

From all parts of Canada, and every day, reports come of Kidney Disease cured by Dodd's Kidney Pills. There is never a case reported where Dodd's Kidney Pills have failed. They never fail.

QUESTIONS AND ANSWERS. Miscellaneous.

PUMPING FROM DISTANT SPRING.

I wish to bring the water from a spring to the house, a distance of about 300 feet. This drawing will give a better idea of it than writing will. Drawing shows an upward slope from spring for 60 feet, with a rise of 12 feet. After that, the ground slopes gently to the house, which stands 7 feet higher than spring.

1. Could water be drawn through pipes by a pump?
2. Would it be hard to pump by hand?

H. S.

Ans.—1. There is nothing to hinder drawing water through pipes from distant spring in this case. If the difference in level were 30 feet or over, it could not be done.

2. There will be considerable friction to overcome in a pipe 300 feet long. Whether it can be pumped by hand, depends on the size of the pipe. The larger the pipe, the less the friction. Would recommend 24- or 3-inch piping.

COLT COUGHS.

I have a colt coming three years old this spring. Since last April he has coughed somewhat. He coughs after drinking and after exercise. Has always been fed well on hay, and some oats. Is it heaves? If so, is there any cure? Is it contagious?

A SUBSCRIBER.

Ans.—Colts of that age very seldom have heaves, and it is quite possible that cough may be due to some other cause. For the cough, try giving every morning, a ball composed of 40 grains powdered opium, 40 grains solid extract of belladonna, 20 grains camphor, and 10 grains digitalis, with sufficient oil of tar to make plastic. Roll in tissue paper, and administer, or dissolve in warm water, and give as a drench. If cough does not yield to treatment, you might use such measures as are advisable in a case of heaves, and these will at least do no harm. Feed only small quantities of hay, and dampen all food with lime water. Water before meals. When he gets into work, be careful not to work hard or drive fast soon after a heavy meal. Heaves are incurable, but not contagious.

NUMBER POINTS ON LEGHORN COMB—STANDARD LEGHORN PULLET—PROMOTING GROWTH OF HAIR.

1. How many nicks, or notches, should be in comb of pure-bred Buff Leghorn cockerel?
2. How should a pure-bred Buff Leghorn pullet be marked?
3. About a month ago, a Buff Leghorn pullet became sick. She gets her head down under her breast bone, and then backs up. At first she could not stop on roost; now she can. What is the trouble?
4. What is the best treatment to reduce enlargement on horse's leg, caused from blistering?
5. Can you recommend a treatment to hasten growth of hair on horse's leg after blistering?

SUBSCRIBER.

Ans.—1. Single-comb Leghorns should have five points, or five notches, in comb. 2. Beak, shanks and toes, yellow; eyes, red. The face, comb and wattles should be bright red, the ear lobes white. The plumage should be of a rich, golden buff, of even shade on the surface, with lighter color underneath.—From "American Standard of Perfection."

3. In large-combed birds, convulsive movements of the head and neck occur in cramps, gapes, or common colds. If any affected birds die, send a specimen to Dr. C. H. Higgins, Biological Laboratory, Ottawa.

4. For most surface enlargements, mild blistering is recommended. You might try, however, the application of vinegar, or solution of alum, either in the liquid form or mixed into a paste with powdered chalk.

5. If the hair follicles, or roots, have been destroyed, nothing can be done; but if these remain, benefit may be derived from monthly applications of tincture of cantharides, in moderation. The action is that of a mild blister. Or this may be tried: Take ½ pint raw linseed oil, ½ pint coal oil, 4 tablespoons of sulphur. Mix, and rub in well on bare spots.

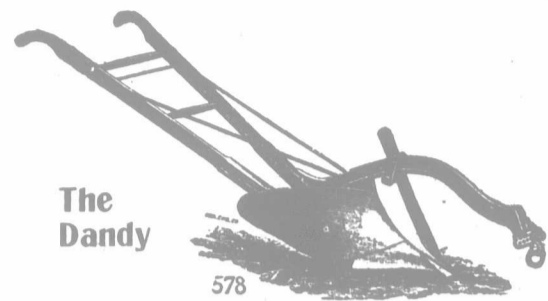
FLEURY PLOWS

They lead wherever introduced.

FAMOUS

For lightness of draft, steady running, the finest quality of work in the field. Beware of IMITATIONS which are INFERIOR.

The ORIGINAL NO. 21, "DANDY" 13, 15A (one-horse) and TINKLER WHEEL PLOWS made at AURORA only.



J. FLEURY'S SONS, AURORA, ONTARIO

MEDALS AND DIPLOMAS: WORLD'S FAIRS, CHICAGO AND PARIS

SOL-O-KRE SHEEP DIP

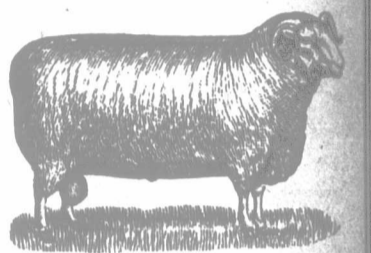
KILLS LICE, TICKS and FLEAS

"SOL-O-KRE"

will stamp out CONTAGIOUS ABORTION.

50c. per Quart. \$1.25 per Gallon (prepaid). \$5.75 per 5 Gallons (prepaid).

ROCHESTER GERMICIDE CO'Y
11 Jarvis Street, Toronto, Canada.



STOP! LOOK!! READ!!! FAIRVIEW SHROPSHIRE!!!!

Home again, and are feeling well. Ready to start making good for another year. Conditions seem right for constant progress. We are determined to lead, follow who may.
J. & D. J. CAMPBELL, Fairview Farm, Woodville, Ontario.

CATTLE and SHEEP LABELS

Metal ear labels with owner's name, address and any numbers required. They are inexpensive, simple and practical. The greatest thing for stock. Do not neglect to send for free circular and sample. Send your name and address to-day.
F. G. James, Bowmanville, Ont.

SOUTH DOWNS The Ideal Mutton Sheep

For three successive years at the Guelph Winter Fair I have won: 1st on single ewe lambs, 1st on pen of ewe lambs; 1st on pen of ewe lambs bred by exhibitor. I do not import winners, I breed them. Railway Station, Robt. McEwen, Byron, Ont. London, Phone. Alloway Lodge Stock Farm.

FARNHAM FARM OXFORDS AND HAMPSHIRE

CHAMPION FLOCKS OF BOTH BREEDS.

We are offering at reasonable prices a limited number of yearling and two-shear ewes by imported sire, and bred to our two champion imported rams. Long-distance phone in the house. Central Guelph, Telephone Guelph.
HENRY ARKELL & SON, ARKELL, ONT.

MAPLE VILLA OXFORD DOWNS AND YORKSHIRES

Are ideal in type and quality. Present offering is a grand lot of ram lambs for flock headers, also a number of shearing ewes and ewe lambs, sired by imp. Hamptonian 22nd. Yorkshires of both sexes and all ages. Right good ones. Satisfaction assured.
Bradford or Beeton Station. J. A. CERSWELL, Bond Head P.O., Ont.

DUROC - JERSEY SWINE

30 choice young sows, bred and ready to breed. Young boars fit for service. Also a choice Jersey bull calf. Bell phone in house.
Mac Campbell & Sons, Northwood, Ont.

Newcastle Tamworths and Shorthorns For sale: Choice young sows bred and ready to breed. Boars ready for service; nice things, 2 to 4 months, by imp. boar. Dam by Colwill's Choice Canada champion boar, 1901-2-3-5. Two splendid young Shorthorn bulls and six heifers—bred. Prices right. Bell phone.
A. A. COLWILL, NEWCASTLE, ONTARIO

White Hampshire Hogs—Largest herd in Belford

Canada. We bred the hogs that won both championships at Toronto and London for two years. Still have a few choice sows ready for service. Can furnish pairs or more not related. **HASTINGS BROS., Crosshill, Ont.**

Willowdale Berkshires

FOR SALE: Some choice young sows, bred and ready to breed; young boars ready for service, nice things, 2 to 3 months. Long-distance phone. **J. J. WILSON, Importer and Breeder, Milton P.O., C. P. R. & G. T. R.**

Pine Grove Berkshires.

Boars fit for service. Sows three, four and five months old.
Milton, C. P. R. **W. W. Brownridge, Ashgrove, Ontario.**

Hillcrest Tamworths

are second to none in America for type and quality. For sale are both sexes and all ages, from sows bred and boars fit for service down to youngsters. **Herbert German, St. George, Ont.**

SUNNYSIDE CHESTER WHITE HOGS

—I am now offering some very choice young things of both sexes, of breeding age. A few Shropshire sheep of both sexes. Also Red Cap cockerels and pullets. **W. E. WRIGHT, Glanworth P.O., Ont.**

Elmfield Yorkshires

Am now offering a large number of both sexes, from 3 to 4½ months of age, sired by S. H. Albert 2nd. Imp. in dam, and out of imp. and imp.-in-dam sows. True to type and of choice quality. **G. B. Muma, Ayr, Ont.** Phone connection.

Maple Grove Yorkshires

1910 business a record. 1911 to be still greater.

Forty sows bred to farrow in February, March and April, and any or all of them for sale. A grand lot, ranging from 7 months to 2 years old. Also younger ones, either sex, or pairs not related. A choice lot of September boars big enough to use. Prices reasonable, but consistent with quality. Stock shipped C.O.D. and approval. Correspondence or personal inspection invited. Long-distance phone via St. Thomas. **H. S. McDIARMID FINGAL, ONTARIO.** Shedden station, P. M. and M. C. R.

Monkland Yorkshires

I am making a special offering of 50 young bred sows. They will average 200 pounds in weight, and are from 6 to 7 months of age. An exceptionally choice lot, full of type and quality; also a limited number of young boars.
MATTHEW WILSON, FERGUS, ONTARIO

WHEN WRITING ADVERTISERS MENTION THE FARMER'S ADVOCATE.

GOSSIP.

Country-breeders, and lovers of White Horns in particular, should look up the new advertisement in this issue of The Farmer's Advocate.

SHORTHORNS, CLYDESDALES AND GRADES.

Tuesday, March 21st, as announced in their advertisement in this paper, John Wesley Wise, of St. Thomas, Ont., will at auction their select herd of 26 registered Shorthorns, bred from milked strains, and 20 head of bred grade cows, heifers and steers. A number of Clydesdale mares, fillies and colts are also in the offering, which should attract ready buyers. See the advertisement, and write for the catalogue for particulars.

With & Richardson, Columbus, Ont., are doing some business in the past weeks. They have sold the Standard stallion, Baron Elect, at a long sale to W. Nichols, V. S., Kingston, also the Clydesdales, Banks Baron, Joseph Huntly, of Binbrook, Ont.; in Crawford, to Hanbidge & Sons, Toronto, Ont.; a pair of fine imported stallions to Wm. Kirk, Forrester's Falls, their show pair of geldings, Fred Gartley, to Melvin Gordon, Crow-Alt, and a number of other smaller lots. They still have on hand a few dian fillies, and a number of extra imported fillies and stallions, that will be sold at "live-and-let-live" prices.

At the Spring Show and sales of Aberdeens cattle, at Perth, Scotland, the second week in February, while not quite so successful as those of 1910, were yet fairly successful. The highest price realized for a bull was \$810, for J. Ernest Kerr's yearling, Eupator, second in the list, by Prince of Wassail, out of the Eugreta, by Baron Burgess, purchased by J. Douglas Fletcher. The average price for 507 head sold, was \$140, 102 bulls making an average of \$155. At the Aberdeen Show and Sale the following day, the average for 274 head was \$124, for three head, from the Ballin- ch herd, and the second highest \$86, for, from the Harviestoun herd. At the Perth Sale, four young bulls sold at prices ranging from 120 to 155 guineas, an average of \$740 each.

A BIG KIND OF CLYDESDALES. D. Elliott, of Bolton, Ont., can show Clydesdales, two years old off, that make ton horses in weight, that are on underpinning of faultless quality that have draft character from end to end. Anyone wanting a Clydesdale, and that can be easy with him, would have in one of these a horse to be proud of, and a money-maker sure. There is only one over the two years off; he is the big, good horse, Cupfinder 11483, a bay of the great Silver Cup, dam by Hood, a Highland and Royal first-winner. This is gilt-edged breeding, and there are very few better, big, bay horses in Canada. Among the year-olds is the exceedingly flashy, black, Lord Thomas 11487, also Silver Cup, dam by Sir Thomas. This has seven registered dams, and is one of the sweet, nice kind. A big, drafty that will reach the ton, is Felicity, a brown, by the renowned Prince, dam by Baron's Pride. He is a worthy his great sires. Another big on a faultless bottom, is Prince 11493, by the noted prize horse, dam by the invincible Hiawatha, breeding unsurpassed. Another, big and a toppy, stylish colt, is the Kirkbean 11491, by the champion, dam by Baron's Pride, dam by Mac. Another extra big, drafty colt, is bay, Lord 11485, by the H. S. winner, Crusoe, dam by Mac. Still another is the bay, Mount 11494, by the H. & A. S. first-prize, dam by Mac. In these, there are three colts, including three, two grays and one black, smooth colts, on the list. These horses are the right kind, and are the prices.

Make YOUR Buildings Fire-Proof With Steel—PEDLAR'S Way

YOU'D like to minimize the fire risk on your house and barn, wouldn't you? I don't believe there's a man who reads this paper who would deliberately neglect to provide every possible protection against fire? Yet why do you continue to put up frame buildings? If you think a "fire-trap" costs less you are much mistaken. Get the facts about Pedlarizing and figure it out for yourself.

Reduces fire risk fully 80 per cent. Actually Cheaper by 20 per cent.

THIS means practically fire-proof. Many of the so-called "fire-proof" buildings in big cities are not so well protected against fire as your home and farm buildings would be if built Pedlar's way. Pedlarizing practically eliminates the risk of your buildings catching fire. So protects each part of the building that if fire does start it can be prevented from spreading. There is nothing about a Pedlarized building to burn, except the contents. Any fire insurance agent will tell you how much lower the insurance rate is on a building like this—enough to save a good bit of its cost.

PEDLARIZING means sheathing any building, inside and out, with Fire-proof Sheet Steel. Roofed with Oshawa Steel Shingles, which I guarantee for 25 years. Outer walls surfaced with Pedlar Steel Siding, to imitate brick, cut stone, dressed stone, etc. Inside walls and ceilings finished with Pedlar Art Steel—made in over 2000 beautiful designs. Such construction is actually cheaper by 20 per cent. than an ordinary frame building. My booklet makes it plain to you. Write for a copy—FREE.

PEDLARIZING Has Many Other Advantages--All Important

WALLS and ceiling are one unbroken seamless sheet of hand-somely designed steel. No crevices or cracks to harbor dust or dirt or disease germs. Can be easily washed with soap and water just like a pane of glass. If there's been sickness in a Pedlarized room the whole interior can be scrubbed with antiseptics and thoroughly disinfected.

INNER walls and ceilings wholly free from dampness—always Will not "sweat" because there is a dead-air space between them and the Pedlar Siding of the outer walls. For Pedlarizing Means a Damp-proof Building. Frame cannot penetrate from the outside. Frame houses and wood-shingled roofs do "sweat" and open up cracks that let in the wind and rain. A Pedlarized house is perfectly dry in all seasons.

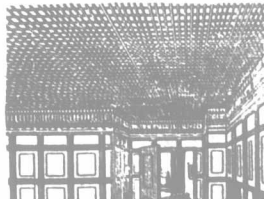


Oshawa Steel Shingles Make a Good Roof For 100 Years

I give you a written Guarantee that absolutely protects you against roof troubles for a quarter-century. Just as your fire insurance policy protects you against loss, so the Pedlar Guarantee protects you for 25 years against loss through any fault of Oshawa Shingles. Nearly Fifty Million square feet of roofs in Canada protected today in this way. They cover farm buildings, homes, churches, schools, public buildings all over this broad Dominion. Cost very little, too.

OUTSIDE can be finished to look like stone, fancy cement blocks or brick. For the inside walls and ceiling you can choose from over 2000 designs, every one the creation of an artist in mural decoration. Every taste can be satisfied, any decorative scheme harmoniously carried out. Patterns are deeply and clearly embossed in heavy sheet steel. Can be put in place easily and quickly. Never crack with settling of building—never need papering or firing.

THE unbroken, seamless covering of steel keeps out the cold, and makes buildings wind-tight—easier to keep warm in winter. Think what a Pedlarized barn would mean to your Pedlarizing Means stock. And in summer's blazing sun you'll find a Pedlarized house or barn the coolest—heat can't get in. Thus your buildings are kept dry and comfortable in all seasons, through all kinds of weather.



Pedlar Art Steel Imperishable Ceilings

Adorn and protect thousands of Canadian homes, schools, fine churches, stores and public buildings. Because they are so much handsomer, more economical and sanitary than plaster or wood. Best fire protection, too. A plaster ceiling starts cracking almost as soon as it sets. Pedlar Art Steel Ceilings cannot crack. Seams are invisible. Hundreds of patterns provide every conceivable style of decoration.



Beautiful, Durable Pedlar Steel Siding

At the cost of a frame building, it makes your house as staunch and handsome looking as if built of stone or brick. Pedlarize buildings, remember, are less liable to fire damage than the usual type of brick building. There are dozens of patterns. Enable you to build a strong, beautiful, safe, wind-tight, weather-proof, durable building with greatest economy. Get my book of pictures and facts.

Pedlarizing Means Lightning-Proof

Lightning costs farmers on this Continent four million dollars a year. In one year 623 people were killed and 889 injured by lightning—all on farms. Oshawa Steel Shingles would save all this immense loss. The sheer sheet steel surface of the roof scatters the electric blast and passes it harmlessly off—better than any number of lightning rods. For this reason alone you ought to roof your next building with Oshawa Shingles.

Pedlarizing means Less Expense in Every Way

It costs a great deal less to Pedlarize a room, or a whole house, than you probably think it costs. Get the facts—then figure. My large, finely illustrated book shows numerous fine churches, schools, public buildings, private homes in city and country that are Pedlarized, also some of the 2000 Pedlar designs. Our nearest warehouse will gladly mail you a copy FREE.



In the space of this advertisement I can only suggest some of the many advantages of Pedlarizing. You should send for my big free book, showing the newest of our 2,000 beautiful designs. Also tells how economical Pedlarizing really is. Write for it today. G. H. Pedlar.

Don't Settle the Question of Materials Until You Know Every Detail About Pedlarizing.

Send Your Name and Address at Once. Ask for Our Free Booklet No. 16 Write to our Nearest Address. (See below.)

The PEDLAR PEOPLE of Oshawa Established 1861

HALIFAX 16 Prince St. 3184	ST. JOHN 42-46 Prince William St.	QUEBEC 127 Rue de Post	MONTREAL 321-J Craig St W	OTTAWA 425 Somerset	TORONTO 111-113 Bay St.	LONDON 86 King St	CHATHAM 200 King St. W. 434 Kingston St.
PORT ARTHUR 45 Cumberland St.	WINNIPEG 76 Lombard St.	REGINA 1901 Railway St. S.	CALGARY Room 7, Crowe Block	EDMONTON 633 5th Ave. North of Jasper	VANCOUVER 319 Pender St.	VICTORIA MENTION THIS PAPER.	

WE WANT AGENTS IN SOME SECTIONS. ADDRESS OUR NEAREST WAREHOUSE.

Kemp

At least one-third lighter draft
Genuine
Manure Spreader

You can only buy one manure spreader with the Reversible, Self-Sharpening, Graded Flat-Tooth Cylinder—and that is the Genuine Kemp. Because of this Graded Flat-Tooth Cylinder the Genuine Kemp is at least one-third lighter draft than any other spreader.

There is less friction on the Flat-Tooth Cylinder, because the teeth are wide and graded. On that account only one-third as many teeth are required, which reduces the friction when the manure is passing through the cylinder.

The square or round teeth on ordinary cylinders are not wide enough apart and the manure backs up, chokes cylinder, causing heavy draft.

The manure cannot back up against the flat teeth, and because the flat teeth are graded they will handle and thoroughly pulverize all kinds of manure from the clear gum to the strawy material.

There are many other exclusive improvements on the Genuine Kemp. Our big catalog describes and illustrates them fully. Send for a copy and learn some new facts about manure spreaders.

There would be twenty times as many manure spreaders in use in Canada today if farmers realized the economy of spreading manure with the Genuine Kemp. The Genuine Kemp will pay for itself faster than any other farm machine.

But send to us for catalog "F" That's your first step. We are sole selling agents. 62

FROST & WOOD CO., LTD. SMITH'S FALLS, CANADA

LET ME SEND YOU A CHATHAM FANNING MILL FOR THIRTY DAYS FREE

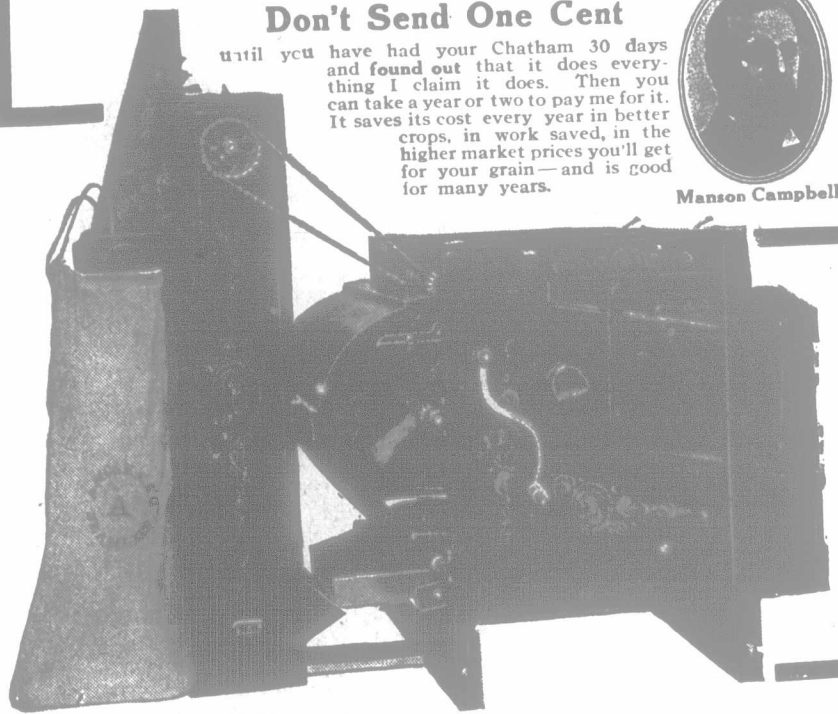
I'll pay the freight, no matter where you live—give you every chance to test the machine thoroughly, in actual use right on your own farm, to see that it actually does completely clean, separate and grade all kinds of seeds.

Don't Send One Cent

until you have had your Chatham 30 days and found out that it does everything I claim it does. Then you can take a year or two to pay me for it. It saves its cost every year in better crops, in work saved, in the higher market prices you'll get for your grain—and is good for many years.



Manson Campbell

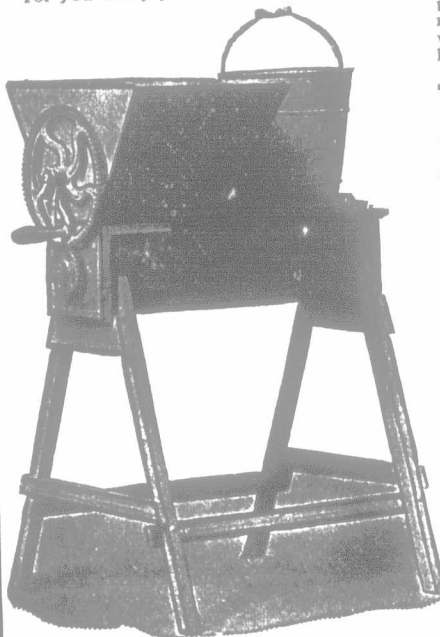


The Only Machine That Positively Rids Clover of "Plantain" Weed

Buckhorn Plantain is the pest that has bothered Ohio and Illinois farmers recently, until the Chatham conquered it. Now it has come to Ontario and you'll probably find this year's clover full of this weed. Maybe you won't know it, until you try to sell your clover, or plant it next year. But it's there and if you don't clean it out it will cost you a lot of money. Only the Chatham will do the work—that's why you need your Chatham right away.

Cleaned Seed Means Higher Market Prices, Better, Surer Crops, Less Work

That's how the Chatham pays for itself so soon, and keeps on making bigger profits for you every year. We'll prove to you that the Chatham will add \$29 a year extra profits on every 40 acres. Isn't such a remarkable machine worth trying? Then write at once for my free book and liberal offer.



The Fastest and Most Successful Smut Destroying Machine is the

CHATHAM GRAIN PICKLER

This low-priced device puts an end to smut in wheat or other grain. Built staunchly, all of wood, and will last a lifetime. Uses either bluestone or formalin solutions. No metal to corrode. Works fastest and smoothest. Pickles 60 bushels of wheat an hour, 80 bushels of oats. Guaranteed to work right. Pays for itself in one crop.

Get My Free Book and Liberal Offer At Once

This seed question is of vital importance, as you'll realize when you read my big, free book. My experience of over 43 years in building fanning mills cannot fail to help you. Ask about my offer immediately. You Need a CHATHAM Right NOW to clean and grade your grain and rid your clover of the dangerous "buckhorn plantain" weed. Don't delay. Write me to-day. Remember, you can have a Chatham 30 days FREE. Address Manson Campbell, President.

The Manson Campbell Company, Limited
Chatham - Ontario

SAVES -MONEY- -TIME- -WORK- AND REALLY COSTS NOTHING

You can easily afford this handsome, practical kitchen necessity. For our special offer (please send for details of it) lets you pay for it out of what it actually saves in lessened grocery bills. You should ask us about it at once.



Whole table-top one heavy sheet

OF BRIGHT ALUMINUM

You cannot begin to know the CHATHAM by this picture. For the picture cannot show even one of its most pleasing and valuable features—the SOLID SHEET OF BRIGHTLY-POLISHED HEAVY ALUMINUM that forms the covering of the table-top and extension leaves. This ALUMINUM is extra-heavy weight, pure metal—LOOKS LIKE SILVER—LASTS LIKE STEEL—cannot rust—won't gather dust or dirt—easily cleaned—simply perfection! And this is the ONLY kitchen cabinet you can buy with an aluminum top—which ADDS FULLY FIVE DOLLARS TO ITS VALUE. Yet you pay NOTHING EXTRA for it!

You must see it to know it

You must see the Chatham Kitchen Cabinet to appreciate how handy, compact, sensible it is. Exterior of specially-selected black ash, hard as rock and beautifully polished. Panels of golden chestnut. Bake-board, drawers and flour-bin of snow-white basswood. With the CHATHAM everything you use in cooking is at your fingertips. You can get meals ready sitting down. Your flour-bin (metal lined—holds 75 pounds!) is right under your hand in easy reach. Sugar-bin (opened or closed by a touch) is just in front of you. Six air-tight canisters (free with every Chatham Cabinet) stand in the shelf-rack. Big, dust-tight drawers hold spoons, egg-beater, funnels, strainers, etc.; ample closets for kettles, pans, and the like.

Everything in its place

And you can tidy up as you go along when you have a CHATHAM. There is a place provided for all the things you now walk back and forth for, between pantry and table. The CHATHAM spares you all those countless steps. Cupboards for jams and tinned foods; three roomy drawers (besides the two large ones) for small packages. High top makes a fine shelf for dishes—enclosed on three sides, and a rod at the back as a plate rack. Fine French plate mirror in center door—fix your hair in a second if anyone comes. The CHATHAM is mounted on ball-bearing castors. You can readily move it when you are sweeping up. Yet it is most solidly built—nothing shaky nor wobbly about it. Whole thing is dust-tight, mouse-proof—a permanent, durable, satisfying kitchen help.

Easily moved to sweep under

You should now investigate

Yet, with all these conveniences—features found in nothing else—the cost of a CHATHAM is probably less than you imagine. You should write us for the address of our agent nearest you. He can name you a price that will surprise—and he will gladly show you the Cabinet and point out its merits.

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