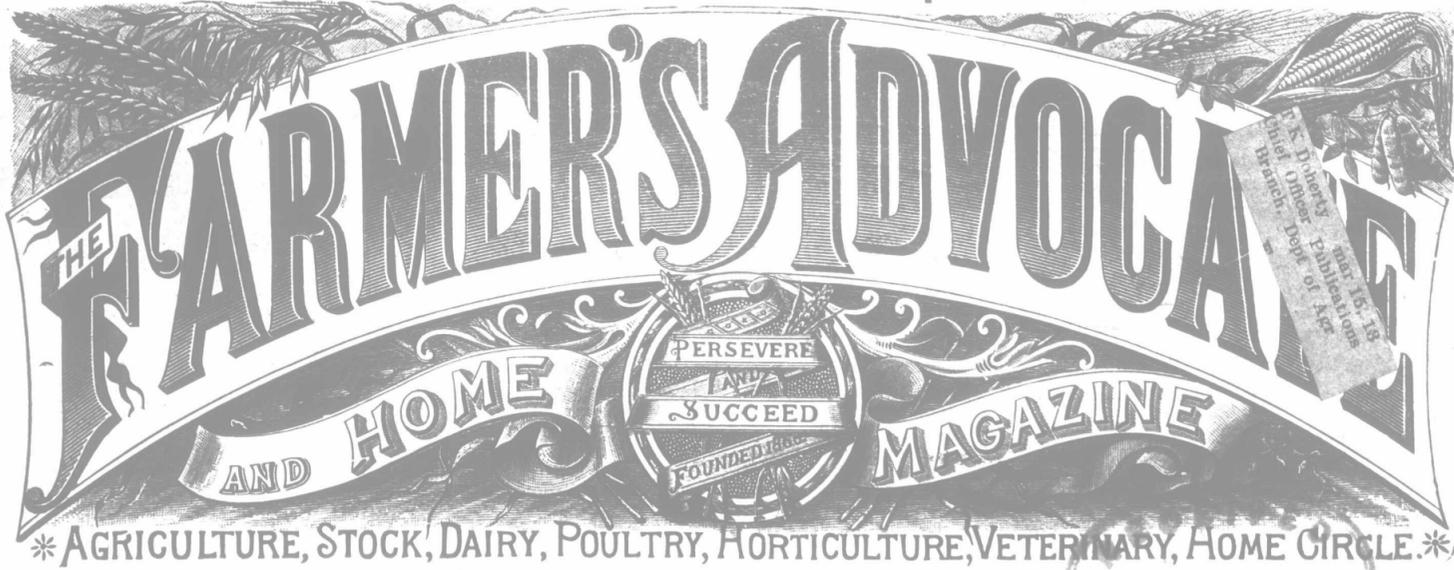


PUBLISHED EVERY WEEK. \$1.50 PER YEAR.



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

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VOL. XLVII.

LONDON, ONTARIO, JUNE 13, 1912.



## The Understudy of the Sun McClary's Sunshine Furnace

WHEN Old Sol swings low and far away he appoints an understudy for the purpose of keeping Jack Frost where he belongs—outside.

Years ago McClary's "Sunshine" Furnace, by reason of its marvelous heating capacity and the balmy June air it suffused the house with, was specially appointed Understudy to the Sun. That appointment has been confirmed year after year, and—your "Sunshine" Furnace—Jack Frost's Master awaits your orders for the coming winter.

Remember the past winter—the Frost King was very active—He battered us with a three-months' siege of snow and ice—Almost conquered the thermometer by chasing the mercury out of sight. But he failed to penetrate thousands of homes, because the Understudy of the Sun—McClary's "Sunshine" Furnace—was on the job in the cellars of these homes.

It's easy to keep Jack Frost at a safe distance with the "Sunshine" Furnace. He may storm and rave outside, but there is no place for him within—because the Understudy of the Sun has demonstrated its mastery in the home.



The average furnace is a glutton for coal—it literally burns up money. The "Sunshine" Furnace saves money—earns its cost in a very few years, because it burns coal sparingly. Call on the McClary agent of your locality and ask him to prove that statement true. If he cannot convince you—show you that the "Sunshine" Furnace will cut your coal bills by a very pleasing margin we don't want your order. That's the fairest way we know of doing business—does it appeal to you?

There are a multitude of reasons why the "Sunshine" Furnace does save fuel—reduce coal bills—reasons that will be printed in the following advertisements. Here is one that should make you call on the McClary agent at once—the "Sunshine" Furnace has four radiating surfaces—surfaces that gather up the heat greedily and diffuse it liberally all over the house.

But—you just call on the McClary agent and ask to be shown. If you do not know him write us at our nearest address and we'll tell you.

You certainly owe it to yourself to find out why McClary's "Sunshine" Furnace is called the "Understudy of the Sun."

LONDON  
TORONTO  
VANCOUVER  
ST. JOHN, N. B.

# McClary's

MONTREAL  
WINNIPEG  
HAMILTON  
CALGARY

# "Here is my Letter to You. It is Worth One Thousand Dollars"

DEAR FRIEND:

If you're going to buy a horse, you look at his feet. But if you buy a building, you look at the ROOF last. A horse isn't worth more than his feet, and a building isn't better than its roof.

I want you to roof right. I want you to get the right stuff from me at the right price. I want to make your roof a good deal better than your building, because then you'll get everything out of the building that it can give in shelter, protection and proper storage. The right roof does more than anything else for any building.

My Oshawa Shingles have taken 50 years of my thought and time and invention. It was hard work. I tried to make a perfect shingling. I worked for years to get just the right kind of metal to last longest. I worked to get the easiest and best lockjoint that ice couldn't pry open. I worked and estimated hard to get a roof neither too heavy nor too light. I worked for a time-proof shingling. I have got it for you. It will last 100 years.

When you use this Oshawa Shingle of mine what do you get? First, you get a shingle so good to-day, that it gives perfect service. It suits any building. It meets every kind of need for a roof at low cost and with long service. Second, you pay a moderate price. This is because many buyers unite on using my Oshawa Steel Shingle. The Canadian Government Bernier Arctic Expedition used my shingle against Arctic ice and blizzards. The North-



West Mounted Police use it, another Government proposition, against Arctic snow on permanent construction. The West Indies uses it against terrific heat and rain. You find it in Japan because it stands earthquakes. My Oshawa roofing is on the farms of South Africa. Here is ONE roof that is perfect in every climate in the world from Arctics to Tropics. World sales are my reward for high quality. Third, you have a roof that is easy to lay and lay right. You can lay it and lock it yourself. It will not leak nor burn. It is lightning-proof.

But I want you to pry into every detail of my proposition first. I want you to know it is right. I will send you this book of mine, "ROOFING RIGHT," if you send me a post-card. I have sent thousands of them out, for they have useful hints on planning barns and houses. The book is worth money to you, and if it leads you to use my Oshawa Shingles, the roof will be protecting your barn one hundred years from now.

Send for this book of mine now, to my nearest address below. If you are about to build a barn, it may have a hint or new idea worth \$1,000 easily to you, even if you do not buy a roof. If you do get a Pedlar Roof from me, you get double or triple service from the building. I will be looking for your enquiry. Yours truly, (Sgd.) G. N. Pedlar

321

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Established 1861

HALIFAX 16 Prince St.	ST. JOHN 42-44 Prince William St.	QUEBEC 127 Rue du Pont	MONTREAL 321-3 Orsag St.	OTTAWA 423 Sussex St.	TORONTO 111-113 Bay St.	LONDON 88 King St.	CHATHAM 200 King St. W.
PORT ARTHUR 45 Cumberland St.	WINNIPEG 76 Lombard St.	REGINA Room 7, Crown Block	CALGARY Room 7, Crown Block	EDMONTON 563 Third St. W.	VANCOUVER 108 Alexander St.	VICTORIA 134 Kingston St.	

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Guelph, Ontario

**"60 SPEED" ENGINE**



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Our numerous customers exclaim that the CANADIAN Gasoline Engine IS THE LEADER

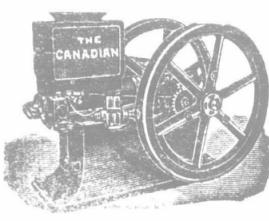
because it is the most reliable, simple, durable and economical engine on the market.

Why not benefit by the experience of those who are using the CANADIAN Engine. Made by

**The Canadian-American Gas & Gasoline Engine Co., Ltd.**  
Dunnville, Ontario

**FROST & WOOD CO., LTD.,** Smith's Falls, Ont.

Exclusive selling agents for Eastern Ontario, Quebec and Maritime Provinces.



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Deputy of the Minister of the Interior.

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Because there are millions of acres of agricultural land in Northern Ontario in some cases free, and in others at 50 cents per acre, excelling in richness any other part of Canada, blessing and waiting to bless the strong, willing settler, especially the man of some capital.

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HON. JAS. S. DUFF,  
Minister of Agriculture

### "LONDON"

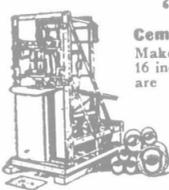
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### T-A Handy Farm Wagons & Wide-Tire Steel Wheels

Equip your old wagons with T-A Wide-Tire Steel Wheels and they'll be just as good as new. And besides they'll carry 25 to 50 per cent. heavier loads.

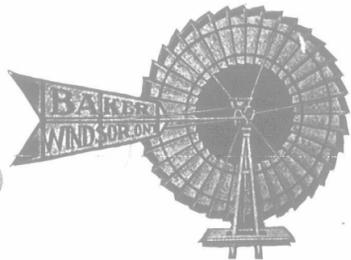
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Tudhope-Anderson Co., Limited  
ORILLIA, ONT.



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Are built for hard, steady work, and keep at it year in and year out.



It is the reputation which "BAKER" Wind Engines have fairly won and steadily held ever since their first appearance on the market, 30 years ago, that should be considered. They are famous for their durability, simplicity of construction and easy running. "BAKER" Wind Engines are so designed that the gears cannot wear out of mesh. The wheel is built on a hub revolved on a long stationary steel spindle, requiring no babbitting. It has a large number of small sails which develop the full power of the wind and enable them to pump in the lightest breezes. Has ball-bearing turn-table and self-regulating device, and all the working parts are covered with a cast shield, protecting same from ice and sleet. The above is only a few of the many features that have placed "BAKER" Mills in the lead. Let the H.-A. Co. agent give you complete information, or write direct for booklet. We make a full line of Steel Towers, Galvanized Steel Tanks, Pumps, Pneumatic Water Systems, Spray Pumps and Gas and Gasoline Engines.

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Cross section of radiator showing fused joints.

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**No Gas  
No Dust**

**FUSED JOINTS CANNOT LEAK**

Comfortable heating is possible only with a Furnace that cannot leak gas and dust. At every joint where a leak might otherwise occur, the Hecla is sealed tight. We do not trust to bolts and cement. The wear due to constant expansion and contraction would grind out the cement and leave a series of leaks for the escape of gas or dust. To make a joint that will be as tight after years of service as it is when new, we fuse the steel sides and cast-iron frames of our radiators by a patent process. This welds the iron and steel into one piece.

Homes heated by Hecla Furnaces 20 years old are getting as pure air from the registers as when the Furnace was new.

And this Furnace saves one ten of coal in seven. Isn't it worth looking into?

**WRITE FOR THIS BOOK.**  
If you want a more comfortable home, it will interest you.

All fumes from fire go through this passage. Every joint is fused making it gas and dust proof.

Burns wood as well as coal.

HECLA No. 119  
RADIATOR  
FUSED JOINTS STEEL SIDED FIRE POT PATENT NO. 103220  
CLARE BROS. & CO. LIMITED  
PRESTON ONT. WINNIPEG MAN.

CLARE BROS. & CO., LIMITED,  
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**8¢ PER RUNNING** Regal Oval Top  
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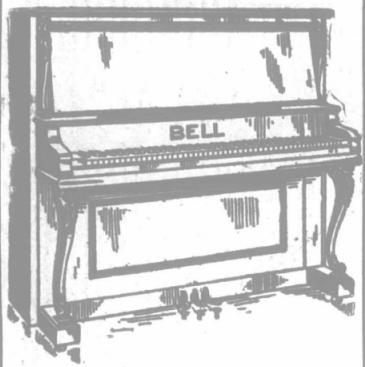
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CANADA'S BEST.

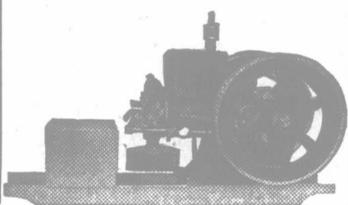


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The Bell Piano possesses several other valuable features, as described in our (free) catalogue No. 40. Send for it.

**THE BELL PIANO & ORGAN CO.**  
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With no complicated working parts, "Bull Dog" Gasoline Engines are built especially for use on the farm. They will stand long and hard service out of doors.

**"BULL DOG" Gasoline Engines**

are built in six sizes, from 1 1/2 to 16 h.p. Adapted for stationary, semi-portable or portable mounting. Liberal bearing surfaces and up-to-date construction throughout. Get prices and catalogue from our Canadian agents.

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Learn "How to get rid of hen lice with one application of Avenarius Carbolinum a year." How to paint silos, barns, fences, shingles and posts to preserve against decay. "Country Gentleman" says: "Every reader should have it." The entire agricultural press endorses its use. Tested on the Dominion Farms and highly recommended by Mr. Gilbert, the poultry manager. Stock carried at 38 Grey Nun St., Montreal, from where Canadian orders are shipped. Write at once for free copy of Bulletin.

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194 Franklin St. New York, N. Y.

When Writing Mention Advocate

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**Be Your Own Judge**

We cannot believe that there is a sensible man living who would purchase any other than a DE LAVAL Cream Separator for his own use if he would but see and try an improved DE LAVAL machine before buying.

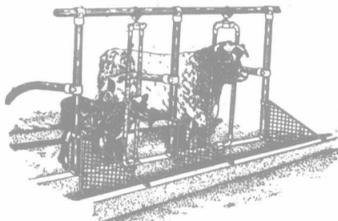


It is a fact that 99% of all separator buyers who do SEE and TRY a DE LAVAL machine before buying purchase the DE LAVAL and will have no other. The 1% who do not buy the DE LAVAL are those who allow themselves to be influenced by something else than real genuine separator merit.

Every responsible person who wishes it may have the Free Trial of a DE LAVAL machine at his own home without advance payment or any obligation whatsoever.

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By doing so you will give them the greatest advantage in producing the maximum of the highest priced product. With SUPERIOR equipment you will have the greatest possible SANITATION, COMFORT, CONVENIENCE and DURABILITY in stable construction for very little expense.

If building or remodelling, write for our free book before you decide on your equipment. Drop us a card to-day. Agents wanted.

The SUPERIOR, the only Stanchion that you can adjust to tie from your smallest calf to your largest export steer.

**The Superior Barn Equipment Co.**  
Fergus, Canada

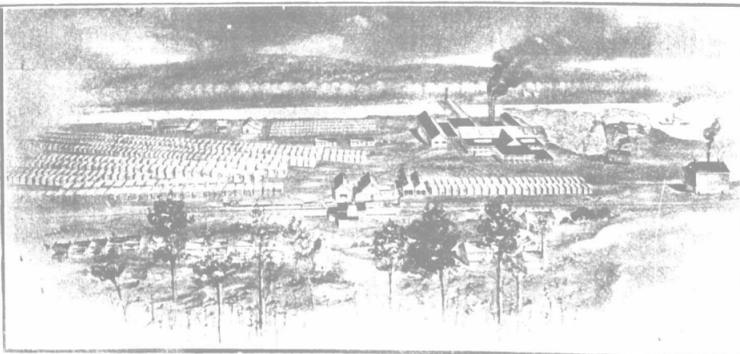
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A COLLEGE OF APPLIED SCIENCE.  
Affiliated to Queen's University.  
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For Calendar of the School and further information, apply to the Secretary, School of Mining, Kingston, Ont.

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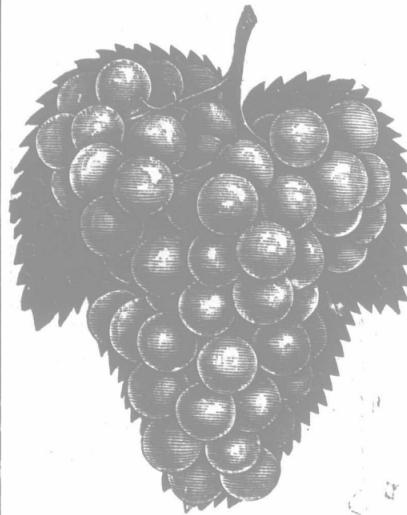


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Large incomes supplied from the Garden of Canada



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ALL THE BEST  
APPLES PEARS PLUMS CHERRIES  
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TESTED sorts for every locality, county and province.

850 ACRES under cultivation. Trees grown for high-class trade. **Straight Stems. Good Heads. Fibrous Roots.** Agents in every district, or write me direct. Years of personal experience at your service.

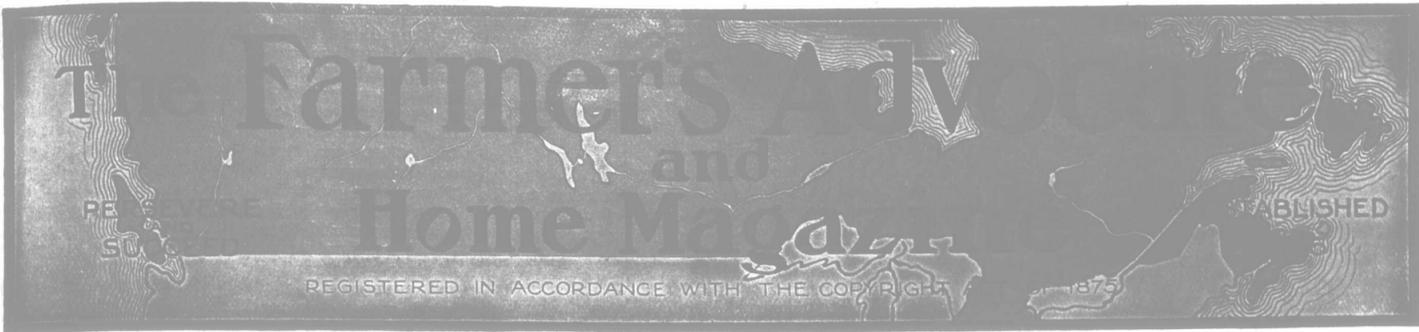
Remember—I grow my own stock. Catalogue and quotations mailed free.

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Choice stock, grain and fruit farms for sale. We specialize in high-class properties, and aim at offering good value only. We have a special department devoted to listing and selling Ontario farms. Write for list.

**UNION TRUST CO., LTD.**  
Real-estate Department  
201 Temple Building, Toronto



## EDITORIAL.

The check-row corn planter is one of our best weed destroyers.

So far, the growing season of 1912 has been as wet as that of 1911 was dry. Are we in for another year of extremes?

Millet is not a bad crop to try on land which could not be planted to corn in good season. Rape is first-rate where one has the stock to utilize it.

Prepare for haymaking. Early cutting of red clover, while it may not yield as many pounds per acre, gives a more palatable and more digestible feed, and gives the aftermath a chance to produce an abundant second crop, either for feed or seed. To give the field the best possible chance to produce seed, cut early.

Just before haying is a good time for the annual stock-taking, if it was not done in April. A yearly inventory is a splendid eye-opener, a source of encouragement to the enterprising, a stimulus to rational investment of money, and a sobering check upon easy carelessness in buying. Knowledge is always corrective and helpful.

Haymaking must be done as rapidly as possible, and as much machinery as can profitably be employed should be installed, in order that the crop may be harvested in the best possible condition. No one having any considerable amount of hay to harvest can afford to do without a hayfork and track, and, where large quantities are grown, the hay loader and side-delivery rake are labor and time-savers.

From this time forward, cultivation should be regular and frequent in the corn and hoed-crop fields, and in the summer-fallow. In the former it is necessary to promote growth and keep down weeds, and in the latter, which is worked for the sole purpose of ridding the soil of noxious weeds and improving its fertility, it is imperative that thorough work be done. With the worst weeds it is necessary to give them a setback weekly; thus, cultivation at least once every week is necessary.

Now is a good time to sow the turnips. They come on quickly, are ready to hoe before harvest begins, or during the breathing spell between haying and harvest, and usually grow into good-sized and fine-quality roots. If you have calves and young stock to feed, and have no mangels or sugar beets, you cannot afford to do without a few turnips. They add something to the ration which just seems to suit the calves' condition in the winter.

Rainy days may be profitably employed in cleaning out the old straw and chaff from the bays in the barn. The past long winter of shortage in straw served to get most of this worked down into manure, but doubtless many barns contain a little, and this would be a good season to clear it all out, and thus destroy a large number of rodents, which use it as a breeding place, and afterwards make inroads on the grain bins. Mice and rats destroy large quantities of grain in the granaries yearly, as these granaries are situated in or near the mows in the barn, in which has accumulated quantities of old straw, ideal breeding places for these animals. Clean them out before harvest.

### Believe in Your Occupation.

Success to a great extent depends upon effort, and effort bears a direct relationship to one's feelings toward the task at which he is employed. Listlessness, half-heartedness, carelessness result invariably in partial or complete failure, and are conceived, born, fostered, fed and reared upon doubting and skepticisms with regard to the business in which the person is engaged. If you have no faith, no real belief in the possibilities of the future of your undertakings, it is better, far, to drop them and commence something in which you are assured in your own mind of success. If the man engaged in a particular work sees no good to come of it, what chance has he to convince the public that his calling is one to merit the attention of the mass of hard-headed, thinking people, every one of whom is out to make a success of life? It is the worst possible argument against a business to see those engaged in it dissatisfied, and ever decrying it as unprofitable, unproductive and wholly undesirable. Yet, how often do we think that we have positively the worst occupation in the world, and that the other fellow has all the best of it, gets his living easier, has more leisure, and enjoys life to its fullest extent? The "other fellow" may be at the same time thinking the same of us. There seems to be a strong current of dissatisfaction in human nature which demands an ever-changing course of events. This uneasiness is general, but with those who believe strongly in their business is not lasting, having only a very slight effect.

Real, lasting, deep-rooted dissatisfaction is often the result of failure to believe sincerely in the occupation engaged in. To believe in one's business does not mean that one is to reach that stage of satiety which eliminates effort. Not at all. Believing stimulates to increased effort, and well-directed effort brings results which cannot but increase and perpetuate the firm confidence in the possibilities and outcome of the working of the business. It is a kind of endless chain. The first link is an occupation, for an ambitious person without employment is like a fish out of water; welded with this first link is the strengthening link of belief in the calling undertaken; out of this link, and joined with it grows effort which brings results, the last link which cements the chain, increases the business and the belief in it, and spells success. Once the work is decided upon, the outcome hinges upon the extent to which the worker believes in his decision.

We read of an increasing trend of population cityward. We ask ourselves why. Answers in hundreds are given. The school is blamed, the society, or lack of it, comes in for its share of responsibility; the desire for leisure and excitement, the possibility of higher wages, less work and shorter hours—these and the scores of other reasons are advanced, and all have a bearing on the situation, but what effect upon the youth of the country districts has the man engaged in agriculture who says, "Never be a farmer; it is the hardest and least remunerative occupation in the world," or the woman who says, "The farmer's wife is a drudge, with no social advantages whatever." How often do we hear men remark, "If I had my life to live over I would never be a farmer; I would go to school, receive an education, and enter one of the professions." What are the sons of these men likely to think of their fathers' occupation? Are they likely, after having this sentiment instilled into them from the cradle up to a high-school age, to show any great

respect for agriculture? No. They learn to look upon it with contempt, and it is only after they have been fitted for, or have accepted and tested other occupations that they begin to see things in their true light, and gradually get more love for the country. But at this time they are very often wholly unsuited for farm life. They are not physically fit, and they lack the knowledge of farm practice necessary to successful farm management. It is these men who are crying "back to the soil." Had their parents, from the beginning, taught them to honor and finally believe in the occupation of farming as being one of the best the country offers, many of these would have never left the land. The child naturally believes the parent is right in his or her estimation of the calling engaged in, and if it is favorably commented upon by father or mother as the result of a firm belief in it, there is no doubt as to its effect upon the child's mind in its formative state. If every agriculturist would always remark, in reference to farming, "It is the best occupation in the world, when all things comprising health, pleasure derived from close communion with nature, freedom and real life are considered," the trek to the city would not be so serious, and the rising generation would grow up with a far larger percentage remaining on the land. It is said that education and social organization will solve many of the country's problems. We firmly believe in getting all the education possible, but it must be more vocational, must interest the rural youth in the science of agriculture and the beauty of nature, and should be commenced in the home as a result of the heads of the family showing in actions and words that, as a result of believing firmly in their business and its future, they are satisfied with their calling, and willing, as a result of this belief, to push it to its utmost.

### Enjoying Nature.

With the highest kind of respect for botanists, entomologists, zoologists and biologists in general, we confess sometimes to a feeling of impatience towards that class of them who imply that it is necessary to know nature analytically in order really to appreciate her charm. From an economic point of view, the systematic knowledge of the scientist is invaluable, and not to be ignored by any farmer without loss. From an intellectual point of view, it is likewise excellent for those who have or care to cultivate a mental bent in that direction. But that such knowledge is necessary to the highest enjoyment of nature's charms, we are not prepared to concede. A certain friend of the writer confesses frankly and unashamedly that, though country-bred and still living on the land, he knows the name of fewer birds and plants and insects than the average high-school boy; yet he fairly revels in rural conditions, and has always done so. He cares nothing how many petals a certain species of flower possesses, nor what are the names of the ferns under his feet, nor what are the scientific appellations of the birds flying over his head. What of botany he once knew he has mostly forgotten, and has likewise unloaded the greater part of his scanty information about birds, insects and sea-anemones, yet there is nothing on earth he enjoys better than a walk through field and wood, drinking in the charm, without caring in what it consisteth. Enough to know that the birds are overhead and their music is sweet; enough to sense the beauty and fragrance of the woods with-

## THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL  
IN THE DOMINION.

PUBLISHED WEEKLY BY  
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
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out troubling about Latin names or carpels or segments, antennæ or cotyledons. Of what concern are all these, anyway, unless one wishes to follow up scientific research to some greater or less degree?

Far be it from "The Farmer's Advocate" to despise such knowledge. It is excellent in its place, but it is not for everybody, and is by no means necessary to the most uplifting, enjoyable and reverential companionship with nature. It is no more requisite to enjoyment of nature than a knowledge of physiology is necessary to admiration of the human face and figure.

To walk through the woods, absorbing through every sense and pore the cadence, the fragrance, the beauty and the inspiring, solacing charm of the Great Out-of-doors, is to experience a wholesome exaltation beyond the ken of city dwellers. This is true enjoyment of nature, and it has no necessary connection with botany or any other science.

When the strawberries begin to ripen, it makes one wish that he had a few rows in his own garden. There is no reason why every farm garden cannot contain sufficient of the small fruits for the use of the family. No fruit tastes quite so good as that which is picked fresh from the vines on your own place. The trouble is, when these fruits are out of season, one doesn't see the need of planting, and the planting season comes and goes without being heeded. If your garden doesn't contain the various bush fruits, strawberries included, place a mark on the garden gate as a reminder to be acted upon at the earliest opportunity this autumn or next spring, in the form of planting these fruits.

For all the rainy weather, it is surprising how little growth has been made on many old pastures. New clover seeding, on the other hand, has made very encouraging progress where there was anything to start. Probably insect injury is responsible for the poor showing on the old sod-bound wire grass meadows. Whatever the cause, the remedy is to break them up where practicable, and work under short rotation.

## HORSES.

Avoid, as much as possible, breeding the mare when she is excited. Mares seldom conceive when bred in such a condition.

Lose no time now in getting the mare to the horse. She may not get with foal at the first service, and every delay means nearly a month.

Stallion owners should be careful that their horses are not overworked during this the rush of the breeding season. It would be better to turn a few mares away than to permanently impair the usefulness of the sire or run the risk of his failing to insure the mares bred.

The draft horse that moves straight and true at the walk, with a snappy movement of the limbs, is almost sure to go right at the trot. The walk is the gait from which draft horses should be judged, as it is the natural gait of the heavy animal; however, one must not neglect to see the animal at the trot, for defective action is often more marked then than at the walk, and any lameness which might be overlooked when the horse is walking becomes apparent when he is asked to move faster.

The rush of spring's work is done, and many of the horses have been turned away to grass, yet the trade in horses was reported by our Toronto market correspondent last week to have been the best which that market had seen for many weeks. This goes to show that there is a steady demand for horses outside of that occasioned by the rush of work on the land, and also is a very good indication that the horse's usefulness where heavy work is to be done is far from being a thing of the past. If present demand is any indication of the future of the horse trade, every farm mare should raise a colt next year, and so on and so on.

### Local Horse Breeding Societies.

Farmers and horse-breeders who are so favored as to be situated in the heart of a district noted for the excellence of some one particular breed of horses scarcely realize the inconvenience the man in another section, and not so favorably situated, is put to in order to get his mares bred to a suitable horse. There are in Canada many districts which cannot boast of a really good sire of any of the many breeds of horses. Stallions of the right kind are scarce enough anywhere, but some districts in which no specialized horse-breeders or importers live feel the loss to a much greater extent than those who have access to a few good sires in the barns of the importers. A well-known Western horseman believes that if we followed the hiring system of Scotland it would tend toward the production of a more uniformly high class of horses in each locality, and doubtless it would. We have too much haphazard breeding. Stallions of entirely different type are used in a locality year after year, and very often the breed is changed as often as the type. This is not in the best interests of horse-breeding. No district can become noted for its good horses under such a system. Matched teams are very rare, and high-class foals are the exception, not the rule. One good draft breed, and one good light breed are enough for most neighborhoods.

If the horse-breeders in a certain section where good sires are not to be had would get together and determine just what kind of stallion they required for their mares (the breed should always be a pure-bred of the same breed as that of which the greatest majority of mares in the section are grades), and would form themselves into an association on the co-operative plan, much good might result. The association could appoint officers, elect capable men to select and purchase the needed sires, and arrange for their help and routes of travel. In this way, the amount of capital interested would make it possible for the association to purchase one of the very best stallions of the breed decided upon; whereas, where the individual makes the purchase, limited means often place the most desirable class of horse entirely beyond his reach. Think what it will mean to a section of country, say a township or half a township, in one of these districts where good sires are not known, and there are plenty of them, to start in breeding to the same stallion or stallions of one breed, and to gradually improve in this way their class of mares, until the output of work geldings and surplus stock from the locality becomes noted over a wide area. Would it increase the horse trade of the district? Would it prove a profitable investment on the part of those concerned? It looks like one of the best moves which could be made. Surely no district is so backward in horse-breeding that a few competent men could not be selected to pick out the horse,

If they didn't feel like relying on their own judgment, let them act in conjunction with a well-known, reliable horseman in making the purchase. If there were a number of these associations in the country, stallions could, when their fillies became of breeding age, be passed on from one to the other, and thus the good stallion's service could be worked to best possible advantage. There is no doubt but that too many scrub horses travel during the breeding season, and that too many types and breeds are used in most localities. Local breeders' associations would do away with much of this, and in its stead would gradually and permanently place a class of horses ever improving and ever tending towards closer uniformity in type, which could not help but attract buyers and be a boon to the horse-breeding industry. It costs no more to raise a good colt than a poor one, and every breeder should start right by using the best type of stallion, and the best type of stallion is made possible by a local breeders' association.

### Working the Horse.

The horse, man's best friend, is not always subjected to the treatment his usefulness warrants. This is not always due to wanton cruelty, but often to a lack of understanding or carelessness on the part of the driver. It has been demonstrated time and again that certain drivers will do more work with a team, on less feed, and keep the horses looking better, than other drivers will on far more feed, doing less work. Why? Simpler better treatment. The work horse requires regularity in all things. He must be fed a certain quantity at a certain time each day of the week. He must be watered just as regularly. He must be curried and cleaned not once a week, but each day in the week, preferably twice. He must have regular hours of work, and a reasonably steady gait at which to do it. The smart walk is the easiest gait for the draft horse. Slow, sluggish, heavy-going horses make the load they are pulling a steady drag, whereas a good snappy walk does not tire them nearly so much. Heavily-loaded horses should never be required to trot, and the less trotting the draft animal does at any time, the longer will be his period of usefulness.

The horse can be taught to understand his driver only when the driver thoroughly understands his horse. Get to know your team. Study their peculiarities. No two horses are just alike in temperament, any more than are any two human individuals identical. Some horses are nervous and excitable, and require petting and talking to; others are slow and sluggish, and require a judicious use of the whip. Generally, however, the nervous horse can be taught to understand his driver's voice, and become quite at ease, while the slow animal will respond, also, to the right kind of retraining. Much jerking and entirely needless use of the reins could be avoided if teamsters would become more familiar with their horses and would talk to them more. By talking is not meant yelling or swearing at the team, but the use of a quiet, reassuring voice. Few horses will not do as they are wished if they understand what is required of them. Beating, jerking and whipping excites them, so that it is a much more difficult matter to teach them what you want them to do than if a little patience and petting were resorted to, instead.

Avoid overloading. Nothing discourages a horse more than to be hitched to a load which it is impossible for him to move, and to be whipped because he cannot move it. Many a horse has "balked" for the first time under just such conditions, and once a horse "balks," he seldom forgets it. Getting "stuck" does not make truer drawers of the team, but generally has the reverse action, and throws the horses open to serious injury from the strain of over-exertion. You cannot afford to needlessly ruin a valuable animal in this way. It would be far better to make two loads than do this.

Avoid overworking. Sticking too steadily at a heavy job under a blazing sun and in a hot wind is likely to cause the horse to show signs of approaching exhaustion. Very often this is mistaken for laziness, which is a serious mistake from the viewpoint of the horse. There is scarcely any excuse for such mistakes, as a lazy horse will show signs of his trouble when fresh almost as readily as when tired, whereas the willing worker seldom slackens unless tired. It is shameful to lash a tired horse; in fact, lashing at any time is not in the best interests of horse or driver. By all means, when the horse is tired, allow him to stand for a few minutes; and if he must do more work, give him his time, and he is much more likely to complete it without injury to himself than if he is over-urged. Too often the horse is expected to draw the same load at the same pace at a temperature of 90 degrees in the shade, as when the thermometer is below freezing.

Where practicable, the horses should get water

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quite frequently during the hot weather. A few swallows of fresh, cold water are just as refreshing to the horse with his dry, parched mouth and throat as to his driver, but usually the driver quenches his thirst many times each day, when the horse is not permitted to even wet his mouth. Of course, care must be taken that the overheated horse does not drink too heavily, but a little and often avoids this trouble very well. These waterings are little more than a wetting of the mouth and throat, and in no way interfere with the regular waterings more than to somewhat allay thirst and to some extent prevent overdrinking. Horses should never be allowed to drink heavily when heated, but many make the mistake of not allowing them any water. A half a pail of fresh, cool water will do much at this time to refresh the animal, and, if he is going to the stable for his feed, he will relish it far better than if he had been deprived of the taste of water. Watering should be done, as far as possible, before feeding morning, noon and night. It does no harm if the horse has been watered before being fed to let him have a little more if he will take it when returning to work after feeding.

Teasing, tickling and beating a horse should never be practiced. Very often, when the team is being rested for a few minutes, the driver amuses himself by teasing them. Horses are very sensitive animals, and such treatment only serves to keep them "on edge," and deprives them of the rest which the driver thinks they are enjoying. They seldom appreciate the joke. It would be far better if the driver's time were employed raising the collar off the heated shoulders, pulling away the mane and rubbing the perspiration off from under the collar. Beating tends to make the horse vicious, and a vicious horse is troublesome, to say the least.

Many make the mistake of increasing the grain ration to overtired horses. During a few days of very hard work, the feed of oats is often increased fifty per cent. This is not always in the best interests of the horse, although the feeder firmly believes it is. Such rapid increases, when the horse's energy is being all expended at his work, leaving very little in reserve to be used in the process of digestion, leaves the animal in a fit state for colic or acute indigestion.

Where extremely hard work is done, it is best to prepare the horse for it by increasing his ration little by little, so that it is at its maximum before the animal is thrust into the overtaxing labor. If it is to last for a few days only, it would be better not to increase it at all than to feed a heavy feed only on the days of the extra work. An over-tired horse positively cannot properly digest a concentrate feed which is far in excess of that to which he is accustomed.

There are hundreds of little things which make for the welfare of the working horse—little things which any driver can do if he takes an interest in his team, and which common sense should teach him to be right. Give the hard-worked horses every attention possible, and they will amply repay you for the trouble.

## LIVE STOCK

### A Farmer's Ideas on Wool.

Editor "The Farmer's Advocate":

Having read a letter in the last issue of "The Farmer's Advocate" on wool, and the loss sustained on account of poor hauling and marketing, I thought I would say a little on the same subject.

I know there are any number of readers who know a lot more about wool than I do; still, I know one or two things, the remedying of which would result in much better prices for wool. First, there is the producing of the wool. If sheep were kept better and housed better during the stormy weather in the autumn, it would result in the production of a much better quality of wool. Then, there are very few farmers who put up their wool in good condition. I happened, some years ago, to go into a wool-dealer's warehouse, and he had an old Scotchman there putting up the wool, and after he had taken a fleece and done it up you would not think it the same wool. I never would have believed that the doing up of a fleece of wool could make so much difference in the appearance. Then, the way wool is taken to market in a great many cases is enough to spoil the sale—burry, chaffy, and sometimes dirty. It would pay farmers twice over to pull off all dirty locks and all loose pieces, and sell them as a poorer grade, making the fleece tidy and perfectly clean.

Another thing that would add to the selling value of wool: If a number of farmers would keep the same kind of sheep, so that there would be a uniformity of grade in the wool coming from each particular neighborhood, and keep their sheep in good condition and out of the cold rain and sleet storms of the fall, and out of the burry pastures, and in winter see that their coats were not filled with chaff, the wool would sell for more

than even well-cared-for and clean wool of all sorts of grade, from Merino to Cotswold or Lincoln. No dealer who has a lot of wool of all grades can get as good a price as he could if his wool were of uniform grading.

Victoria Co., Ont. SAM SUDDABY.

### Feed for Pasturing Hogs.

"Hog Pastures" was the topic open for discussion in a recent issue of "The Farmer's Advocate and Home Journal," of Winnipeg, Man. The prize essayist, F. Fowler, of Saskatchewan, places the different crops grown for this purpose in the following order: Clover or alfalfa, rape, peas and oats mixed, and oats or barley alone. Continuing, he says that "rape is probably the one hog pasture that will prove most satisfactory year in and year out. I have grown all those mentioned, and kept account of grain fed, and must say that, for gains per pound of feed per head, there was no appreciable difference, but, from my experience, they would rank in the order named."

"While clover or alfalfa makes excellent pasture, the hogs will kill it out, and, as it cannot be renewed yearly, I do not find it satisfactory for these reasons. Rape is my favorite, as, if sown early in the spring, a crop will be ready for pasture by early June, and if another field is sown at this time, pasturage can be had right up to heavy frosts."

"My experience has been that, with a pasture of the right sort, any of the aforementioned will do; pigs will make the same gains on three or four bushels of grain as they would on four to five bushels of grain without pasture. The variety of grain, individuality of animals and weather make it that a definite ratio cannot be given."

"Other than the direct saving in feed, the pigs are much more contented and are more easily

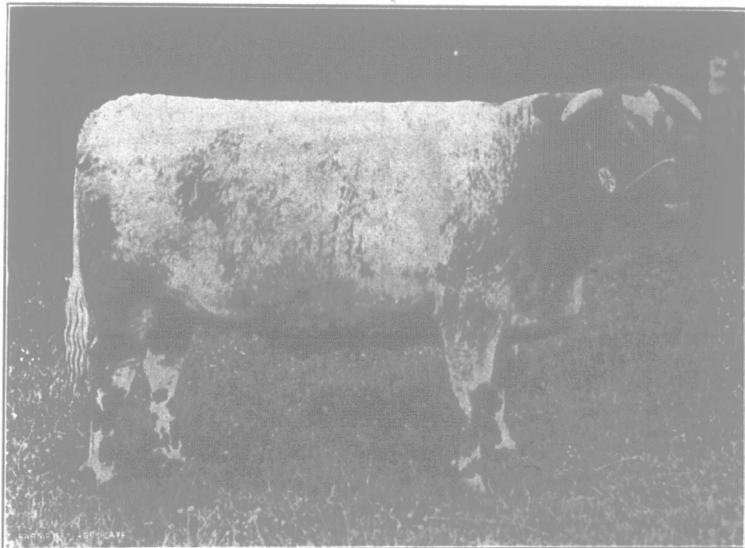
whit more grain with the pasture than without it, and at the same time the pigs required less attention, were turned off one month younger, and weighed nearly 20 pounds per head more. These pigs were on the pasture for about three and a half months only. During the last month the pasture was pretty well eaten off, and the pigs were penned up. Although the oat pasture does not last as late in the fall as other hog pastures might, I intend to sow it again this year, for the reason that it is a safe pasture at all times for all animals."

### Bloating in Cattle and Sheep.

Turning the live stock into fresh-clover pasture is always accompanied by a certain amount of danger of hoven, tympanitis or bloat. In fact, green food of most any kind in large quantity, especially when it is wet or frosted, is likely to produce the trouble. It is, therefore, important, in changing feed from one green food to another, or from dry feed to green feed, that such changes be made very gradually, and when the feed is perfectly dry. The seat of the trouble is what is commonly known as the paunch or rumen, in which the natural churning motion ceases, hastening the formation of gases, due to the fact that the mixing of the digestive juices with the food has ceased. Animals which are in any way run down or debilitated are much more likely to fall victims to this trouble, and those in the best of general health. In turning stock on such crops as clover, rape, or any which are in any way likely to produce tympanitis, it is well to continue feeding the bulk of the ration of the feed to which they are accustomed, and to allow them in the new feed for a short time (gradually increasing) during the middle of the day, until danger is practically nil.

Well - marked

bloating is not at all difficult to diagnose. The undue distension of the abdomen, accompanied by unusual uneasiness, and the cessation of rumination and an overabundant flow of saliva, together with a grunting or moaning, are symptoms not to be mistaken. The eyes project and the muzzle protrudes, and if that part of the animal's body between the point of the hip and the last rib on the left side be tapped, a very characteristic, resonant, drum-like sound is noticeable. Pressing on this part causes it to yield, but it immediately returns to its former state when pressure is removed. As the trouble progresses,



Tongswood Edith.

C. E. Gunther's champion heifer at the Oxfordshire Show.

and the gases accumulate, pressure is brought to bear upon the lung cavity, causing somewhat distressed breathing.

Treatment is, as a general thing, successful, provided the trouble is taken in time. In extremely severe cases action must be taken quickly, or rupture of the rumen or diaphragm may occur. In such cases, puncturing is resorted to. This is done on the left side at the most prominent point between the point of the hip and the last rib. What is known as a trochar and canula is the proper instrument to use, although, where this is not at hand, a common pocket knife may be used with success, provided some means of holding the wound open to allow of the escape of the gases is provided. Some use the fingers for this purpose, others use the quill of a large goose-feather. However, since the trochar and canula can be provided for about \$2.00, every stockman should have one, as it is handier, less dangerous, and more efficient. A piece of garden hose passed down the gullet has been known to give relief in such bad cases, but is not always effective, and so cannot be relied upon at all times. Where this is used, a gag is necessary to keep the animal's mouth open. A block with a hole in it does all right for this purpose. Just here it may be stated that where bloating is the result of choking on some obstruction lodged in the throat, there are few better instruments than such a piece of hose, strengthened by a whip, which forms the required cup-shaped end necessary to dislodge the obstruction, without injury to the animal. Such articles as whips and fork handles should be avoided for this purpose, as they are very likely to pass to

looked after than if penned for the entire feeding period. It might also be stated that they make their gains in a shorter period, and can be turned off at a younger age."

Another correspondent, an Alberta farmer, J. Armstrong, gave his experience with oats as a pasture. The crop, a two-acre plot, was sowed about May 15th, after the other crops were in, and two sows with their litters, also four calves, were turned on the crop about the middle of June. They were not allowed on the green oats during wet weather, and for two months the oats did a little better than making growth enough to keep even with the pasturing. Mr. Armstrong described the feeding as follows: "The pigs, at the time they were put in the pasture, were getting chopped barley and chopped wheat screenings, a small amount of milk, and all the water they wanted to drink. The grain was fed dry in one trough, and another trough was kept full of water all the time. About the first of July the sows were taken out of the field, and it was left to the growing pigs and calves."

"In saving feed from day to day, I cannot say that the pasture was effective; in fact, it seemed to give the pigs a better appetite than if they were without it. However, I turned them off the first week in November, averaging 218 pounds. This was turning them off fully a month younger than I had the year previous, and even at that they barely weighed 200 pounds. I did not keep any record of feed fed either last year or the previous year, and for this reason I cannot give comparisons regarding amount of grain fed. I am satisfied, however, that I did not feed one

one side of the obstruction and rupture the gullet, which proves fatal.

The ordinary case of bloating, due to overeating of green feed or to change of diet, does not require so drastic measures. All that is necessary is to neutralize the excess of gas, and oil of turpentine is most effective. For cattle, the administration of from two to four ounces of oil of turpentine in a pint of raw linseed oil will usually give relief in about thirty minutes. For sheep, about half the quantity is required. Oil of turpentine is a stimulant, neutralizes gases, and prevents the formation of more gas. If linseed oil is not at hand, use melted butter or lard, and, in case no turpentine is on hand, give one-half a cup of baking soda. After recovery from the bloating, it is generally advisable to purge with from one to two pounds Epsom salts, and always feed lightly for some time to allow the digestive organs to regain their normal state. Prevention is always better than cure, so take the precaution of making gradual changes when new green food is to form the basis of the diet.

### Milking Shorthorns for Ontario.

Arrangements are being made by the Minister of Agriculture for Ontario, Hon. Jas. S. Duff, whereby a large herd of milking Shorthorn cattle will be secured in Great Britain for the purpose of increasing the number of this very desirable class of dairy stock in the Province. Of the special Federal appropriation coming to Ontario, some \$12,500 will probably be expended in this way. The foundation herd will be almost entirely used as an addition to the live stock at the Ontario Agricultural College, and the purchases will presumably be made by Prof. G. E. Day, of the Animal Husbandry Department during the approaching season.

## THE FARM.

### Disk Plow and Couch Grass.

New methods or variations of old ones in dealing with weeds are occasionally cropping up as men put intelligence into their work. A new way to deal with couch or quack grass came to my notice recently, and it may be new to others.

It has been a practice, and a good one, for farmers in many localities to plow their timothy sod as soon as possible after they have removed the hay crop. It is plowed shallow, rolled down thoroughly, disked and worked awhile, and later sown with fall wheat, and in some cases rye.

The newer method is to plow the sod with a double-disk plow, which requires two teams. This throws the sod up very rough and loose. After levelling the sods down with an ordinary harrow, the disk harrow is used to cut up the sods and quack rootstocks, etc., as fine as possible. Many of the rootstocks may then be pulled out on the surface, where the sun dries up all the moisture in them, and they have to die. Then the ground is disked over again, and the soil is levelled down as before, and sown with fall wheat or rye. Judging from a piece badly infested and handled in this way, I would say that the method is one of the most effectual I have seen.

Besides all that, I saw where a timothy sod had been treated in that way last summer, where the timothy had been harvested for seed, and this year there was a wonderful catch of volunteer timothy again. That is quick re-seeding. This was on the farm of S. J. Gourlay, Diamond, Ont.

T. G. RAYNOR.

[Note.—How would this work if a prolonged rainy period interrupted operations after the disk-plowing were done? Would it produce satisfactorily thorough results under very many different conditions? We should like to hear of other cases where the method was tried.—Editor.]

### Cultivating Corn.

The prime objects of inter-cultivating crops like corn and roots are four, namely, (a) to help conserve moisture by making and preserving a blanket of loose, dry earth over the firm, moist soil beneath; (b) to promote free aeration of the soil; (c) to loosen soil through which plant roots may afterwards permeate; (d) to keep down weeds. Many people say they cultivate to liberate plant food, but this is merely a general repetition of the first two points. It is by the conservation of moisture and the aeration of the soil that plant food is liberated. As a rule, the cultivation necessary to serve the first three purposes fully will be sufficient to accomplish the fourth one incidentally, though this is not to minimize the latter, which is probably in many cases, almost as important as the first three put together. Without discussing scientific principles already known to every well-informed reader, it is sufficient to state that consensus of opinion among scientific and every-day practical men concerning the old-fashioned idea of "plowing" corn, and the new method, the principle of scuffling through the ground at first, especially in the middle

of the space, but becoming gradually shallower, until, by the time the brace roots have spread across to meet each other, the cultivation is only an inch or so deep, but is still continued at intervals to prevent the formation of a crust; and in this connection let us say that the first two objects enumerated above will be largely accomplished, so long as one observes the simple rule, "Don't let the crust form."

In view of the preceding points, does it not seem the part of wisdom to follow a system which will stir the soil frequently? We often see men let a cornfield lie for weeks, and then go in to "rip it up" with the cultivator. Could they see the immense number of roots they cut off, and the still greater number of tiny feeding rootlets and root-hairs which they disturb, they would be a little less heroic and a little more prudent. We have known fields cultivated that way in a dry time to go back badly, shrivelling up and showing every sign of insufficient moisture, while others alongside, cultivated rationally, would make growth even through the drouth.

In our own practice last year, we cultivated sixteen acres of corn, at a cost of \$38.09 for men and horses, the time being 124 hours of men's time and 173 hours of horse time. In addition, there were several days spent hoeing thistles, mainly because they got a start before we could secure the wide points to use on the cultivator. This corn crop was harrowed one forenoon with a five-section harrow, just as it was peeping through the ground, and afterwards scuffed about once a week, though sometimes oftener, principally with the two-horse riding cultivator, covering two spaces every time across. By straddling one row one time, and the alternate one the next time, about as thorough work in weed eradication

method, using the machine at Redfield, Lemon, McIntosh, Ipswich, Eureka, and Big Stone. Plants were set with a plow at Faith, Sansarc and other points, favoring mainly the dry Western and north-western parts of the State. I believe this will be a way of doing away with dodder and injury from disking. I see no need of injuring plants that should last several centuries by mutilating them with a disk and harrow, and 20 pounds per acre means 100 plants per square foot. Some of these Russian alfalfa plants had 500 shoots from one crown when given room in the garden.

"This machine transplanting I have had in mind for over a year, so I thought I would get at it this spring before anybody else would happen to think of it. I claim no originality for it, except that I have combined Oriental methods with an American machine, one of the machines commonly used for tobacco, cabbage, cauliflower and tomatoes. At present I am only speaking of it from the seed-raising standpoint, but believe it will work out, also, from the forage standpoint.

On a large area of this Western country, farmers have had no crop for two years, so they are looking anxiously for something of a perennial nature that will be independent of surface conditions. Farmers feel that it is uncertain to place their main dependence on annual plants like wheat."

### Making Hay in Kansas.

A. M. Ten Eyck, of the Kansas Experiment Station, points out that many farmers might afford to give more attention to the matter of quality in hay, and to this end it is important to know not only what hay plants are best adapted to a given locality, and the best method of seed-

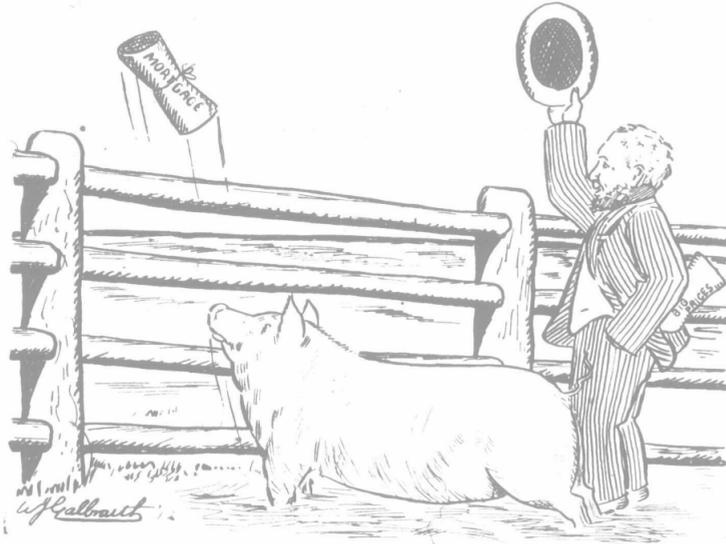
ing them, but it is equally important to harvest and save the hay in such a manner as to secure the largest amount and best quality of product. "Good quality, as indicated by the bright-green color of well-preserved hay, will readily add a dollar or two per ton to the selling price," he says, and he might with equal truth have added, "to the feeding value, as well." The following excerpts have been compiled for the U. S. Experiment Station Review from Kansas Station Bulletins 155 and 175. They contain many good suggestions:

### CUTTING THE HAY.

The common hay grasses and legumes differ somewhat in the stage of maturity at which each should be

cut to make the best quality of hay, and farmers and feeders are learning that this difference in quality means not only a difference in market value, but also a difference in feeding value. The stage of maturity at which grass should be harvested, in order to make hay of best quality, varies somewhat with the different grasses and the use to which the hay is put. A safe rule, applicable to all common grasses, is to cut the grass just as it is beginning to bloom, or just after the bloom has fallen. For cattle and sheep, hay from the early cutting is best, but for horses the later cutting is preferable. When cut in the early stage, grass is sure to make good clean hay of prime quality, if the hay is cured well. Often, a larger weight may be secured by cutting the grass after it becomes more mature, but the quality of the hay is not apt to be so good. If grass is cut when in full bloom, the hay is sure to be more or less dusty. The over-mature hay is less palatable to stock, and its feeding value per hundred pounds is usually less than the value of that cut at an early stage of maturity. Timothy should be cut just as it is coming into bloom. When timothy is grown in combination with common red clover, it is necessary to cut the crop early in order to secure the clover before it has become too ripe to make good hay. The hay cut at this stage is best for feeding cattle and sheep. Timothy should not be allowed to stand until in full bloom, since, if cut at this stage, the hay will be dusty and especially objectionable for feeding horses.

To secure the best quality of hay for horses, timothy should be cut just as it is in its second bloom, which is about the time the grass has about ceased to bloom, and the blossoms have fallen. When cut at this stage, the



The Hog as a Mortgage-tosser.

Stick-to-the-hog Farmer—"Well done. Three cheers for the rooter."

was done as if the same amount of time had been spent cultivating just half as often, but straddling each row at every cultivation. The advantage consisted in the fact that we broke most of the crust nearly twice as often as we could have done by the other plan. On one or two occasions the sixteen acres were cultivated by one man and a team in ten hours, but it takes a good driver and a fast-walking team to do it.

This corn crop, though planted late on spring-plowed sod, unmanured, made headway from the start, and never ceased growing through all the blistering drouth. It made a fine crop of strong, well-eared, well-matured corn, and the land, though a regular thistle-bed to commence with, was left almost perfectly clean by fall. Of course, some thistles are still coming up in the oats, but very few, comparatively speaking. We do not say our method is unimprovable, but we think it rational, and commend it to the consideration of corn-growing farmers. The subject, however, is important, and not to be exhausted in one article. Suggestions are invited, and the experience of others especially requested.

### Setting Alfalfa Plants with a Machine.

Prof. N. E. Hansen, of Brookings, South Dakota, who has brought in so many hardy plants from Siberia for the United States Department of Agriculture, sends to Secretary Wilson an interesting letter with regard to his new idea of transplanting alfalfa by machinery, instead of sowing the seed. He plants them at the rate of 6,000 plants per hour. Prof. Hansen says: "I took a three weeks' tour this spring with two assistants, and transplanted a number of acres by this new

greatest weight of hay is secured, and probably the greatest amount of nutrients, but the hay is more woody and less palatable than timothy cut earlier.

Orchard grass, western rye-grass, perennial rye-grass, English blue grass, and Johnson grass quickly lose in palatability when nearing maturity, and should be cut for hay before the blooming stage. Other grasses, such as Bromus inermis, reedtop and tall oat-grass, retain their good qualities longer, and make good hay if cut when in full bloom or after the blossoming stage. The annual cereal grains, such as barley, oats and emmer, sowed sorghum, and Kaffir, make the best hay if cut when the grain is in the milk or at the soft-dough stage. It is best to cut millet for hay as soon as it is fully headed, before the bloom forms. Cut at this stage, the hay is certainly less woody and more palatable than is the hay made from the more mature millet. The poisonous principle in millet which causes it to be injurious to stock, especially to horses, does not seem to depend upon the condition of the millet with regard to its maturity and the time of cutting. While the less mature millet is better relished, it may seem to give injurious results more quickly.

Clover should be cut just when it is in full bloom, with a few of the blossoms turning brown. If it is cut before this stage, the hay will be lighter and more "washy," especially if fed to horses; while, if the crop is left until the clover is mature, many of the leaves will be shattered or lost in harvesting. This will be a great loss, for the leaves are the most nutritious part of the clover, as they contain nearly two-thirds of the protein in the plant.

Alfalfa should be cut for hay when it begins to bloom. Several experiments conducted at the Kansas Experiment Station, and at other State experiment stations, have shown that alfalfa hay has a higher feeding value when cut at an early stage of maturity, about one-tenth in bloom, than when cut in full bloom. It has also been observed that, when cut at the beginning of the blooming period, the next crop, under favorable soil and weather conditions, starts quickly, and there is no delay in the growth of the alfalfa.

The leaves of the alfalfa are much richer in protein than the stems, and the leaves drop off and shatter worse in cutting if the plants are allowed to become too mature before harvesting. For feeding horses, however, it is advisable, and often recommended, to allow the alfalfa to become more mature and to reach full bloom before cutting. The more-mature hay may be fed to horses with less danger of injurious effects, which sometimes occur from feeding the immature hay.

#### CURING THE HAY.

The most important factor in making good hay is favorable weather. Hay exposed to excessive rains is greatly injured in quality and in feeding value. This is especially true of hay from leguminous plants, such as clover and alfalfa. Every farmer knows that hay is injured by rain and dew, which cause it to bleach and to mold, and which take from it the natural aroma and palatability essential in hay of good quality. Not all are aware, however, that hay which is cured too much in the sun not only bleaches and loses leaves by becoming too dry, but also becomes lighter in weight and less palatable.

When one cures hay of any kind, he should aim to expose it to the sun no more than is absolutely necessary. The best hay is therefore made by curing it largely in cocks, rather than by leaving it spread over the ground in the swath or windrow. Hay in the swath and windrow is also more exposed to injury by rain and dew than is hay in the cock. Rain not only bleaches hay, thus lowering its market value, but the feeding value of the hay may also be very much decreased.

Hay cures more evenly in the cock than in the swath or windrow. If left too long in the swath, the leaves become thoroughly dry, while the stems still retain a large amount of moisture. Such hay will not cure fully and evenly, and is often put into the stack in a partly-cured condition. If hay is raked before the leaves are dry and placed in cocks, the leaves continue to draw moisture out of the stems, thus allowing the hay to cure evenly.

Clover or alfalfa hay well cured in the cock in this way will keep perfectly in the stack or in the mow. When cured in the swath and windrow, the hay is often stacked in such condition that it may burn or spoil in the stack. Also, the greater breaking of the leaves which must take place in curing alfalfa or clover in the swath and windrow, makes the hay less palatable to stock, and less nutritious than hay which has been properly cured.

A large part of the hay made in the United States, however, is cured in the swath and windrow, or in shocks made up by bunching the hay with the horse rake. When a farmer has a large amount of hay to put up, and little help with which to handle it, he is compelled to do the work in the most rapid and economical way. Put-

ting up the hay directly from the windrow is not only a saving of labor, but it enables the hay-maker to do the work rapidly, so that the danger of loss by exposure to the weather is lessened.

In the Central States it is common to cure timothy and clover hay in the swath and windrow, and to put it on the wagon by means of the hay loader, which makes the work more rapid and does away with the hard labor of pitching. In the large alfalfa and prairie-grass fields of the Western States, the common method is to use sweep rakes, by which the hay is taken directly from the windrow to the stacker. Where a large amount of hay is made, it is almost necessary to handle the crop by such a method. The method of curing hay in cocks is more applicable to the small farmer and to farmers who live where the market price of hay makes it profitable to handle it in this more expensive way.

The following general suggestions may be given with reference to making clover or alfalfa hay: As soon as the dew is off in the morning, start the mower; when the hay has wilted somewhat, run it over with a tedder if the crop is heavy and needs lifting; after an interval of a few hours, before the leaves have begun to get dry and brittle, rake the hay into windrows. Allow the hay to remain in this condition for a day or two, when it may be put into the stack or mow. If the plan of curing in cocks is followed, the hay should be placed in small cocks soon after raking. It will be necessary for it to remain in the field for from one to three days of drying weather before it is ready to be put into the stack.

It is possible to start the mower late in the afternoon, cutting until dark, raking the hay the next forenoon, and bunching or cocking as described above. Good hay may be made in this way, since the dew does not blacken the green hay, and even a light rain during the night may not greatly damage it. There is some objection to this method, however, for making clover or alfalfa hay, in that the dew falling on the green hay in the swath seems to favor the development of white mold. Cutting only during the forenoon, after the dew is off, is perhaps the preferable method, provided the farmer can handle the crop rapidly enough in this way.

Hay is much more likely to be injured by the moisture on it than by the moisture in it. This should be an invariable rule: Hay should not be raked or bunched or placed in the stack or mow when there is moisture on it either from dew or from rain. Such hay is likely to mold in the cock or in the mow, and is almost certain to heat, to blacken, or to "burn" in the stack.

Grasses cure much more quickly than do alfalfa and clover. The length of time required for curing grass hay will depend upon the kind of grass, upon the degree of maturity, and upon the weather conditions. In good weather most grass hays may be cut one day and stored the next. It is even possible to cut grass in the forenoon and put it up in the afternoon.

Because hay requires rapid handling, it is not necessary to cure grass hay in the cock in good weather. In showery weather, however, it is a good plan to rake the hay somewhat green, to cock it, and to allow it to cure. Grass hay will shed rain much better in the cock than will clover or alfalfa.

#### STORING THE HAY.

Hay should be stored in sheds or in barns. Grass hay sheds the rain better than does clover or alfalfa, and may be stored out of doors with little loss, provided the stacks are well made and covered. However, a good hay shed is a profitable investment on any farm. When hay is fed on the farm, the aim should be to store it in a convenient place, so that it may be conveyed to the stock with the least amount of labor. If possible, the hay should be stored, and the live stock fed, under the same roof. This will avoid the expense of handling the hay a second time, and the loss from the breaking of the leaves and heads.

The most rapid way of putting up hay is by the use of sweep rakes and sweep stackers, or swinging stackers. This necessitates stacking the hay in the field where it is cut. This method of putting up hay is best adapted to those regions where hay is made on a large scale. On the average farm, the practical method is to load the hay on wagons, and to haul it to the stack or mow. The hay is rapidly removed from the load and dumped into the mow or stack by means of the hay fork or the hay sling. Slings are often preferable to hay forks for unloading hay, on account of the cleaner and more rapid work which may be done by the use of the sling. For barn or shed storing, a carrier and track is usually most convenient. For field stacking, some form of hay poles, with the pulley and rope, either with or without the track, is in general use.

Hay should not be stacked on the ground, but on an elevated bottom made of poles and brush. If hay is green or unevenly cured, it is apt to "burn" or spoil when there is no ventilation beneath the stack. Great care should be taken to keep the middle of the stack full, so that when

the hay settles the stack will shed rain. There is no better grass covering for stacks than marsh hay. When the stack is finished and topped out, one should not fail to bind on the cover with good hangers of wire attached to stones or heavy sticks of wood. As a rule, canvas or board stack covers are troublesome and expensive, and not to be recommended. A farmer might better build a good hay shed than use such temporary means of protecting the stacks from rain. It is often advisable to have a canvas cover or two for temporary use when hay is stacked out of doors.

Although the methods described above are the safest and the most satisfactory, it is a very common practice to put clover hay into the mow in a partially-cured condition, perhaps on the afternoon of the same day the hay is cut. Green or partly-cured clover put into a tight barn will become very hot, but it will not "burn." Such hay may come out in good condition for feeding, but with a brown color which injures the hay for selling on the market. It may be practicable, also, to store clover while green in raised-bottomed sheds, according to the plan which is now being used in Kansas for storing green alfalfa. It is now becoming a common practice in the more humid sections, where the method of farming is intensive, rather than extensive, to protect the hay in the field by covering the cocks with canvas or with paper caps.

#### Limitations of Profitable Fertilizing.

From experiments carried on at the Rothamstead Experiment Station, and recorded in the current transactions of the Highland and Agricultural Society of Scotland, the conclusion is drawn that, with every system of farming a certain position of equilibrium will be reached (viewed over a term of years long enough to smooth out seasonal effects), when the natural recuperative agencies and the additions of fertilizing material in the manure are balanced by the removals in crops and stock and inevitable waste. The higher the level of production, the greater will be the waste, and, in consequence, the additions of fertilizer must be doubly increased to maintain the balance. How high a level of production for a given soil and climate can be profitably maintained is determined by the prices that rule for the crops, but there will always come a limit when the production can be no longer increased by additions of fertilizer, except at a loss. At such a stage, only the introduction of improved varieties of seed, or some modification of the methods of cultivation that will induce a better utilization of the fertilizer can still profitably increase the production per acre.

On examining the various farming systems in different parts of the country, it will be found that farmers do instinctively adapt their expenditure on fertilizers (including feeding stuffs), and, therefore, their level of production to the magnitude of the returns they can get for their produce. One man will have a large cake bill (linseed cake), and spend 40 shillings per acre on artificial fertilizers during his rotation; he can afford a high level of condition, and, therefore, of waste, in his soil, because he can get good prices for potatoes or barley or sheep, whatever his staple products may be. But, on poorer land, and with less suitable markets, a man may be driven to cut down his cake bill and spend only 10 shillings per acre on fertilizers, because his products are not valuable enough to compensate for the waste that sets in with a higher level of condition in the land. Thus, the problem of what is a profitable manure for a given crop becomes a very complex one, and the biggest factor is perhaps the level of production at which the individual farmer can conduct his business remuneratively.

## THE DAIRY.

### Fill the Cows with Roughage.

Every summer the question comes up whether it pays to feed grain to cows on grass. More or less data is available on the point, but still it remains an open question, the answer depending upon such factors as the value of grain, the price of milk, the luxuriance and quality of the pastures, and above all, perhaps, upon the cows, their dairy capacity and the care they receive. With cows of beefing tendency grazing good meadows, it would probably be unprofitable to add grain, since it might easily strengthen the tendency to lay on flesh, without contributing much extra to the pail. With highly-bred cows of pronounced dairy temperament, well handled and skilfully milked, so as to stimulate milk production to the extent of the animal's capacity, the case would be different. Speaking of ordinary farm herds, however, we believe it will be recognized as sound policy to use the expensive concentrates, by preference, in the winter season, depending in summer upon pasture and soiling crops. The first principle in cattle-feeding is to fill the animal's paunch at least twice a day with

all the wholesome, palatable and nutritious herbage she can be induced voluntarily to consume. Where pasture fails, use special crops like peas and oats, or oats alone, even though they may have been sown for threshing. Of course, where one has alfalfa or summer silage, the problem is easy. Alfalfa, by the way, will give excellent results if cut, cured and fed as hay. In this form it is less liable to cause bloat than if pastured or fed green, though it is worth noting that even the hay has been known to cause it. Whatever the feed, let it be furnished in abundance from spring till fall. Better fewer head kept well than a large number indifferently sustained. Cows which come into the stable night after night with a hollow appearance in front of the left hook-bone, are not likely to overflow the milk can, even though fairly well grained, but cattle which lie down two or three times a day, heaving the grunt of complacent fulness, may be depended upon to convert the cheap vegetation of the farm into its most valuable finished products, and leave their owner a liberal margin of profit on the transaction.

**Variation in Butter-fat Tests.**

Editor "The Farmer's Advocate":

I am sending a chart, which I have carefully worked out, it being a part of my fourth-year thesis. I find that a great many cattle-owners believe that a cow only needs to be tested once; that the butter-fat content is nearly always the same in the same cow. This chart shows clearly how much cows may vary.

The nine cows shown in this chart were in the College dairy herd at Guelph, Ont. Here the lowest, as well as the highest, butter-fat test of each cow is given.

By means of this chart, one can readily see how misleading an individual test may be, some cows testing twice as high at one time as at another. Hence, we should be careful in weeding out our dairy herd, lest we discard a good cow and leave a poor one.

Daily or weekly, or even yearly records, may not be a perfectly accurate and safe basis on which to weed out our dairy herds. It must not be forgotten that dairy cows have their off days, and their off weeks, and occasionally their off years, when their test for butter-fat will be found to vary considerably.

The scales and the Babcock test are essential requisites for every true dairyman. One dairyman's cows may produce twice the yield and return double the profit of those of another with the same soil and the same market, simply because he uses greater intelligence in his business.

R. H. C.

**Production of Certified Milk at Massachusetts Agricultural College.**

Of all the States in the American Union, none is more distinctly a dairy State than Massachusetts. There are only four smaller States, yet there are only six in the Republic which have as many or more dairy cattle. A dense population results in a vast demand for whole milk. Such conditions have shaped the whole course of animal husbandry, until it is directed largely toward teaching the methods of producing a high class of market milk, or, in short, scientific dairying.

The College herd consists of enough cattle to supply a specified milk trade throughout the year. To do this, about fifty cows are constantly in milk. This necessitates the maintenance of about sixty head of stock over two and one-half years of age; these, with the young stock, bring the total herd up to about 120 head. Representatives of the four leading breeds are kept for instructional purposes. The number of these pure-breeds at present does not constitute more than a quarter of the herd, but their number is being increased, and their standard improved upon. It is the departmental policy to develop the very strongest herd of each of the four breeds, thus largely eliminating the cattle now used.

A careful study of the cost of production is prosecuted. Daily milk records and careful breeding records are constantly kept. All star-boarders are eliminated quickly from the herd, and only the progeny of the highest producers are retained. Weekly tests are made for the percentage of butter-fat.

During the year 1911, on account of the disposal of some animals and the purchase of others, the total number of cows completing a year's work in the herd was 45. These cows produced an average of 6,156 pounds of milk, which has been the lowest record of the herd for some time, and has been the result of the unusually unfavorable summer season. While not an unusual annual yield, yet, considering the fact that there have been a goodly number of heifers with their first calf, and quite a proportion of animals over nine years of age in the herd, the result is very

satisfactory. There has been no direct effort made to develop a few phenomenal producers. The heaviest milkers in the herd have been producing around 12,000 pounds of milk year after year.

The College has placed at the head of its Ayrshire herd a son of Jeanie of Kelso, a high milk-producing, show type of Ayrshire cow, which, as a calf they have recently purchased from Alta Crest Farm, Spencer, Mass. At the head of the Guernsey herd is Earl of Fair Acres, by Dairy-maid's Glenwood of Pinehurst, and out of Jedetta. Thus, heading two of the breeds of dairy cattle are pure-bred bulls of as good breeding as may be expected.

The College produces certified milk entirely, which retails in Boston at 16 cents a quart. For this there is a growing trade. The very highest type of building construction, and the most careful methods of feeding, handling and management are demanded in the production of such a product. Therefore, every day the students and the people of the State have demonstrated the highest kind

on clean white-duck suits every morning, and they wash their hands after the milking of each cow. If any herdsman is indisposed, or has any sore on his hand, or in any way is in ill-health, he is laid off until he recovers. These are a few of the requirements in clean milk production.

The herd is tested annually for tuberculosis, and kept entirely free from this disease.

The stable is built of cement blocks. It is given a smooth, cement-plaster finish over the whole interior, and a rough-plaster finish exteriorly. The floor is a semi-rough-finish cement, and the cattle stand on cement. They are well bedded with shavings constantly, and the cement is laid upon a deep substratum of cinders, which obviates any tendency to either dampness or coldness from the floor. The longitudinal axis of the stable runs north and south, thus giving a maximum of continuous sunlight. A combination of the King system and the Sheringham valve system of ventilation is used. The Sheringham valve system of ventilation is simply window ven-

tilation, in which the window drops inwardly from the top, and there is extending inwards from the wall a metal or canvas which prevents the air from floating inwards and downwards past each end of the window, but makes it necessary for the air to shoot upwards over the top of the window.

The young stock and the bulls are kept in a separate barn, in which are arranged box stalls, to which the cows are removed at calving time. This barn is of frame structure, with cement floors and tie-ups

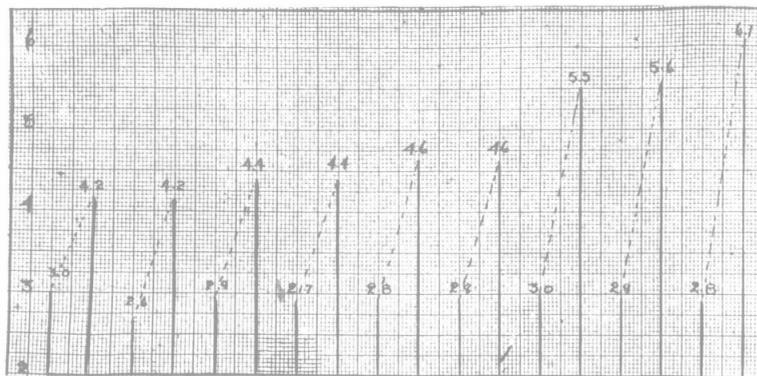


Chart Showing Variation in Butter-fat Test of Nine Individual Cows.

of dairying. From it they can make, and are taught to make such adaptations as are essential for the economic production of milk which retails for much less money. The production of the best exemplifies the essential features of profitable production of all desirable grades.

The cattle are grain-fed before milking. Hay, silage, roots, etc., are fed after milking. The cows are groomed every day; their udders, rear parts and tails are washed and rubbed dry before each milking, after which treatment the animals are so fastened that they cannot lie down until after milking. This is accomplished by a very simple device, in the form of a little chain, about the size of a dog-chain, which fastens from one side of the stallion to the other, so as to just touch the lower side of the neck as the animal is standing normally. This chain is permanently fastened to one side, and ordinarily hangs free, but when in use is hooked across as suggested.

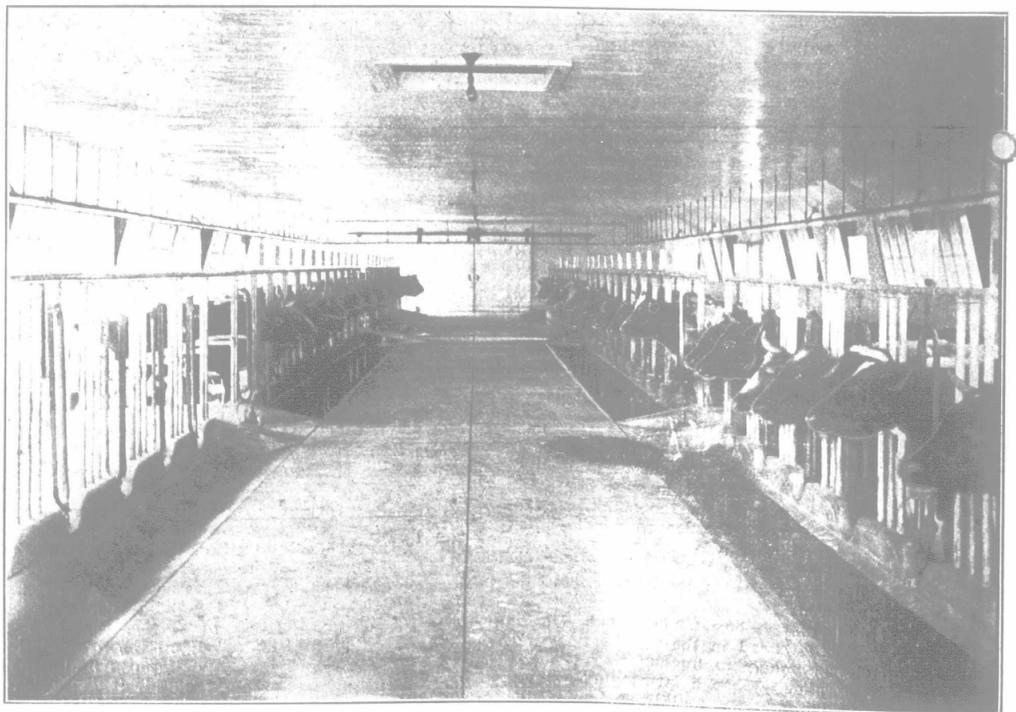
The body, from the hip points and flanks backward, is clipped every week. The milkers put

similar to those in the larger barn.

The Massachusetts Experiment Station occupies a leading position because of its long-continued investigational work relative to dairying. Cost of producing dairy cows, cost of milk production, economical feeding rations, the influence of feeds upon the content and quantity of the milk produced, are questions which have been and are being most carefully studied. Feed inspection and analysis is especially important in this State, since so much feed is bought by the cattle men, and so many kinds of feeds, different and indifferent, are offered in the markets. In this, the Station efficiently serves its clientele.

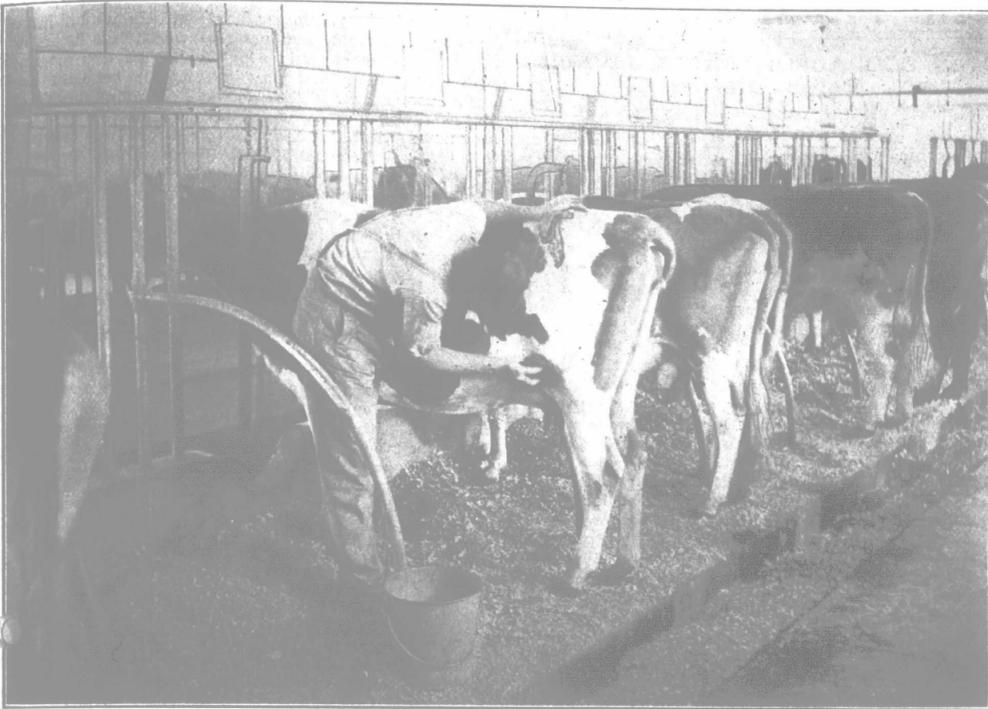
More closely associated with the work in animal husbandry than in most institutions is a study of dairying, and most of the students taking one set of courses, also take the other. Thus, a thorough study is made of milk and its products, and of the various grades of market milk, by every student of dairy and animal husbandry.

Mass. Agricultural College. J. A. McLEAN.



Watering - time.

Showing the type of stallions and mangers, and also the Sheringham valve system of ventilation.



Washing the Cows.

This operation is performed before every milking.

## GARDEN ORCHARD.

### Romance of Spraying.

By Peter McArthur.

Everything that has been done in the orchard has been wonderfully interesting, but the third spraying was a revelation. When Mr. Clement began "squirting Death through a hose" at the blossoms, I regarded the operation as part of the ordinary routine, and little suspected that back of the work lay one of those romances of science that are lost in common-place reports, instead of glowing on the pages of a poet. As usual, a chance question brought out the wonderful fact that kindled my imagination about a teacher who had asked the nature student to bring to school a specimen of the codling moth, and how, when I tried to help him, and looked up the literature on the subject, I found that the codling moth flies by night, and that many experienced orchardists have never seen one. Then I asked if it would be possible to capture a codling moth at this time of the year.

"No. They do not begin to lay their eggs until about the end of June."

Instantly I became a living interrogation mark, and during the next few minutes learned a story that illustrates better than anything I have yet found the patient work that is being done by our scientists, and the wonderful skill with which they adapt their methods to the processes of nature in order to accomplish results. Here is a case where they meet Nature on her own ground, and conquer her with a subtlety equal to her own. It is a triumph of science that should be observed by Faber, and described by Maeterlinck. Having studied out the processes of an apple's development and the codling worm's method of attack, they prepare a death-trap for an insect that is as yet unborn. While the calyx of the blossom is open, they saturate it with a spray of arsenate of lead. As the young apple develops, the calyx closes and folds within itself the charge of poison where it cannot be washed out by the rain. Weeks later the young codling worm is hatched from the egg deposited on some near-by twig by the moth, and, obeying a compelling instinct, crawls up the stem of the little apple, makes its way to the calyx, and begins to eat its way into the fruit. Then it meets with the lurking death that has been placed in its path by the ingenuity of man. Could anything be more skillful or more carefully thought out? The orchardist makes Nature herself "commend the ingredients of the poisoned chalice" to the lips of her destroying creatures. Here is something that surpasses the craft of the poisoners of the Dark Ages. It is fabled that they could administer their death-dealing "Aqua Tofana" in the perfume of a rose, and that Caesar Borgia could destroy an enemy by poisoning one side of a knife, dividing a peach with it, and then eating his own half with relish, while his unsuspecting guest took certain death from the other. But the Borgias, de Medicis and Brinvilliers were clumsy poisoners when compared

with the scientists who protect the bounties of Nature from the ravages of her prodigal hordes. Poisoning the blossom for the unborn insect that would prey on the fruit is surely the masterpiece of protective sciences. In my excitement, I forgot to ask if it is known who devised this plan, but probably it was developed bit by bit, scientist after scientist adding his portion, until the scheme was perfect. This marvel is now one of the commonplaces of farm work. I wonder how many more stories just like it are back of the methods and formulas by which man is slowly learning to control the forces of nature for his profit.

The orchard is right up to date. It has been given its three sprayings, and has been fertilized and plowed. Of course, I have never watched an orchard closely until now, but those who should know assure me that there has never been such a showing for apples as there is this year. The little apples are now formed, and it is easy to find trees on which four and five blossoms out of each cluster of six have been fertilized. If even a small percentage of the apples that are already formed reach maturity, practically every tree in the orchard will be loaded. In fact, it has been suggested that there are so many apples, the fruit

will be small, unless it is thinned out later in the season. If the insects that prey on the young fruit only worked with discretion, they might be helpful in thinning it out. I wonder if the scientists cannot find some way of training the larvæ that feed on the blossoms to take only a just proportion of them. Nature provides enough for them and for man, if they could only work in unison. But I am afraid that the war of extermination must go on, for I doubt if they can do anything along this line, even though they are so wonderfully skillful.

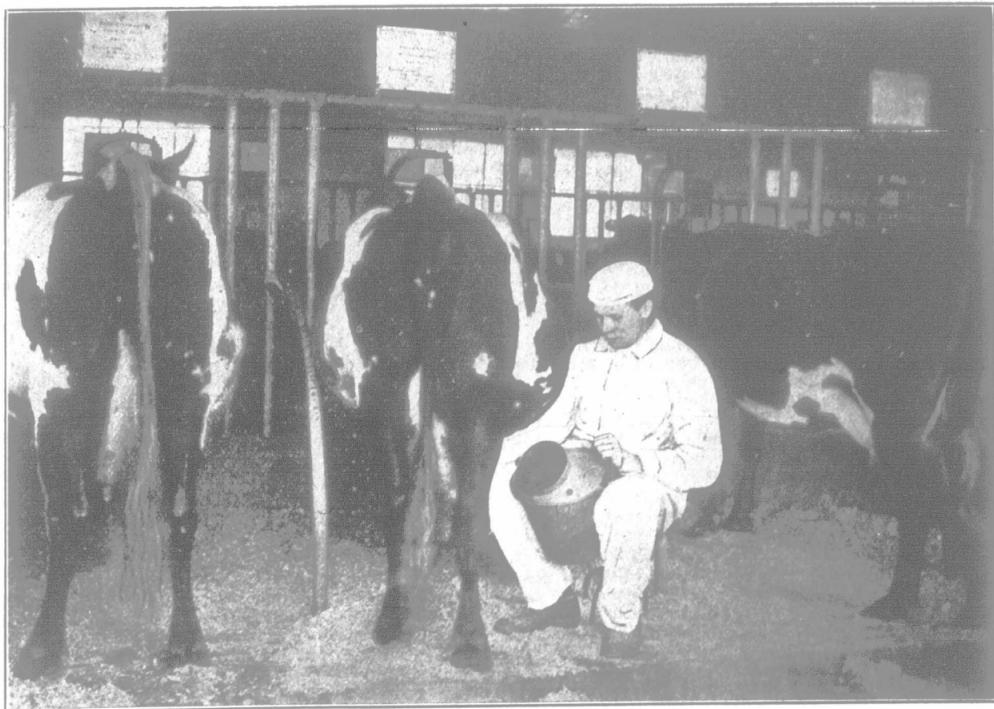
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A couple of days ago a sharp-eyed boy found something on the apple trees to which he called my attention. There were little clusters of eggs on the under side of the branches—little yellow things about the size of pin-points. I am so anxious to find out what they are that I am going to clip off a few pieces of bark, put them in a pill-box, and send them over to Mr. Clement. But perhaps, instead of being the eggs of some injurious insect, they may be the eggs of something useful. I wonder if I should take all the eggs when sending them, or should I leave a nest-egg? In doing these scientific things, the ordinary man is always afraid he may not be right. But as the eggs seem fairly plentiful, I guess I can risk it. Anyway, I want to find out all about everything that is happening to those trees.

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This has been a great year for gardening. Although it has been a late spring, we are already having plenty of lettuce, radishes and young onions, and the work needed to make a garden was not missed. One thing that interests me is to find that the cabbage, cauliflower and tomato plants I am getting from seeds sown in the open are growing so rapidly that they promise to do better than the hothouse plants that were put out for an early crop. Apparently, there is little to be gained by forcing plants for ordinary gardening, though it may be useful in market gardening when every day counts in getting the high prices at the beginning of the season. We have over thirty varieties of vegetables in the garden this year, ranging from the bulky squash to the small, savory herbs, and, when vegetarians call to see us this summer we will always be ready to give them a dinner fit for a cow—I mean a king.

I wish the frost would not keep sneaking and snooping around as it is doing this year. After each rain we have a cool spell, and sometimes the thermometer gets perilously close to the danger-point. At such times people try to cheer me up by telling about other years they remember when a summer frost killed everything. The last time the fruit was all killed by the frost, the damage was done on the fourteenth of June. Just as I was thinking that if we got past that date safely, someone came along and told about a summer long ago when there was frost in every month of the year. People seem to have a great memory for misfortunes of this kind. The bad luck that they have suffered seems to become traditional, while the good luck is usually forgotten. Of course, I am not worrying enough to injure my health, but



Ready to Milk.

Note the clean white suit and the type of pail used.

I have the danger of frosts and blights on my mind sufficiently to keep me interested. After all, farming is like any other business venture, and, as I meditated on the many things that may dash a man's hopes and keep him from getting back even the hired man's wages, I found a new meaning in that passage in "The Merchant of Venice," where Antonio's friends are sympathizing with him about his speculations abroad:

"Believe me, sire, had I such venture forth,  
The better part of my affections would  
Be with my hopes abroad. I should be still  
Plucking the grass, to know where sits the wind;  
Peering in maps for ports, and piers, and roads;  
And every object that might make me fear  
Misfortune to my ventures, out of doubt  
Would make me sad. My wind, cooling my broth,  
Would blow me to an ague, when I thought  
What harm a wind too great at sea might do.  
I should not see the sandy hour-glass run,  
But I would think of shallows and of flats,  
And see my wealthy Andrew docked in sand,  
Vailing her high top lower than her ribs  
To kiss her burial. Should I go to church  
And see the holy edifice of stone,  
And not bethink me straight of dangerous rocks,  
Which touching but my gentle vessel's side  
Would scatter all her spices on the stream,  
Enrobe the roaring waters with my silks;  
And, in a word, but even now worth this,  
And now worth nothing."

Instead of storms and rocks and sands and shallows, put frosts and blights and bugs and drouths; and in the place of silks and spices put crops and cattle, and you have the case of the farmer. And besides that, the farmer has to think of mergers and the money trust. I really believe he has more to worry about than had the Merchant of Venice, or even the merchants of Montreal or Toronto, and there is no one to console with him.

### Topical Fruit Notes.

To date of writing, weather conditions have been as good as could be desired, and all classes of fruit are consequently looking at their best. This is especially so where proper cultivation has been practiced, but where, through scarcity of sufficient help, this has been neglected, the trees show lack of that vigorous growth, as seen in strong, new shoots and healthy, dark-green foliage. Vines are growing rapidly, and tomato and strawberry plantings are looking well. Older strawberry patches are in the best of condition, and give evidence of a heavy crop, although the acreage is not as heavy this year as usual, and consequently the total quantity will not be as great as in past years. To obviate any shortage in the local crop, some of our jam factories are importing Kentucky and Delaware strawberries, for which the price in Buffalo has ranged from 6 to 10 cents per quart. Buyers tell me that the berries are excellent, and that the boxes are well filled, owing to careful Government inspection at point of shipment. Those sold from retail stores in Hamilton are also of good size and quality, and the boxes exceptionally well filled. They should produce an example to our growers to be more careful in this respect. Last year, the first strawberries were shipped from this district about the 29th of May, but this year the first shipments will not begin until about the 15th to 20th of this month, which will considerably shorten the fruit season.

As this is being written, most growers are busy at their first summer spraying, some using the summer strength of lime-sulphur, others the old familiar Bordeaux mixture. To these, for insecticidal purposes, are added arsenate of lead, Paris green, or arsenite of lime. Of these, arsenate of lead has the most satisfactory properties, but it is rather expensive. To overcome this question of expense, experimenters in France and California have found that zinc arsenite has equal properties and is much cheaper, it being claimed that "the equivalent of 12 cents of arsenate of lead can be purchased in this material for less than 5 cents." It appears that there may be some danger of foliage injury unless it is properly used, and, for safety, iron sulphide should be combined with it. As this spray is receiving some attention from Californian orchardists, it may be that it will soon be tested in the East. "Black Leaf 40" is another new insecticide which is being recommended strongly for sucking insects, such as aphids and Psyllids. It is a tobacco extract, and can be sprayed on separately or used in combination with lime-sulphur, but it should not be used with Bordeaux mixture. In spraying plums and cherries at this season we are mainly after the rot and curculio; with pears and apples, the scab and codling moth; with peaches, the curculio. Despite the continued wet weather early this season, there is very little curl-leaf of peaches showing, which is accountable to thorough and timely spraying with lime-sulphur before the buds swelled in the spring.

W. R. D.

## THE FARM BULLETIN.

### Over 300 Acres Onions in Point Pelee District.

Editor "The Farmer's Advocate":

So far as can be ascertained, the prospects for good crops are excellent. While very few wheat fields have escaped the ravages of winter, yet the majority destroyed have been sown to other grains, more especially barley, and are making wonderful progress. Spring seeding was somewhat later than usual, owing to showery weather, and also the fact that a much larger area required cultivation through the destruction of fall wheat and clover. The farmers have received another very valuable lesson, which has been placed before them objectively, viz., to refrain, if possible, from pasturing newly-seeded fields, and thus allow sufficient roughness to remain on them that may form a partial and in many cases perfect protection from the destroying elements of winter and spring. However, with many damaged fields, the prospects for hay at present are much better than a year ago. Nevertheless, the producing of fodder to tide them over another winter is seriously engrossing the attention of men on 50-acre farms. To this end, a larger area of corn is being planted. Corn-planting has been retarded by showery weather, but a few fine days will see it finished. The soil is in excellent condition for the reception of seed, and should the present moist, warm weather continue, great possibilities lie before corn-growers.

There is a good showing in fruits, except peaches, which are a total failure. Thousands of peach trees have perished, owing to severe frosts of winter, which loosened the bark around the trunk of the trees near the ground. This is more especially the case on undrained lands, and more so on those having a cold quicksand subsoil. On higher lands and orchards well drained, the percentage destroyed is comparatively small. Small fruits promise well. Along vegetable and general truck-farming lines this year promises to be a record-breaking one. Over 300 acres of onions have been sown in Pt. Pelee district alone. Encouragement for truck-growers may be ascertained from the following reports, vouchsafed by H. O. Duke: John Atkin received for produce of a single acre of early tomatoes \$1,500. The Ellis Brothers raised, in 1911, over \$1,000 worth of tomatoes under glass, and have almost doubled their capacity for present season. J. A. Campbell, of Pt. Pelee, cleared over \$6,000 from his 50-acre farm. His products were mainly potatoes and onions. That Mr. Campbell has faith in the future of Essex is demonstrated from the fact that he refused \$3,000 for 15 acres of land which a few years ago cost him less than \$10 per acre.

American and English land-buyers are still scouring the country, securing farms wherever possible. Prices still continue to advance. A. E.

### More District Representatives.

Eight new offices of the Ontario Department of Agriculture are to be opened up this year. The following is a complete list of the counties getting these, together with other new appointments recently made. The men chosen to fill the offices, and the towns where the offices are to be located, are also given: R. Schulyer, B. S. A., Paris, for the County of Brant; E. Austin, B. S. A., Welland, for the County of Welland; C. H. Buchanan, B. S. A., Chatham, for the County of Kent; I. B. Whale, B. S. A., London, for the County of Middlesex; J. G. Taggart, B. S. A., Sydenham, for the County of Frontenac; W. H. Smith, B. S. A., Athens, for the County of Leeds; N. C. McKay, B. S. A., Walkerton, for the County of Bruce; G. F. Curran, B. S. A., Napanee, for the County of Lennox and Addington.

E. Bradt, B. S. A., has been appointed to Morrisburg, Dundas Co., to fill the position lately vacated by A. D. Campbell, B. S. A. W. W. Emerson, B. S. A., takes the place of R. S. Hamer, B. S. A., at Perth, Lanark Co., and D. E. McTae has been appointed to Alexandria, Glengarry Co.

Four temporary offices have been opened in New Ontario. The men to take charge of them are as follows: I. E. Metcalfe, B. S. A., Gore Bay; F. C. Beaupre, B. S. A., Dryden; F. C. McRae, B. S. A., Burk's Falls; W. H. Ross, B. S. A., Sudbury.

Few people realize the extent of the business carried on in the apiaries of Canada. A reading notice, advertising a recent bee demonstration, estimated the annual honey crop of Ontario alone at one million five hundred thousand dollars. Ten thousand persons, from Point Pelee to the Cobalt regions, and farther north, are engaged in the business of producing it, and yet not one-quarter of the nectar secreted by Ontario bees is ever utilized, and Ontario consumers do not eat one-tenth as much honey as they would if they were urged.

### Galt's Greatest Horse Show.

Of the twelve summer horse shows which have been held in Galt, and each of which has been in its time a great success, the 1912 exhibition, which concluded Saturday last, easily reached the high-water mark. The weather, although cool on the first two days, warmed up on the closing day, and never in the history of the show was the attendance so large. Each afternoon the grandstand, situated on a side-hill overlooking the horse-ring in Dickson Park, was crowded to overflowing, and hundreds seated themselves on the grass on the high land in the park, which afforded them a good view of the performances in the ring. Many notable horsemen attended the show, and the entry list was the largest in its history, being about 500 in all, and sixty more than that of a year ago. Some of the larger exhibitions might well take a lesson from the Galt Horse Show in the matter of compiling a catalogue and of running off the awards on schedule time. Few, indeed, are the exhibitions which are better managed than this. The committees in charge were untiring in their efforts to promote the show by showing every courtesy to spectators and exhibitors.

The handsome prizes offered proved a drawing-card for horsemen from a distance, who were there with their best. The show is also stimulating horse-breeding in the vicinity of Galt, as was evinced by the large number of local horses in the ring.

The greater portion of the money was offered for the different classes of light horses, including saddle horses, hunters, carriage and roadsters, but good prizes were also given for heavy-draft and agricultural animals.

The class for registered mares suitable for draft purposes was won by John Brown, of Galt, with Belle of the Ball, a three-year-old Celtic Clan colt, and a right good mare, brimful of quality. Second went to Lee Bros., Galt, on Celtic Maid, Brown getting third on Lady Howes, and M. Shellard, Galt, fourth on Lady May.

Twelve pairs lined up before the judges in the agricultural class, and a finer lot was never seen at Galt. Jos. Pleased, Galt, secured the red on Prince and King, a fine pair of geldings; second went to John Brown, Galt, on Lady Howes and Belle of the Ball; third to Chas. W. Moser, Berlin, on King and Queen, and fourth to A. B. McPhail, Galt, on Nell and Doll.

Eleven entries made up the class for single-draft horses. H. Pelton, of Youngsville, secured first and second on a smashing pair, Bob and Pat. The Breithaupt Leather Co., Berlin, got third on Earl Grey, and D. A. Murray, Bennington, fourth on Silver Dale.

Two teams lined up for the money in the heavy-draft class, and Bob and Pat repeated for H. Pelton, winning the silver cup, valued at \$200, and the \$25 first prize. D. A. Murray got second on Silver Joe and Silver Dale. The winning team are a pair of five-year-olds, massive, clean-limbed, strong-going horses, good enough to grace any show-ring.

In the single class for draft purposes, D. A. Murray got first and second on Silver Dale and Silver Joe, third and fourth going to Brown on Belle of the Ball and Lady Howes.

The three-year-old agricultural class was won by John McBean, Galt, on Monty, with James Naismith, Blair, second, on Dolly Howes; R. Wedge, Sheffield, third on Jim, and Thos. Dickson, Kirkwell, fourth, on Jean.

Only one two-year-old drafter came out, John McClure & Son, Brantford, securing first money on Royal Mary.

The two-year-old agricultural class had five entries. August Becker, New Dundee, got first on Queen; Alex. G. Wilson, Galt, second, on Annie Gray, and E. Hallman, Roseville, third on Molly.

All the light-horse classes were filled to overflowing, and space will not permit of a full list of the prize-winners. Saddle horses were out strong, and the prize-money was divided between Joseph Kilgour, Toronto; Aemilius Jarvis, Toronto; Martindale Farms, St. Catharines; Crow & Murray, Toronto; S. D. Robinson, Hamilton; Mrs. Jas. A. McSloy, St. Catharines; A. Yeager, Simcoe; F. Moss, Preston, and others.

Hunters and jumpers offered some of the closest contests, and were always popular with the on-lookers. Excitement was high throughout, and particularly so as some equine beauty cleared the last wall. The Hon. Adam Beck, London; A. Jarvis, Toronto; Jos. Kilgour, Toronto; Jno. Gartshore, Hamilton, and H. N. Bates, Jr., Ottawa, were the chief winners.

Miss K. L. Wilks, Galt, and W. J. Crossen, Cobourg, divided the money in the roadster classes; while A. Yeager, Simcoe, and Crow & Murray, Toronto, fought it out for honors in the carriage classes, with Yeager winning the lion's share of firsts. There were several other exhibitors, some of whom got well into the money in some of the classes.

With H. N. Bates, Jr., of Ottawa, winning the hunt in the last year's show, the curtain fell on the greatest summer horse show ever held in the

beautiful town of Galt, and the directors and horsemen went away determined to make the next show even greater than the one just closed.

**Graduates in Agriculture.**

Each year sees a larger graduating class at the Ontario Agricultural College, and Canada's agriculture should receive a greater uplift year after year as these men, Bachelors of the Science of Agriculture, most of whom remain on Canadian soil, scatter to different parts to disseminate their knowledge by practical application or by entering some of the educative professions directly connected with agriculture. The following is the list of those who have been successful this year in obtaining their B. S. A. degrees. The results are given according to options taken, and names are arranged alphabetically in each option. Where a subject appears in brackets after the name, the candidate is required to take a supplemental examination in that subject:

- Agricultural option—F. C. Beaupre, S. A. Bergy, A. M. Bosman, E. Bradt, T. O. Clark, R. H. Clemens (botany, chemistry of insecticides and fungicides), W. Dawson (English), W. R. Emerson, J. H. Fay, W. L. Graham, R. R. Graham, R. Green, A. C. McCulloch, A. A. McMillan, F. C. McKee, G. P. McRostie, A. Palmer, R. L. Phillips, C. C. Rebsch, J. E. Rettie, W. W. Ross, R. Schulyer, C. S. Shibley, W. H. Smith, J. N. Sorley, W. Southworth, L. Stevenson, J. G. Taggart, R. H. Tipper (botany), M. N. Tompkins, A. A. Toole, P. O. Van Sickle, E. A. Weir.
- Dairy option—P. A. B. Cherry, J. Iwanami, R. McDonald (French or German).
- Horticulture option—W. M. Aikenhead, F. A. Boyd, M. Middleton, F. S. Reeves, S. Rogers, O. H. S. Reinecke (chemistry, practical insecticides and fungicides), E. W. White.
- Biology option—C. E. Petch, W. H. Wright.
- Chemistry and Physics option—A. L. Gibson.
- Bacteriology option—T. H. Lund.

**Our Wool Propaganda.**

Our readers will be pleased to learn that T. R. Arkell, B. S. A. (O. A. C.), son of Henry Arkell, of Arkell, Ont., the widely-known sheep-breeder, and for some time Professor of Animal Husbandry in the New Hampshire Agricultural College, joins the staff of the Dominion Live-stock Branch at Ottawa, to take charge, under Prof. H. S. Arkell, Acting Live-stock Commissioner, of the special policy for the development of the Canadian sheep industry, which the Minister of Agriculture, Hon. Martin Burrell, is instituting as a sequel to the work of the Sheep Commission. The new appointee will first proceed to Saskatchewan and Alberta to advise with the wool-growers there regarding handling the season's clip, and undertaking experimental shipments of wool to Great Britain in 1913. Illustration exhibits of Canadian wool are to be arranged as part of the propaganda. The arrangements are also going forward for the purchase of rams and ewes in Ontario, to be sold in Nova Scotia and British Columbia during the autumn.

**Dominion Fair Prizes for Field Crop Competition.**

The Central Canada Exhibition Association has concluded arrangements for the awarding of generous prizes at the Dominion Fair in Ottawa, September 5th to 16th, to winners in the 1912 field-crop competitions. Entries will be accepted from any Province in Canada. Express charges on all Ontario exhibits will be paid by the Exhibition in conjunction with the Ontario Government, and on exhibits from other Provinces, the Exhibition will defray transportation charges to the extent of \$2.50 on grain, and \$1 on potatoes.

Following is the revised list of prizes as it will appear in the Central Canada Fair premium catalogue: Oats in sheaf, six prizes, \$18, \$15, \$12, \$9, \$6, \$3. Spring wheat in sheaf, \$12, \$9, \$6, \$3. Barley in sheaf, \$12, \$9, \$6, \$3. Each sheaf must be at least 8 inches in diameter, selected from the best grain in the field, boxed and forwarded to the Horticultural Hall on the Ottawa Exhibition grounds, not later than September 2nd.

Oats in bags, six prizes, \$30, \$22.50, \$17, \$11.25, \$7.50, \$3.75. Spring wheat in bags, \$15, \$11, \$7, \$4. Barley in bags, \$15, \$11, \$7, \$4. Potatoes, \$22, \$18, \$15, \$11, \$7, \$4. These exhibits

must consist of two bushel sacks of grain and one and a half bushel sacks of potatoes. The Ontario exhibitors will be given stencilled and numbered sacks by the Provincial Department of Agriculture. All entries must be made not later than August 20th.

Grain, awarded prizes, will be retained by the Department of Agriculture for experimental purposes. The rest will be sold for the owners, or returned if they pay express charges.

J. Lockie Wilson, Superintendent of Ontario Agricultural Societies, has been instrumental in arranging this big feature for the Dominion Fair.

**TRADE TOPIC.**

The attention of stock-breeders and agriculturists is called to the advertisement in this issue of Molassine Meal, a stock food which is said to have been used for years with great success in Great Britain, and which has been introduced into Canada by the L. C. Prime Co., of Montreal. This meal is a scientifically-prepared combination of West India molasses and sphagnum moss. It is not a medicine, but is said to keep stock in the pink of condition when regularly fed. The Prime Co. have adopted the method of offering generous cash prizes to every first-prize winner at the

Canadian National Exhibition in Toronto this year that was fed on Molassine Meal in order to introduce the feed. See their advertisement on another page.

**THE CENTENARY SHOW.**

"The Greatest Year of the West's Great Fair," is the motto of the Canadian Industrial Exhibition of 1912 at Winnipeg, July 10-20. The prize list totals up to \$40,000, and catalogues and all other information may be secured from the Manager and Secretary, A. W. Beel.

**GOSSIP.**

Messrs. R. Honey & Sons, Brickley, Ont., breeders of Holsteins and Yorkshires, in ordering a change in their advertisement, write: "The bull calf we are offering is three parts white, and was born May 24th, 1912. His sire is Lakeview Burke Payne, whose dam and sire's dam average 23.14 lbs. butter in seven days. His sire has ten sisters averaging 30.63 lbs. butter in seven days. This calf's dam is giving over 40 lbs. milk daily, on grass alone, as a two-year-old. She is sired by Prince Posch Calamity Bleske. His daughters are testing from 4.4 per cent. to 5.5 per cent. fat.

**Good Farming Rolls Along.**

The "C. P. R. Better Farming Special" train, under the guidance of H. P. Timmerman, the company's industrial commissioner, equipped with exhibits arranged by the staff of Macdonald College, and manned by sixteen lecturers (half English and half French), with a bunch of newspaper men, has been making a tour of Quebec and New Brunswick, attracting thousands of visitors. Many teachers brought their school classes to the train to hear the lectures and witness the demonstrations. The displays of insects and weeds by Prof. Lochhead, of live stock by Prof. Barton, and those relating to dairying, were particularly popular. The train returns to Montreal via the Intercolonial, and is regarded as having made a great awakening all along the lines. At Sherbrooke, P. Q., 2,000 farmers came in from the "Townships," and, with town people, swelled the attendance there to fully 6,000.

**June Frosts.**

A series of three white frosts, each one a little harder than its predecessor, disturbed the equanimity of farmers last week. The final one, on the night of June 7th, registered three degrees below freezing on thermometers near London, and deposited quite a thick coating of hoar frost. Apprehension was felt for fruit, garden stuff, corn, potatoes, and also for wheat, which in some fields was just heading out. Subsequent examination, however, was for the most part reassuring. In some gardens no apparent injury was done, except a little to beans. Here and there plants of clover were cut, but the damage to this crop was small, while many fields of corn escaped without a singe. No doubt, injury has resulted in some cases, especially to market-garden crops, and perhaps in some instances to fruit, but probably very little, compared to the first fears. At date of going to press, reports to hand were chiefly local.

**Chief Forester for British Columbia.**

H. R. McMillan, B. S. A., graduate in agriculture from the Ontario Agricultural College, and subsequently trained in Forestry at Yale, relinquishes his position as Assistant Inspector of Forest Reserves in the Department of the Interior at Ottawa to accept an appointment as Chief Forester of British Columbia. Mr. McMillan is well known to readers of "The Farmer's Advocate" through many contributions distinguished by the breadth of knowledge evinced, by accuracy of statement, and by well-balanced, well-reasoned opinion. He is a young man of unusual capacity, and his removal is one more instance of the tribute levied on old Ontario by the nascent West.

It is estimated that one acre out of every three plowed each year in the United States is planted to Indian corn. It is the crop that characterizes and sets apart the agriculture of that country from that of every other nation upon the globe.

It is said that only one per cent. of the United States Federal budget is devoted directly to agriculture.

**A Farmers' Elevator.**

The Farmers' Grain & Seed Company, of Henry County, Ohio, is a stock company of over 200 farmers, who own an elevator and buy and sell grain, coal, tile, fence posts, carbide and fertilizers. The company was organized about a year ago, with a capital stock of \$8,000, the stock to be sold at \$25 per share. All stock-holders must be farmers, and no man can hold more than eight shares. After the stock had been sold, an elevator was erected at a cost of \$10,000, leaving the company with an indebtedness of \$2,000. The first grain was received by the new elevator on August 7th, 1911. On December 1st a dividend of 5 per cent. was declared on the capital stock. It is estimated that they will have handled during the year about 500,000 bushels of grain. Some of the corn purchased by this farmers' company is sold in carload lots to inland points, but the bulk of the grain is sold on the four terminal markets, Toledo, Buffalo, Baltimore and Pittsburg. The success of this enterprise has led to the formation of ten other similar organizations in Henry county. They are not yet in operation, but expect to be in the near future.

This short history of the doings of this farmers' company, by one of the agriculturists at the Ohio State University, shows what may be accomplished by farmers handling their own output. A joint-stock company, while not the best form of co-operative effort, is, when rightly carried on by farmers themselves, a step in the right direction. Under proper business management, such organizations cannot fail to benefit the shareholders and the farming community at large.

A demonstration train operated over 15 railways in Louisiana in a recent ten weeks' tour, visited nearly every parish in the State, making 200 stops in 4,606 miles, and attracting a total attendance of 144,425 people. Excepting the actual farms, it carried almost everything calculated to illustrate or demonstrate good farming, including live stock. Some of the beef cattle gained 100 pounds each or more in their 60 days' travel. Dipping tanks, to illustrate the treatment of the cattle tick were on board, and a hog cholera exhibit. One of the best and most popular features was the exhibit of boys' and girls' work, and the display of the best features of the State public school system. The railway officials and staffs put forth every effort in their power to make the tour an agreeable success, convinced that the enterprise would promote their own and the welfare of the State.

Toronto University does itself credit in conferring upon C. C. James, until recently Deputy Minister of Agriculture in Ontario, and now acting as a special commissioner for the Dominion Department of Agriculture, the honorary degree of Doctor of Laws.

At a recent council meeting of the Scottish Clydesdale Society, a list of stallions, the stock of which will not qualify for Canada was submitted. It was agreed to print the list for revision by members of the editing committee.

Because of serious shortages of cement, the Government has decided, as per announcement by Hon. W. T. White, Finance Minister, to remit one-half the duty paid on importations from June 12th to October 31st, inclusive.

**Record of Merit Tests for May.**

Some notable official tests are included in the reports for the month of May. One mature cow, Jenny Bonerges Ormsby, with very large records in previous years, reaches the high mark of 26,4109 lbs. fat, equal to 33.013 lbs. butter. This is the second-largest seven-day record for Canada, and the largest to the credit of a cow now living. Five other mature cows pass the 20 lbs. of fat standard, and one senior four-year-old, Pansy Butterbank, reaches nearly 21 lbs. fat. A large class of junior two-year-olds is headed by the British Columbia heifer, Pietje Belinda, with 16.815 lbs. fat, equal to 21.018 lbs. butter.

The following three cows have just completed the yearly performance test:

Princess Ella (8100), at 4 years 312 days: Milk, 14,291.15 lbs.; fat, 469.8 lbs.; equal to 587.25 lbs. butter. Owned by F. Leeson, Aylmer, Ont.

Pietertje De Kol (7477), at 4 years 200 days: Milk, 11,903.75 lbs.; fat, 415.69 lbs.; equal to 519.61 lbs. butter. Owned by J. F. Walker, Aurora, Ont.

Princess Gretqui De Kol (13192), at 3 years 323 days: Milk, 10,003.6 lbs.; fat, 352.06 lbs.; equal to 440.08 lbs. butter. Owned by W. A. Bryant, Cairngorm, Ont.

## THE CANADIAN BANK OF COMMERCE

ESTABLISHED 1867

Capital, paid-up, \$15,000,000.

Reserve, \$12,500,000.

The Canadian Bank of Commerce extends to farmers every facility for the transaction of their banking business, including the discount or collection of sales notes. Blank sales notes are supplied free of charge on application.

Accounts may be opened at any branch of the Canadian Bank of Commerce to be operated by mail and will receive the same careful attention as is given to all other departments of the Bank's business. Money may be deposited or withdrawn in this way as satisfactorily as by a personal visit to the Bank.

## MARKETS.

### Toronto.

At West Toronto, on Monday, June 10th, receipts of live stock numbered 147 cars, comprising 2,749 cattle, 373 hogs, 383 sheep, 109 calves, and 63 horses. Quality of cattle good; trade slow; no exporters sold; fat cows 25c. per cwt. lower. Exporters, worth \$7.50 to \$8; export bulls, \$6.25 to \$7; choice butchers', \$7.50 to \$8; good, \$7.15 to \$7.40; medium, \$6.75 to \$7.10; common, \$6 to \$6.75; cows, \$4.25 to \$6.50; milkers, \$4.5 to \$8.00 and \$100; veal calves, \$4 to \$8.50. Sheep—Ewes, \$4.50 to \$5.25; rams, \$3 to \$4; spring lambs, 9c. to 10c. per lb. Hogs—Selects, fed and watered, \$8.50, and \$8.15 f. o. b. cars.

### 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	206	256	462
Cattle	2,384	3,304	5,688
Hogs	4,639	5,350	9,989
Sheep	1,110	345	1,455
Calves	1,173	121	1,294
Horses	29	53	82

The total receipts of live stock at the two markets for the corresponding week of 1911 were as follows:

	City.	Union.	Total.
Cars	244	212	456
Cattle	2,970	3,263	6,233
Hogs	5,317	2,144	7,461
Sheep	1,457	960	2,417
Calves	807	192	999
Horses	4	25	29

The combined receipts of live stock at the two markets for the past week show an increase of 6 carloads, 2,528 hogs, 295 calves, and 53 horses; but a decrease of 545 cattle, and 962 sheep, compared with the corresponding week of 1911.

The unexpected happened, as everybody was looking for light supplies, but there was a fairly large delivery, as will be seen by the above figures, especially in cattle. Notwithstanding this, prices remained firm for cattle, at last week's quotations.

Horses.—At the Union stock-yards' sale stables on Wednesday business was brisk, many horses changing hands. The demand was keen for good wagon horses, many city firms being represented on the market. The demand was mostly local, not many outside buyers being in town. Prices were: Drafters, \$175 to \$225; general-purpose, \$150 to \$200; express and wagon horses, \$160 to \$215; drivers, \$100 to \$150; serviceably sound, \$30 to \$90 each.

Exporters.—About 600 cattle were bought during the week for export, at prices ranging from \$7.75 to \$8.

Alexander McIntosh bought 6 carloads of distillery-fed steers at \$8 per cwt., for J. Shambert & Sons.

Mr. Howard bought for Swift & Co., during the week, about 500 cattle, some fed by farmers and some distillery-fed, at \$7.75 to \$8.

Butchers.—The best steers of export weights and quality, bought for butchers' purposes, sold at \$7.50 to \$7.90, and a few lots at \$8; mixed butchers' steers

and heifers, \$7 to \$7.40; common and medium, \$6.25 to \$6.90; cows, \$4 to \$6.75; bulls, \$5.50 to \$6.75, and in a few instances \$7 per cwt. was paid for choice quality.

Stockers and Feeders.—Few of either class were offered, but steers, 900 to 1,000 lbs., are worth from \$6 to \$6.25; stockers, 600 to 800 lbs., are worth \$5 to \$5.75.

Milkers and Springers.—On account of the continued demand from Montreal and Quebec for milkers and springers, the market was strong all week, although there was a liberal supply. Prices ranged from \$45 to \$95. The bulk sold from \$60 to \$70 each.

Veal Calves.—Receipts of veal calves were large, but prices ruled steady to strong all week, at \$4 to \$7.50, with a few veals of extra quality at \$8 to \$8.25.

Sheep and Lambs.—Ewes sold at \$5 to \$6 per cwt.; rams, \$3.50 to \$4.50; spring lambs, at \$4 to \$6.25 each, and 10½c. per lb.

Hogs.—The market for hogs at the commencement was weak, but at the close prices ruled as follows: Selects, fed and watered, \$8.60 to \$8.65, and \$8.30 f. o. b. cars at country points.

### BREADSTUFFS.

Wheat.—No. 2 red, white or mixed, \$1.05 to \$1.06, outside points; Manitoba No. 1 northern, \$1.10½; No. 2 northern, \$1.07½; No. 3 northern, \$1.04½, track, lake ports. Oats—Canadian Western extra No. 1 feed, 48½c.; No. 1 feed, 47½c., track, lake ports; Ontario No. 2, 48c. to 49c.; No. 3, 47c. to 48c., outside points; No. 2, 50c. to 51c., track, Toronto. Peas—No. 2, \$1.20 to \$1.25 per bushel, outside. Buckwheat—72c. to 73c., outside. Rye—No. 2, 85c. per bushel, outside. Barley—For malting, 87c. to 88c. (47-lb. test); for feed, 60c. to 65c., outside. Corn—No. 3 yellow, 80c., bay ports; kiln-dried No. 3 yellow, 83c., bay ports. Flour—Ontario ninety-per-cent. winter-wheat patents, \$4 to \$4.10, seaboard. Manitoba flour—Prices at Toronto are: First patents, \$5.70; second patents, \$5.20; strong bakers', \$5 in jute; in cotton, \$5.10.

### HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, \$21 to \$22; No. 2, \$20. Straw.—Baled, car lots, track, Toronto, \$9 to \$10. Bran.—Manitoba, \$23 per ton; shorts, \$26; Ontario bran, \$24 in bags; shorts, \$27, car lots, track, Toronto.

### COUNTRY PRODUCE.

Butter.—Market unchanged. Creamery pound rolls, 27c. to 28c.; creamery solids, 25c.; separator dairy, 25c.; store lots, 23c.

Eggs.—Strictly new-laid, 24c. per case. Cheese.—New, 15c. per lb.; old, 18c. per lb.

Honey.—None offering. Poultry.—Receipts continue to be light. Live poultry is quoted as follows: Turkeys, gobblers, 16c.; last year's chickens, 16c. to 18c.; spring chickens (broilers), 40c. to 45c.; hens, 14c. to 15c. Dressed—Turkeys, 18c. to 20c.; last year's chickens, 18c. to 21c.; spring chickens, 50c. per lb.

Potatoes.—Market easier for Ontario potatoes, at \$1.60 to \$1.75; New Brunswick Delaware \$1.80 to \$1.85, for car lots, track, Toronto.

Beans.—Market strong. Car lots of primes, \$2.60, and hand-picked at \$2.75.

Note.—W. H. Millman & Sons, 27 Front Street East, Toronto, inform us that the Canadian supply of beans is nearly exhausted. From the present time, until this season's crop is harvested, the market will be supplied with Rangoon and Austrian beans.

### TORONTO SEED MARKET.

The season is past for seeds, therefore we give no quotations.

### HIDES AND SKINS.

E. T. Carter & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows, 12½c.; No. 2 inspected steers and cows, 11½c.; No. 3 inspected steers, cows and bulls, 10½c.; country hides, cured, 11½c. to 12c.; green, 11c.; calf skins, 13c. to 17c.; sheep skins, \$1 to \$1.50; horse hides, No. 1, \$3.25; horse hair, per lb., 33c.; tallow, No. 1, per lb., 5½c. to 6½c.

### FRUITS AND VEGETABLES.

Apples—None offering; onions, Egyptian, sack, \$2.75 to \$3; oranges, navels, per case, \$2.75 to \$3; lemons, per box, \$2.50

to \$3; parsnips, per bag, \$2; turnips, per bag, 75c. to \$1; Florida grape-fruit, per case, \$2.50 to \$2.75; beets, per bag, \$1.50; cucumbers, per hamper, \$3; asparagus, per dozen, 50c. to 60c.; spinach, per bushel, 50c. to 60c.; radishes, per hamper, \$1 to \$1.25; green beans, hamper, \$2.25 to \$2.50; wax beans, per hamper, \$2.25 to \$2.50; strawberries, American, plentiful, at 13c. to 15c. per quart, by the case.

### Montreal.

Live Stock.—In the local market prices continued very strong, and changes seem to be mostly upwards. Last week they were about ½c. more than the week before, offerings being smaller than ever. There is a great scarcity of choice animals, and American exporters are buying them freely to fill their ocean space. Prices of choice cattle are very high in the United States, and this sends many purchasers into the Canadian market for their supplies. Choicest cattle were quoted at 8c. to 8½c. here, fine stock being 7½c. to 7¾c., and good being 7c. to 7¼c., medium being 6½c. to 7c., and common as low as 5c. per lb. Choice milk cows are selling as high as \$90 each, medium being \$65 to \$75. Sheep were steady, being 6½c. to 6¾c. per lb. for ewes, and 5½c. to 5¾c. for bucks and culls, while lambs were 7½c. to 7¾c., and calves \$5 to \$10 each. Hogs were in good demand, and prices ranged from 9½c. to 9¾c. per lb. for selects, while commoner stock prices were in the vicinity of 9c., off cars.

Horses.—Demand for all kinds of horses keeps up wonderfully well, and as the offerings are very light, the result is a firm market. Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$300 to \$350; light draft, \$225 to \$300; light horses, 1,000 to 1,100 lbs., \$125 to \$200, and broken-down, old animals, \$75 to \$100. Choice saddle and carriage horses, \$350 to \$500 each.

Dressed Hogs.—The tone of the market for dressed hogs is rather easy, and prices are fractionally lower, at 12½c. to 13c. per lb. for fresh-killed, abattoir-dressed.

Potatoes.—The market for potatoes shows very little change, being \$1.70 to \$1.75 per 90 lbs., carloads, track. The offerings are very light, however. The above refers to Green Mountains, which are selling, bagged and delivered, in smaller quantities, at an advance of 20c. to 25c. per bag. Other qualities are available at 20c. to 25c. less than the choicest.

Maple Syrup and Honey.—Demand only moderate throughout both markets, and prices hold steady and unchanged, at previous quotations. Maple syrup is selling at 7c. to 7½c. per lb. in wood, and at 70c. to 75c. in tins, while maple syrup is 9½c. to 10c. per lb. White clover comb honey is steady, at 10½c. to 11½c. per lb., dark grades being 7c. to 8c., while white strained is 8c. to 10c., and dark is 7½c. to 8c.

Eggs.—The market for eggs is active, and dealers have a demand for all they can spare, at 26c. per dozen for best stock. Straight receipts were quoted at 22½c. to 23c. in large quantities, and at ½c. more in smaller, while seconds were 17c. to 18c. per dozen, according to quantity and quality.

Butter.—The market was generally easier last week, the demand from the West having fallen off. It is claimed that about twelve carloads of butter have recently been shipped to the Northwest and British Columbia, and this has reduced the quantity available for the local market. Prices in the Townships were down to around 24c. to 25c. This means anywhere from that figure to ½c. more here, seconds being about a cent under these figures. Dairies are 21c. to 22½c., and rolls are 22c. to 23c. per lb. The tone of the market was easy.

Cheese.—Exports are 105,000 boxes, or 30,000 less than for the corresponding period of last year. The market is strong, and prices are quoting Westerns at 14½c. to 14¾c., and Easterns at ½c. less than these figures.

Grain.—The market for oats holds about steady, at 55c. to 55½c. per bushel, carloads, ex store. No. 1 extra feed, 51½c. to 52c.; No. 3 Canadian Western, 50c. to 50½c., and No. 2 feed, 49½c. to 50c.

Flour.—Prices for winter-wheat flour have advanced 10c. per barrel, being \$5.25 to \$5.35 per barrel for Ontario patents, in barrels, and straight rolls,

being \$4.80 to \$4.90. Manitoba spring-wheat patents, firsts, \$6.10 per barrel; seconds, \$5.60, and strong bakers', \$5.40. Bags were 30c. less than barrels.

Feed.—The market has declined owing no doubt to the growth of the new grass. Bran is now \$24 per ton, and shorts \$27, while middlings are \$28; pure grain mouille, \$34 to \$38, and mixed mouille, \$28 to \$32.

Hay.—Hay was higher than ever, at \$24 to \$25 per ton, carloads, track, for No. 1; \$22 to \$23 for No. 2 extra; \$21 to \$21.50 for No. 2 good; \$20 to \$20.50 for No. 3, and \$18 to \$18.50 for clover mixture.

### Cheese Markets.

Campbellford, Ont., 13½c., 13 9-16c., 13½c.; Stirling, Ont., 13 9-16c. to 13½c.; Canton, N. Y., 13½c.; butter, 27c.; Utica, N. Y., 12½c.; butter, 26½c., 27c., 27½c.; Madoc, Ont., 13 5-16c.; Woodstock, Ont., 13½c.; Brockville, Ont., highest bid, 13 5-16c., was refused; Kingston, Ont., 13½c.; Vankleek Hill, Ont., 13½c.; Victoriaville, Que., 13½c.; Picton, Ont., 13 5-16c. to 13½c.; Kemptville, Ont., 13 5-16c.; Cobourg, Ont., 13½c.; Cowansville, Que., 13c.; butter, 25c.; St. Hyacinthe, Que., 12c.; butter, 24c.

### Chicago.

Cattle.—Beeves, \$5.90 to \$9.30; Texas steers, \$6.35 to \$8; Western steers, \$6.40 to \$8; stockers and feeders, \$4.20 to \$6.80; cows and heifers, \$2.80 to \$8; calves, \$5.50 to \$9.

Hogs.—Light, \$7.15 to \$7.60; mixed, \$7.20 to \$7.67½; heavy, \$7.20 to \$7.70; rough, \$7.20 to \$7.40; pigs, \$5.30 to \$7.10.

Sheep and Lambs.—Native, \$3.30 to \$5.50; Western, \$3.60 to \$5.50; yearlings, \$5 to \$7; lambs, native, \$4.75 to \$6.50; Western, \$5.25 to \$8.65.

### Buffalo.

Cattle.—Prime steers, \$8.50 to \$9; butcher grades, \$3 to \$8.25.

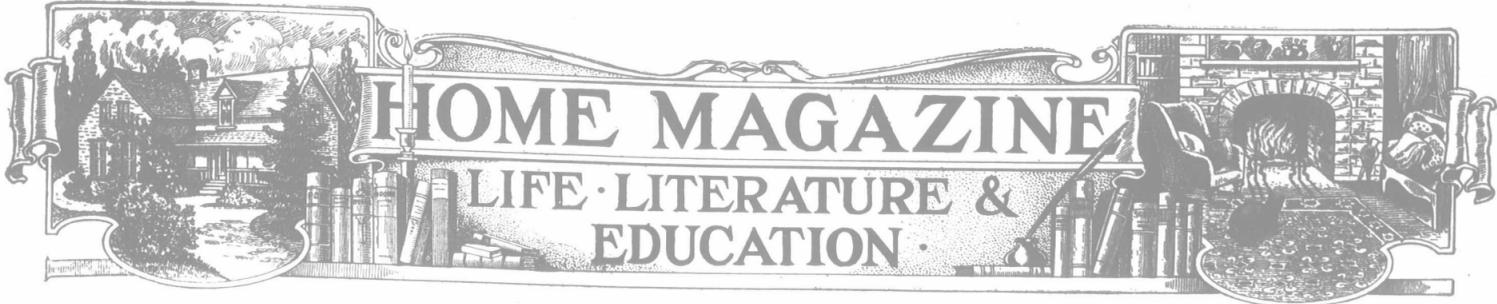
Calves.—Cull to choice, \$6 to \$9.75. Sheep and Lambs.—Choice lambs, \$8 to \$8.25; cull to fair, \$5 to \$7.75; yearlings, \$6 to \$6.50; sheep, \$3 to \$5.25.

Hogs.—Yorkers, \$7.80 to \$7.90; pigs, \$7.20; mixed, \$7.90 to \$7.95; heavy, \$7.95 to \$8; roughs, \$6.50 to \$6.90; stags, \$6 to \$6.25.

### TRADE TOPICS.

COMFORT FOR COWS.—To protect cows from the torment of the fly nuisance, which will soon be at its height, is to insure greater thrift of the animals and a better flow of milk. Dairy products are selling high, and every additional pound adds to the returns from the herd. This naturally calls attention to a preparation like "Cow Comfort," offered by the Sapho Manufacturing Co., and distributed by the McLaren Imperial Cheese Co., of Woodstock, Ont., as per advertisement in this issue of "The Farmer's Advocate." Look it up and write for particulars, or still better, put the preparation to the test on your stock.

THE COCKSHUTT CATALOGUE.—To turn out such implement as though the entire factory output depended upon that one sale, aptly expresses the policy of the Cockshutt Plow Co., Ltd., of Brantford, Ont., as expressed in the "Foreword" of their new catalogue, a copy of which has reached "The Farmer's Advocate." Photogravures illustrate the wonderful growth of this enterprise from a little two-story factory in 1877, to the magnificent group of industrial buildings at the present time. The handsome 96-page catalogue itself affords evidence of remarkable progress, not only in the manufacture of standard plows of every description, but of a great variety of tillage implements, drills, binders, corn-planters, harrows, potato-diggers, and everters. It is splendidly printed, and carefully indexed. A card of request to the head office, or to any local representative, will secure a copy, which well deserves study by all interested in efficient farm machinery. The Cockshutt Company are also now the sole selling agents in Canada, from Peterborough, Ont., north and west, for the famous Case & Wood implements.



Mrs. H. A. Boomer.  
President Local Branch of National Council of Women of Canada, London, Ont.

**Something About Our Women's Parliament.**

[It would be a matter of regret were we not permitted, at this juncture, to reveal the identity of "H. A. B.," who has been for many years an esteemed contributor of "The Farmer's Advocate" Home Magazine.

During the recent Convention of the National Council of Women of Canada, held at London, Ont., many of our readers were especially interested in the clever and alert little lady who, as President of the local branch of the Association, was hostess upon that occasion. They would, no doubt, have been even more interested had they known that this Mrs. H. A. Boomer, of whom all had long since heard, was none other than our own "H. A. B."

To-day, the fact need no longer be concealed, for Mrs. Boomer has kindly consented to our giving the readers of these columns a few notes upon the events of her unusually eventful life,—the personal touch that will make still more real a personality which has so often revealed itself through the writings of "H. A. B."

Mrs. Boomer was born July 10th, 1835, at Bishop's Hull, England, the daughter of Mr. Thomas M. Mills, Solicitor, of Taunton. She was educated at Queen's College, and, in 1851, came to Canada with her mother, who had been appointed lady superintendent of a home school for daughters of the clergy and officials of the Hudson Bay Company at the Red River Settlement, now Winnipeg. The trip, still vividly pictured in the memory of Mrs. Boomer, was made by way of Hudson's Bay, over the route for which a regular steamship service to Europe is now, after so many years, being projected.

Afterwards Mrs. Mills came, with her young daughter, to London, Ont., where she assisted Bishop Hellmuth in founding Hellmuth Ladies' College, of which she was principal for three years.

In 1858, Miss Mills (now Mrs. Boomer)

was married to Mr. A. R. Roche, of the Civil Service of Canada, who, later, was the originator, and, in connection with Lord Bury, Earl of Albemarle, and others, one of the founders of the Royal Colonial Institute, of which King Edward VII., as Prince of Wales, King George, as Prince of Wales, and now H. R. H. the Duke of Connaught have been, in turn, Honorary Presidents, presiding personally on special occasions.

Of Mr. Roche, one who has written of him, says: "By perpetual use of the press of Canada, over fifty-five years ago, he so kept in view the possibilities of the Big Northwest, then only known as a wild waste for fur-bearing animals, and only inhabited in spots by the Hudson Bay Company, who practically owned it, that at last Canada's eyes were opened, so that now the whole Northwest is a living Canada. Old records bear his name, though time has effaced the memory of the hand that sowed the first seed."

In 1875 Mr. Roche and his wife went to South Africa, and while here the subject of this sketch wrote two books that were extensively circulated, "On Trek in the Transvaal," which foreshadowed the Zulu war, and, "Notes from Our Log in South Africa."

On the homeward journey, Mr. Roche died at sea, and some years later, Mrs. Roche became the wife of the Rt. Rev. Dr. Michael Boomer, Dean of Huron, and first Provost of the Western University.

Since the death of Dean Boomer in 1888, Mrs. Boomer has lived chiefly in London, but has made frequent trips to the Mother Country. Always energetic, she has made her life count along many lines. For some time she was Provincial President of the National Council of Women of Canada (of which the Countess of Aberdeen was then President), and, in connection with the work of the Association, she has become well-known throughout the Dominion. At present she is President of the local branch at London. She was also the first woman to be made a member of a civic board in London, having been appointed one of the Trustees of the Collegiate Institute of that city in 1898. Her interest in all charitable works has always been deep, and for years she has been a prominent member of the Women's Auxilliary to the Missionary Society of the Church of England. It will be remembered that, at the time of the serious accident which befel her last year, through the running away of a horse, she had been occupied during the day in packing bales of clothing for the sufferers after the Porcupine fire.

With this, then, may we close, making room for Mrs. Boomer's own account of the meeting of the "Women's Parliament of Canada."—Ed.]

**A FEW ECHOES FROM A MEMORABLE WEEK.**

Just a very few echoes only, out of a very large number which might with equal justice find a place in our women's Columns in "The Farmer's Advocate" to-day.

During the week just gone by, London has been honored, not only by a visit from the Royal Representative of the King of England in Canada, the Duke of Connaught, and by their Royal Highnesses, the Duchess of Connaught and their daughter, the Princess Patricia, who has a place of her own in the hearts of loyal Canadians, but by a gathering of some of the most notable women of our Dominion, drawn together for the nineteenth annual meeting of Canada's National Council of Women, a council of women's societies which claims the interest and co-operation of every woman in Canada. For the National Council, the coming of the Duchess of Connaught

had a very special significance, for she came, not only as the First Lady of the Land, but as the First Lady of the National Council of Women, in virtue of her office as its Honorary President.

Apart from the great honor done to us as one in membership with her, and to our city through the gracious acceptance by Her Royal Highness of our invitation to attend the first annual meeting of the N. C. W. held since she came to Canada as its Vice-Reine, we have had, by many tokens, the assurance that to her the National Council of Women is not a mere name. She has heard great things of it in the past, and she expects great things of it in the future. Her Royal Highness has already given Canadians practical evidence of her interest in the work of the Council, and of her thorough understanding of its true meaning.

In one very definite way she has already accomplished much along Council lines, her appeal on behalf of the extension of the work of the National Order of Nurses in the widely-scattered districts of outer Canada where skilled nursing is so sorely needed, having brought rich results. The Duchess chose as the subject which she would desire to hear discussed, "The Employment of Women," and she followed the debate with a keen and intelligent interest which promises much for the future.

Of the various civic functions which arose out of the coming to London of their Royal Highnesses, the daily press has given full information, so I will confine my echoes to mentions of what transpired more particularly within our own "ring-fence."

Both by letter and cablegram, our honored founder, Lady Aberdeen, sent us greetings, adding, in the former, the words, "How His Excellency and myself wish we could fly across the Atlantic to be with you all. Now, would you find a florist in London who would make up a little spray in Council Colors for our delegates to the National Council, to be given to each as a token of our affectionate remembrance. Good-bye. God be with you all." And so it came about that on "Royalty day" every member bore on her breast a tiny spray of lilies of the valley, as she rose to greet the Duchess when she entered the Council Chamber at the Normal School on the 29th May last. The story of the young girls of the Normal School who lined up on either side from the door of entry, their fresh young voices singing, "Oh, Canada!" should be written by one of themselves. The memory of it will assuredly live in many of their hearts as a day to be marked with a white stone.

It was said of the National Council that no sooner was a new need made manifest than a remedy was unitedly and diligently sought for it. Already has much been accomplished for the bettering of the conditions of women, such as, after much insistence, the passing of the Factories and Shop Act, which provided women inspectors as well as men; the securing in many centers medical inspection in schools; the reports from year to year of Dr. Helen MacMurchy, throwing light upon much which mothers, as well as teachers, should know. The Council, through Miss Agnes Fitzgibbon, has organized a system of Welcome Hostels in connection with the immigration movement, systematizing and smoothing the way for women from the Old Country who come to supply one of Canada's greatest needs at present, assistance in one form or another in the homes of the land.

An immense amount of investigation along these and other lines was reached by the reports from the conveners of the several central committees, each of which was compiled in condensed form from the information handed in from the workers

in the several local councils throughout the Dominion, and therefore trustworthy and to be relied upon. Nearly every one of these subjects might with profit have had a whole session to itself, only that was impossible.

I will give you their headings, and perhaps a little later on, when the printed reports come out in our Council Year-book for 1912, I may be allowed to tell you of these committees of concentrated effort a little more in detail.

The standing committees of the National Council are as follows:

- I. Laws for the Better Protection of Women and Children.
- II. Objectionable Printed Matter. This opens up a wide field for its antidote; good literature for our homes and schools.
- III. Custodial Care of Feeble-minded Women.
- IV. On the Development Classes.
- V. Finance.
- VI. Immigration.
- VII. Press.
- VIII. Agriculture for Women.
- IX. Citizenship.
- X. Vacation Schools and Supervised Playgrounds.
- XI. Equal Moral Standard and Prevention of Traffic in Women. (This is a burning question, of which Mr. Coote, a devoted worker from across the water, and an eloquent speaker, said, "The Women's Council has been a greater force than any other body in Canada in aiding in the suppression of this iniquitous traffic.")
- XII. Peace and Arbitration.
- XIII. Public Health.
- XIV. Education. A subject of very wide significance and deep interest to every parent and teacher.
- XV.—Employments for Women.
- XVI.—Special Committee on Home-making.
- XVII. On Problems of Childhood.

With these subjects as the keynotes for discussion, with some of Canada's most earnest, clever, thinking women as their exponents, with records given of good work already done, and of hopes still to be fulfilled as the reward of continued, persistent effort, of remedies for existing ills suggested, and propositions offered for broader lines of work, is it any wonder that time was all too short (although not a moment of it was lost, and not a second of it wasted in talking for talking's sake) to wholly satisfy the members of this Women's Parliament of 1912?

But, nevertheless, its members parted believing that their annual fore-gathering would once more bring with it fresh inspiration, renewed enthusiasms, added wisdom, and by God's good hand upon them, blessed results.

I will close my little extra article with an echo from the lips of one of our most devoted pioneer workers now gone to her rest, Mrs. Gibbs, President of the West Algoma Local Council, who proved by her life that while home and its claims must ever have first claim to her motherly heart, it did not make her forgetful of her relationship to her city as a good citizen, or to her country as a good Canadian.

Eleven years ago, in our Forest City, during her response to the welcome offered on behalf of our London Branch to the visiting delegates from far-away local councils, by Mrs. E. N. English, our first President, whose loss we have ever lamented, Mrs. Gibbs said: "I believe that the most valuable feature of our Council is the bringing about of an interested knowledge of the lives of our sisters under less happy circumstances than our own; for, when we think, we will care; and when we care, we will work to bring about a happier condition for all."

H. A. B.

## Hope's Quiet Hour.

### Rest a While.

He said unto them, Come ye yourselves apart into a desert place, and rest a while.—S. Mark vi. 31.

Between the days, the weary days,  
He drops the darkness and the dew;  
Over tired eyes His hands He lays,  
And strength and hope, and life renews.  
Thank God for rest between the days!

Else who could bear the battle stress  
Or who withstand the tempest's shock,  
Who tread the dreary wilderness  
Among the pitfalls and the rocks,  
Came not the night with folded flocks?

The white light scorches and the plain  
Stretches before us, parched with the heat;  
But, by and by, the fierce beams wane;  
And lo! the nightfall, cool and sweet,  
With dews to bathe our aching feet!

For He remembereth our frame!  
Even for this I render praise,  
O, tender Master, slow to blame  
The falterer on life's stormy ways,  
Abide with us—between the days!

These are strenuous days, and the ideal of service acts as a continual spur to effort, so that many of the noblest men and women are living in a wild rush of work all the year round. Their lives are so full that meditation is impossible, prayers are hurried, reading is almost entirely crowded out, and peace is a dream of the future rather than an ever-present reality. We may say that we should like to be sitting at the feet of Jesus, like Mary of Bethany, but most of us form the daily habit of copying Martha.

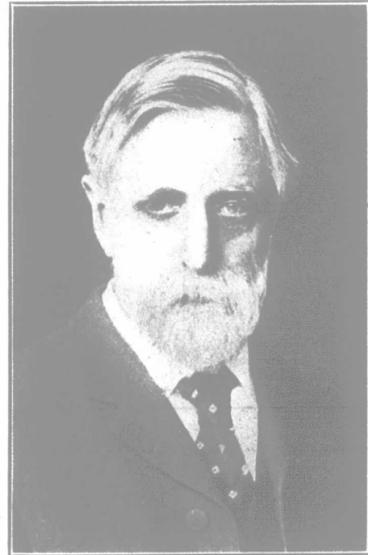
There is only One Man Who ever dared to say to all the weary and heavy laden: "I will give you rest." It is a wonderful offer—have we any right to go on being weary and heavy laden, without even trying to take advantage of it? We love Him, and are eager to serve Him. Why do we disappoint Him? He loves us with deepest, tenderest love—is it any pleasure to Him to have us toiling constantly, jaded, nervous, almost ready to drop? Work should be a joy—not a weary drudgery. I know that there are countless thousands who are forced to toil from early morning till late at night, in order "to keep body and soul together."

But that is a wrong condition of things, and as men become more enlightened, they are trying to cure the disease of crushing work, as they try to cure smallpox and other diseases. But I take it for granted that you are not forced by awful necessity to such an inhuman kind of life. Most of our readers can—if they will—secure a certain amount of restful leisure, without really neglecting God-given duties. If men and women refused to rest until all the work in the world was done, then they would never rest at all. But God insists on a certain amount of rest. He has placed us in bodies which cannot go on at all without many hours of sleep. And, as it is a delight to Him, to take a tired worker into His arms at night, quieting the excited nerves and giving new freshness and vigor so that the day's work may be like the happy play of a child, so He still calls willing workers apart to "rest a while" sometimes, even in the daytime. The work of the disciples was pressing heavily on them when the order was given to come apart and rest, "for there were many coming and going, and they had no leisure, so much as to eat." Is the Master less wise and merciful now? He always wants to keep His disciples in a well-balanced condition, and He still warns us—by our own experience and the experience of others—against overstrain. His command to rest a command given to willing workers is both wise and tender. To disobey such a reasonable and kind command is foolish as well as wrong. The apostles wanted to serve their generation—as you do—therefore it was necessary to take a real holiday in order that body, mind and spirit might be refreshed and invigorated. Then new zeal and eager energy could accomplish far better work.

When you feel tired and worried, when

your head is aching and depression has spoiled the expression of your face, when you are "blue" and "cross as a bear," then the healing power of a rest in God's out-of-doors is simply magical. A light couch or a hammock under the trees, where you can stretch yourself out and drink in life fresh from God, is usually the best medicine.

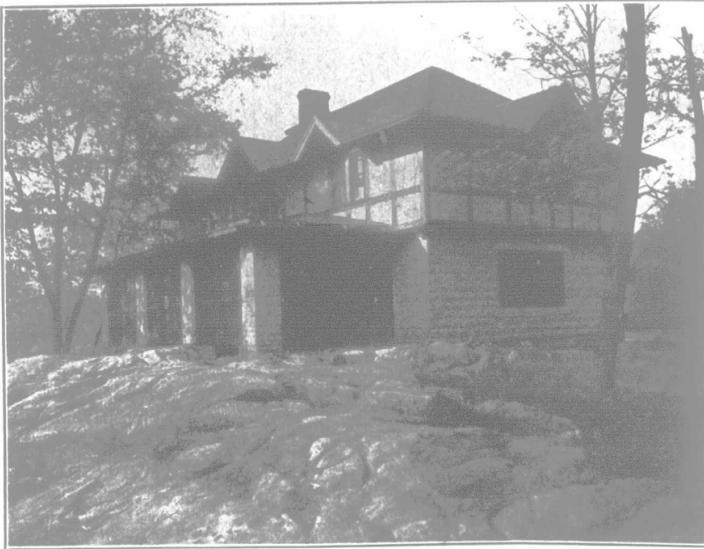
But prevention is better than cure, as we are at last beginning to realize, and sensible people will not wait until they feel irritable and depressed before they obey the command to "rest a while."



Mr. Charles Barnard.

Founder of the Darien Housekeeping Experiment Station, Conn.

As we grow older, we usually need a little rest during the day—especially when the day is extra busy or hot—and very often it is the greatest comfort to all the family to know that the hard-worked mother takes her afternoon rest as regularly as her dinner. If one person is so weary that the others can see the tired lines in the face, and hear the tired sound in the voice, the rest of the family find it hard to be glad. It is a wonderful help and inspiration to everybody when one member of the household can always be depended on to wear "a glorious



View of "The Little House in the Woods."

Housekeeping Experiment Station, Darien, Conn., where housekeeping problems are being worked out scientifically.

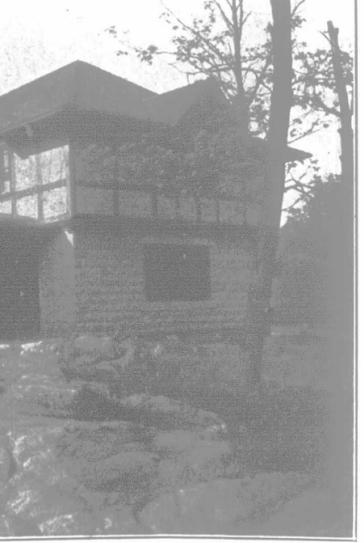
morning face," and to keep the morning freshness undimmed all day, radiating joy everywhere. And it is just as depressing to have a member of the family looking pale and forlorn, speaking cheerlessly, and walking with weak and weary steps. None of us are angels, and it is much easier to be bright and sweet in soul when we are rested and healthy in body. Let us be sensible enough to accept all the helps that are offered to us. Gladness of voice or face is not inspir-

ing when it is only on the outside. Others can feel the unreality of it. If you can possibly manage a real outdoor holiday, during the summer, it will be good for you, and good for the people who live with you.

A restful season can do more than refresh the body. We are apt to set a high value on visible gains, forgetting the far greater importance of the invisible building of the soul, which is going on all the time. Many a mother is conscientiously working for her husband and children, wearing herself out over meals and other household cares, yet all the time drifting farther and farther from those she loves. She has no time to keep in touch with their interests, no time for a drive or a walk or a picnic, no time to read books which will help her to understand their up-to-date ideas, no time for the companionable chats with them and their friends, which can inspire high ideals and make them ashamed of low thoughts. Perhaps she thinks she has no time to pray for them—but we can usually find time for anything which seems to us of vital importance, and it is possible to pray and work at the same moment. While she is wearing herself out in caring for their bodies, she may be doing scarcely anything to strengthen their far more precious souls. The power of the Holy Spirit is close at hand, waiting for her to use. She can keep in touch with God and in touch with her dear ones, a link through which His Life can flow to them. This is a great mystery, but too many have proved by experience the possibility of going into God's open Treasury, and bringing out priceless gifts for those they love best, for any of us to throw away the opportunity—unless we are very foolish.

But when we try to pray only in the rush of the early morning, or when we are too tired to concentrate our thoughts at night, it is little wonder that our prayers seem to accomplish very little. We are doing ourselves and others serious wrong if we are always too busy or too tired to hold communion with God. It is not easy to fix our minds and hearts on Him, even when we are fresh and not hurried, it is far more difficult when the mind is distracted over "getting breakfast," or when the body is longing for rest in bed.

It has been said: "One of the best means of saving power is to rest just before getting tired. When exhaustion comes, it cannot be recovered from readily." When I was a child my father often used to tell me about a boy who



View of "The Little House in the Woods."

Housekeeping Experiment Station, Darien, Conn., where housekeeping problems are being worked out scientifically.

morning face," and to keep the morning freshness undimmed all day, radiating joy everywhere. And it is just as depressing to have a member of the family looking pale and forlorn, speaking cheerlessly, and walking with weak and weary steps. None of us are angels, and it is much easier to be bright and sweet in soul when we are rested and healthy in body. Let us be sensible enough to accept all the helps that are offered to us. Gladness of voice or face is not inspir-

ing when it is only on the outside. Others can feel the unreality of it. If you can possibly manage a real outdoor holiday, during the summer, it will be good for you, and good for the people who live with you.

God has given us social powers, and expects us to take time for friendship. If we are not always busy with social things, we may gain a lot from them.

getting into touch with other people—either in daily life or through books—and may also help to uplift and cheer other lives.

It is not always possible to get a complete change of scene, but those who understand the value to body and soul of a time of restful leisure occasionally, can generally find some time for it, without neglecting real duties. Indeed, if rest is a duty, and our Master's command to "rest a while" is one which cannot be constantly disobeyed without serious loss to ourselves and to others, we must learn to "make time" for it.

"Nay, I'll not shun to-morrow's wild claim;

Storms when Thou sendest, I'll not ask for calms.

Yet, I grow weary on the way I go,  
Put underneath the Everlasting Arms—  
Just for to-night."

DORA FARNCOMB.

## The Ingle Nook.

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

### Simplifying Housework.

Dear Ingle Nook Friends:—A fortnight or so ago I spoke to you of the Housekeeping Experiment Station at Darien, Conn., and promised to tell you more about it if I could find out anything worth telling. Since then I have received several of the bulletins from the Station, and very interesting indeed is the story which they tell.

A few years ago Mr. Barnard, the originator of the movement, and his wife became weary of the life in New York City and set out to find a spot, quiet and beautiful, where they might find the restfulness and interest that they craved. In their search they came upon the place now known as "The Little House in the Woods," and so they began life anew in an environment wholly different yet full of promise.

From the very beginning, in renovating and furnishing the house, convenience and economy—not only of money, but of time and strength, which are surely not less important—were looked to, then one day the inspiration came, "Why not tell the world about all these little useful things that we have found out? There are thousands of housewives working under conditions that sap them of strength and rob them of the time for mental development, rest and recreation, that every human being should have.—Why not write pamphlets that may help to lessen the daily burden for such as these?"

The thought was acted upon, bulletins were sent out, and so great became the demand for them, and for information on a variety of subjects connected with housekeeping, that the Barnards found it advisable to secure two assistants, Mr. and Mrs. Child, who are now in charge of the station, Mr. Barnard being at present in California.

In looking over the bulletins one becomes impressed with the fact that one of the great secrets—perhaps the one great secret—of the methods at the Station is the securing of all the utensils and contrivances that tend to ensure speed and ease in doing the general work. Look right into the question and you come to the conclusion that this is all right, do you not? The good farmer, for instance, buys every machine that can expedite his work or bring about better results. Why, then, should he refuse his wife the same privileges? Or, if he should happen to concern himself not at all with the matter, why should the wife voluntarily deny herself any help that she can afford to have? She certainly earns her right to such things just as much as her husband does. Considering her strength she works quite as hard as he. She is by no means idle; often she is busy, busy, when her spouse is calmly resting or reading the newspaper. She has a right to a little spare time too.

Perhaps the convenience most insisted



Mr. Alfred Child.

Mr. and Mrs. Child are at present in charge of the Housekeeping Experiment Station at Darien.

upon in the Darien bulletins that have come to hand is the use of the denatured alcohol stove for cooking, assisted by the fireless cooker. Denatured alcohol as a fuel seems to be an unknown quantity in Canada as yet, but surely it cannot long remain so. For instance, for cooking in the summer, say, a dinner: First you heat the things to be cooked on the alcohol stove, then pop them into the fireless cooker. They require no more attention, therefore you can proceed to do other work about the house, unruffled by the fear that anything is burning or that the kitchen is being filled with smoke or steam. You return to the kitchen and find it cool and comfortable; moreover, as the denatured alcohol gas flame does not smoke the saucepans, etc., there is no grimy dirt to be washed off after dinner.

The fireless cooker, you see, saves the expense of burning large quantities of alcohol, and by getting one of the best quality, provided with disks, you can roast, bake and fry as well as boil and steam the various dishes.

There is also on the market a denatured alcohol iron, which keeps hot itself, and, I understand, a denatured alcohol lamp which does away with the necessity of cleaning lamp chimneys.

Other articles which have been found to save labor greatly at the Darien Station are: A vacuum cleaner; a self-basting roasting pan; dustless dusters made of a certain kind of cloth which retains the dust instead of flipping it out again into the room; a steam-cooker which cooks several articles at once and would be especially useful, I should judge, in the winter, when it might be necessary to keep a fire in the range; a long-handled mop provided with a wringer; a bread-mixer; tea and coffee percolators; a wheel-tray for conducting dishes to and from the dining-table, and so saving many steps every day; an egg poacher; a pie plate with a pivoted knife fixed to it, which quickly and thoroughly removes the pie, even though it may be stuck somewhat; loose bottom cake pans; dishes made of a superior earthenware in which foods may be cooked and then served without removal to other vessels, thus achieving two benefits at once—the food is hotter, and there remains but one set of vessels to be washed. . . . There are many more which cannot today be mentioned.

At the Darien Experiment Station every provision has been made to make short routes in doing the housework. A kitchenette, quite small, with the walls covered with shelves, upon which everything may find its own place, has taken the place of the old-fashioned large kitchen; in summer an outdoor dining-room is substituted for the indoor one.

Now, Ingle Nook folk, if you want to find out more about this very interesting place you will just have to buy the bulletins. I hope even this short sketch may have suggested to you a few of the conveniences which may be found for mak-

ing housework easier and lighter, which you may not have known about before.

Just one word more: When buying any article be sure to make inquiries enough to enable you to know just what is the best kind and where it may be found. Don't take the first thing offered to you. Don't accept, without investigation, the "just as good." It never pays to buy makeshifts or cheap inferior articles. There is no surer way to throw away money than to spend it for articles that give half satisfaction or none, that wear out quickly because of inferior material and workmanship, or that are continually going out of gear. As a rule, the best is the least expensive in the end.

JUNIA.

STENCILLING.

Dear Junia,—Would you kindly send me directions for stencilling, and what kind of paint is used?

Is it right to say, "Good morning, Dr. Brown," or should I just say, "Good morning, Doctor?"

ANXIOUS.

You forgot to sign your name, Anxious, and by rights your letter should have gone into the waste-paper basket;

with connecting strips so that it will not all fall out in a piece when the cutting is done. You see you must cut out the portions to be removed, by placing the paper over glass and using a sharp knife and fine scissors, for, in stencilling the color is put on the material by painting through the holes of the pattern.

Now, supposing your pattern is all ready, the next step is to stretch the material to be stencilled over a large sheet of blotting paper placed over a board. Tack the whole down tightly with thumb-tacks, then put on the color, applying it with stiff brushes and scrubbing it well into the texture of the material. You must be very careful that it does not run under the edges of the stencil, forming a blur, as much of the attractiveness of the work depends upon clear, even outlines. To prevent blurring, it is a good plan to drip off the brushes a little on a separate sheet of blotting-paper before applying.

A very good stencil mixture is made as follows: Mix tube paint of the required color with the following: 1 pint turpentine, 1 oz. acetic acid, 1 oz. oil of wintergreen.

If the colors as you buy them are too



Mrs. Alfred Child.

Who is not less interested in the experiments being worked out at "The Little House in the Woods," than her husband.

well to apply the color on both sides. Of course you understand that one small pattern will do. You simply move it along the material, tacking it down carefully each time with the thumb-tacks.

One should say "Good morning, Doctor Brown," not "Good morning, Doctor."

HAIR BOWS.

Dear Junia,—Kindly give me some information on "Saving Steps," as I have an essay to write on that subject.

Should a girl of seventeen wear ribbon bows on her hair? A READER, Oxford Co., Ont.

See first of Ingle Nook for answer. It just happened that this subject of "Saving Steps" is dealt with to-day. We do not undertake to supply information for essays and debates, as a rule.

A girl of seventeen may wear a ribbon bow on her hair if she wishes, but bows are not very fashionable just at present.

A NEW SOMETHING.

Dear Junia,—Would you kindly tell me the cause of the Canadian swelling and a cure for it? JENNIE, Lanark Co., Ont.

Give it up. What in the world is "Canadian swelling"? We hope it isn't "swelled head."

REPLY TO "M. S."

Dear Junia,—Although I have for some time thought of writing to the Ingle Nook, I think I should have still been "intending" if it had not been for the letter in last week's "Advocate" by "M.S." That had the effect of bringing me to the Nook on the run. I couldn't for a minute think of letting such a picture of farm life remain in any reader's mind; still, when I take into consideration that a large share of the readers are farmers and their families, I know there really is no particular need of showing the other side of the case, for it is the one that the majority of "The Farmer's Advocate" readers know.

I, too, have lived among farmers all my life, and I must say that I have a far better opinion of them than "M. S." "Not one in a hundred with water in the house"—that surely is not true of this part of the country. Any of the houses which are being built lately have waterworks up and down stairs, and a modern bath-room, which, by the way, is made good use of, winter and summer. Our house did not have the waterworks when it was built, of course (about 30 years ago), but when the barn was fitted with the system the house was not forgotten, and there are many more around here who did, or are now doing, the same.

We haven't the stationary tubs, but expect to have them this summer when we have the cellar renovated. However, our sink is in the very handiest corner of the kitchen, and the water-pipe is large enough to allow for washing-water.

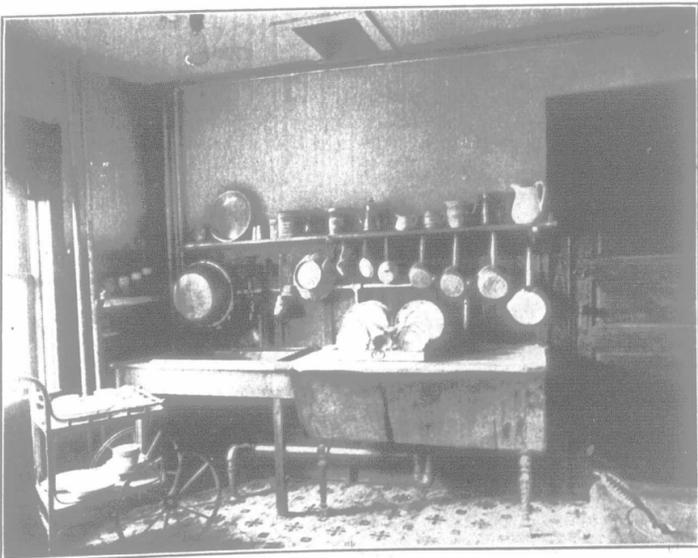


The Attractive Dining-room at the Housekeeping Experiment Station. Breakfasts and suppers are prepared at the table.

however, I took pity on you. Please don't forget next time. We need not print any communication which is not accompanied by name and post-office address.

Stencilling is very easy, that is, unless you design your own patterns, which makes it less easy but more interesting. The design may be traced on regular stencil paper, or on tough brown paper, but in case the latter is used the whole must be varnished with shellac on both sides to prevent the paint from softening the paper. The design must be made

harsh and crude you may soften them by mixing the paints to the required shade. For instance, to make gray-blue mix blue, white and a little black; to soften green add a little brown, or mix together blue and yellow and tone down with brown; a sage green is made by adding some white and a larger proportion of blue to the yellow; for a dull red use Indian red, or add brown to the vermilion—and so on. Be sure to test the color first on a separate bit of material before applying. If the work is done on curtains it is



Kitchen at "The Little House in the Woods."

The country kitchen can be made efficient and attractive at moderate expense.

We also have a large size bread-mixer, two food choppers (large and small), besides other labor-saving devices. A number of our neighbors have just as many or more, and some things (such as a vacuum cleaner), two or three have together.

Both our kitchen and dining-room have good hardwood floors, which are kept oiled and consequently easily cleaned. The sitting-room and parlor have squares which come about one and one-half feet from the wall, the bare space being stained to match the room (but not until all cracks are filled up).

And no mattresses!!! It is almost directly opposite in this section. I doubt if you could find a dozen husk or straw beds, for I haven't seen one in years around here. Even the hired men who have families and live in separate houses have mattresses and springs almost altogether. We have seven large beds and a cot with springs and mattresses, and our house is not an exception.

And what is it she says of the farmers? They do not give the women a chance to go to the village or church, find fault when they have to pay a nurse a bill, neglect to take a bath or change underwear, are not as courteous to wife and daughter as to sweetheart, and let a wife wear the same hat for fifteen years! That is surely a black list to think up and write down to see printed in a paper that thousands are to read.

If "M.S." were to live here for a week or two she would see who go to drive anywhere. The women certainly have a chance to go to the store (without smuggling eggs too), and on Sunday two-thirds of the congregation are women, but that does not mean that there are only two or three men there.

If a nurse is required the husband or father is thankful if he can get someone, and if only the wife is helped through her illness, the bill does not count.

If there is warm water ready and clean underwear laid out every week, I think very few farmers would refuse to "clean up," so that fault may be laid at the wife's door.

I have seen men who after marriage were sadly changed, in those little gentlemanly acts which count for so much, but I think there are enough who do not change to balance the account, and for another thing, there are town husbands who are just as remiss as the farmers, never being seen on the street with their wives after the first few months or weeks of married life, and there are numberless families who do not have waterworks, labor-saving devices, good floors and mattresses, etc.

And about the hat that every woman likes (no, not the fifteen-year kind)—I would like to see that hat, though. It must have been made of better material than the hats of to-day or it never would have held together. Did she never get caught in a good rainstorm?

I must confess that a good share of the women and girls here get at least one new hat every summer and winter, getting a new ready-to-wear one year and a new "dress" hat the next.

If "M.S." put her side of the story truly, I am awfully sorry for her, and I would love to have her spend a month or two in a good part of Leeds Co., Ont., just to see that "Farm Life" is not always unpleasant, although we often have to do things we don't like to. However, everyone has to do that, so we are not in a lonesome class by ourselves.

Hope I have not taken too much of the Ingle Nook to myself on my first appearance.

"A Western Lassie's" appeal has taken root, and I am calling on some new neighbors this week. BETTY.  
Leeds Co., Ont.

#### REPLY FROM SIMCOE CO., ONT.

Dear Junia,—I have been a constant reader of your paper for a long time. We have taken it for a number of years, and find it of great value to us in every way. Thought I would write a little about the letter in last week's paper which "M.S." of P.Q. wrote. Speaking about unpleasant life on the farm, well, I think she must live in a city or country. Surely, she cannot live on a farm! I live on one, and find it very pleasant, especially in summer, when everything looks lovely. She spoke of not many having water in their houses. Well, we have a soft-water pump and sink in our kitchen, quite handy for us,

and I think nearly everyone has them all around us. She seemed to look on the worst side of everything, which makes life very unpleasant. And about mattresses? Well, I am sure nearly everyone has mattresses in our county, also feather beds. I know we have five of them, and more feather beds.

The letter the "Western Lassie" wrote was splendid, as everyone ought to know the people in Ontario are not nearly as friendly as they should be. If Ontario had about half the friendliness that the West had it would surely be a different country. The people will have to widen out and be more free. I will close now, wishing your paper every success.  
Simcoe Co., Ont. "DIMPLES."

#### REPLY FROM PEEL CO., ONT.

Dear Junia,—In "The Farmer's Advocate" this week I read with much amusement a letter from "M.S." I should like very much to know what kind of home and husband "M.S." must have. I am a farmer's daughter, and feel I cannot allow townfolk to form such an

opinion of the farmers as "M.S." leads people to believe them to be.

Things are not at all as "M.S." describes in our neighborhood. Most of homes (in fact, all homes) are most comfortable, having 'phones, sinks, water, furnaces (and if not, coal heaters), clothes closets, mattresses, etc., etc.

I have never heard of any farmers' wives wearing hats for quite so long as stated, or having to hide eggs to procure the necessaries when at town. Only once did I hear of boys being kept from school to keep pigs from eating the garden. We have fence wire and wire netting around our garden, and find it very satisfactory indeed.

Now, I am positive no men around here wear their clothing and take baths at such intervals as "M.S." states. I should be delighted to have the pleasure of seeing "M.S." and our neighbors' farms.

"M.S." could not see the country?—and especially at this season, when one can be soothed by nature's beauty on every side.

"M.S." must surely have found the farms in Norfolk County, for I have

sume the neighbors were not altogether to blame.

So much for the farm and people of Peel County. Come! live in Peel, enjoy life and be happy.

FARMER'S DAUGHTER.

Peel Co., Ont.

We are pleased, indeed, to publish the three letters given above, but we were also glad to publish the letter from "M.S." It showed that in one spot at least in our beautiful Canada conditions are not what they should be. Perhaps the letter written by "M.S." will have some effect in bringing about a better state of affairs in the county, or, perhaps, the one small portion of it in which she lives.

Yes, Farmer's Daughter, I have been through your Peel County from end to end. It is very beautiful, and the homes of the farmers look very comfortable indeed.

### Seasonable Recipes.

[When the Fruit Jars Run Low.]

Chocolate Cream:—Put 10 tablespoons



Preparing for the June Wedding.

sugar, 1 teaspoon cornstarch and 7 teaspoons grated chocolate into a saucepan, add 1 quart milk, 3 beaten yolks of eggs, and a teaspoon vanilla extract. Stir over the fire until boiling, then remove and beat until creamy. Place on ice until ready to serve. Serve with sugar and whipped cream. This makes enough for 8 people.

Marbled Cornstarch Blanc-Mange:—Put 1 tablespoon sweet grated chocolate into a saucepan with 1 tablespoon milk. Rub with a spoon until the chocolate is dissolved, then set aside. Mix in a basin 3 tablespoons cornstarch, 3 tablespoons sugar, 1 teaspoon vanilla extract, and moisten with a little cold milk. Put 1½ pints milk on to boil and pour over the cornstarch mixture, stirring all the time. Pour the whole back into the saucepan and boil over boiling water for 5 minutes or more, stirring constantly. Stir in the chocolate roughly to marble it, and pour at once into a wet mould. Set in a cool place, and when firm turn out and serve with cream.

Prune and Almond Jelly:—Stew 1 lb. prunes, remove stones, cut the fruit into pieces and lay in a mould with strips of

blanched almonds. Cover with the prune juice flavored with lemon, sweeten to taste with sugar and water syrup to which has been added while warm ½ tablespoon gelatine to the pint of liquid. Repeat the layers of fruit and nuts as the jelly sets, till the mould is full. Serve with whipped cream.

Syrup (nice for serving with muffins or Johnny cake):—1 cup sugar, ½ cup water, 1 teaspoon butter. Boil the sugar with the water until it thickens slightly, then add the butter. Serve hot.

Orange Charlotte:—½ box gelatine, ½ cup cold water, ½ cup boiling water, 1 cup sugar, juice of 1 lemon, 1 cup orange juice and pulp, whites of 3 eggs. Line a glass dish with sections of orange or slices of stale cake. Soak the gelatine in the cold water until soft, then pour on the boiling water, and add the sugar and lemon juice. Strain the orange juice and pulp, then add with a little of the grated rind. Set all in a pan of very cold water. When it begins to harden beat until light. Add the beaten whites and beat until stiff enough to drop. Pour into a mould, set in a cold place to stiffen. Serve with whipped cream.

Fig Whip:—Cut 5 cooked figs in small bits; beat the whites of 4 eggs dry, adding gradually ½ cup sugar and ¼ teaspoon salt. Fold in the figs, turn the whole into a buttered-and-sugared dish, and bake with the dish in a pan of boiling water. The water should not boil while cooking. When firm in the center remove and serve hot with boiled custard made of 1 pint milk, 4 yolks of eggs, sugar and salt to taste.—Boston Cooking School.

Prune Jelly:—Wash ½ lb. good prunes, add ½ cup water, put on cover and simmer until soft. Remove the stones and place the prunes in wet moulds. Put 1 heaping tablespoon powdered gelatine into a saucepan; add 1 cup boiling water, 1 cup of fruit juice of any kind, strained juice of 2 oranges, 1 tablespoon lemon juice. Stir over the fire until the gelatine is dissolved, sweeten to taste and strain over the prunes. Let set for several hours in a cold place. Serve with whipped cream.

Fig Jelly:—Wash 1 lb. figs, cover with cold water and soak over night. Put on the fire in the water in which they were soaked and stew gently until figs are soft. Drain off the liquid; measure it, and to each pint add juice of 2 lemons and ½ cup granulated sugar, and beat in ½ box gelatine that has been soaked in a small cup of water for two hours. Stir until the gelatine is dissolved, but do not let it boil. Strain and pour into moulds wet with cold water, with the stewed figs placed in the bottom. Set aside in a cold place until firm. Serve with whipped cream.

Rhubarb and Orange Marmalade:—Wash the rhubarb and cut it into inch lengths, add just enough water to start the cooking, and stew to a pulp. While this is cooking wash the oranges and remove juice and pulp. Measure the rhubarb and add an equal quantity of the orange, also as many cups of heated sugar as there are of the fruit mixture. Return to the fire, and cook slowly for ½ hour, then add the grated rind of half the oranges and continue the cooking until thick. Pour into glasses and cover with melted paraffin.

### The June Wedding.

"Rose-time," the time of times for weddings, will be here in a fortnight, and no doubt many of the invitations have already been sent out nicely engraved (or neatly written, if engraving was not practicable) on fine white or cream unglazed paper, in form something like this:

Mr. and Mrs. John Smith  
request the pleasure of your presence  
at the  
marriage of their daughter,  
Mary Eva,  
and (or "to")  
Mr. James Stanley Brown  
on  
Wednesday, June the twenty-sixth, at  
twelve o'clock,  
Lakeview Farm.

In case of a church wedding, the name of the church has, of course, been given

instead of that of the farm; and where guests are expected to remain for a wedding reception or breakfast, an engraved or written card has been enclosed with the invitation, reading thus:

Reception  
from half-past one o'clock.

Lakeview Farm.

R. S. V. P.

The R. S. V. P. ("répondez si il vous plait," meaning "answer if you please") is sometimes omitted, as it is taken for granted that one will send a written acceptance at once on receipt of the invitation to a reception.

Occasionally instead of enclosing a separate card with invitation to the reception, the very convenient plan of placing this second invitation in smaller lettering at the bottom of the page, is followed, thus: "and afterwards at breakfast, Lakeview Farm."

If one receives an invitation to the church only no reply is necessary.

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By this time, too, the bride's trousseau is all ready. If her parents are rich, and she is marrying a rich man and will have an elaborate wedding, she has probably chosen white satin for her wedding dress, and will wear a lace veil. If, however, such is beyond her means, it is to be hoped that she has shown her good taste by choosing pretty embroidered French muslin, or silk mull, or simple white silk (a young bride's dress should always be white—ivory white if dead white is not becoming). A veil does not look well where no train is worn, but a very slight train on a simple dress will give excuse for wearing a tulle veil, caught up a little with white flowers or a pearl ornament. Most brides prefer to wear a veil of some kind.

With a bride attired richly the bridesmaids may wear light silks, or mousseline de soie over hats, and picture hats; when the bride dresses more simply they may wear white organdy over slips of pink or yellow or pale green, with picture hats to match. All, of course, carry flowers.

When the bride wears a suit, it should be of rather light-colored cloth, with picture hat to match, white or very light colored gloves, and black shoes. In this case a veil may be omitted, as it is in very bad taste to go away on a train wearing a conspicuous white veil, as some do. If one is worn at all, for the purpose of keeping the hair tidy, it should be fine, thin, and as inconspicuous as possible. During the ceremony, however, the bride may carry quite as fine a bouquet as though she were attired in satin and lace; or she may prefer instead a dainty little white prayer-book.

As a rule, the bride who chooses to wear a suit has but one bride's maid, the maid of honor, who also wears a suit and hat.

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When the bride dresses in white and wears a veil she usually has two bridesmaids and a maid of honor, the bridegroom being supported by the best man and two ushers. More bridesmaids and ushers may be invited to act, of course, if one chooses.

Shortly before the hour announced for the ceremony the guests arrive at the church, and are shown by the ushers to their seats, the bride's relatives being placed at the left of the center aisle, the groom's at the right, and the rest of the guests anywhere in the rest of the space which has been ribboned off.

As the moment arrives the groom and his best man follow the clergyman and take up their places. Then, as the wedding-march sounds the rest of the bridal party enter, first the ushers two and two, then the bridesmaids two and two; the maid of honor follows, walking alone, then the bride enters leaning on the left arm of her father or nearest male relative, and wearing her veil down. The party must progress slowly, as undue haste would look rather ridiculous. As the ushers and bridesmaids reach the front of the church they separate, and form a semi-circle, the ushers going to the right of the best man, the bridesmaids stepping to the left and leaving room for the bride. The father hands her to the groom, then steps a little back; after giving her away in the service he retires to a front pew.

In coming out of the church the bride

walks at the right of the groom, with her veil thrown back, and the two lead the bridal party.

If a reception is held at the home of the bride's mother, the bride and groom drive there quickly in the carriage, which the groom has provided. The bridesmaids and ushers and the bride's parents also hurry home, and all take up their places, the parents of the bride just inside of the drawing-room door to welcome the guests, the bride and groom a little farther back, under a floral decoration if so chosen, with the bridesmaids near. The ushers, meanwhile busy themselves, introducing people and seeing that everything goes smoothly.

When the receiving is over the bride and groom lead the way to the dining-room, the immediate bridal party following, then the rest, the older ones first. The men may take in the ladies, or the ladies may enter in groups, as preferred. The host, as a rule, takes the groom's mother with him, while the groom's father walks with the bride's mother, but often the bride's mother, as hostess, sees that all the guests are attended to before she sits down.

If one chooses, the wedding breakfast (it is called "breakfast" until two o'clock) may be in buffet style, the guests standing about, the men serving the ladies from a well-filled and beautifully decorated table—sandwiches, salads, olives, salted nuts, ices, cakes, crystallized fruits, tea and coffee,—but it is certainly more comfortable to have small tables; with chairs, so that all may sit, and this is the style sure to be most popular in the country.

The bridal table must, of course, be decorated with white flowers. At it the bride and groom, best man and ushers, bridesmaids, parents of bride and groom, and the clergyman and his wife may sit; or the parents of bride and groom may sit at a separate table with guests of honor; or the bride's father and mother, as host and hostess, may choose to wait until all guests have been placed. This is quite a matter of taste and convenience, depending upon circumstances, such as the age of the parents, or whether there are grown-up sons and daughters to attend to details.

Pieces of the black wedding cake are distributed about the tables, the ornamental portion of the cake occupying a place of honor on the bride's table. Pieces are also placed in tiny white boxes, or tied in white crêpe paper napkins with white ribbon for the guests to take home. A new and rather pretty fad is to have a pure white cake, called especially the "bride's" cake, with soft icing. She cuts this into pieces with her ribbon-decked knife, and the pieces are then passed about.

Before the bride leaves the house for the train she usually divides her bouquet into parts and throws them at the bridesmaids, the one who picks the first piece up being the one who is supposed to be the next bride.

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The mode of procedure for a home wedding is precisely the same as at church, an aisle for the bridal party being drawn with ribbons through the drawing-room or across the lawn to the arch of flowers and greenery which has been prepared for the ceremony. The clergyman, of course, stands before the archway during the ceremony, the bridal party thus standing with their backs to the guests; immediately afterwards the former steps out of his place, and the bride and groom take it, turning about to receive congratulations and best wishes. The bride's parents may now stand next to the bride (who is now to the right of her husband), with the bridesmaids next to them; the groom's parents may stand at his left. At an afternoon wedding ladies retain their hats. If in the evening they go without them.

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Presents are displayed in a room set apart for the purpose, but it is now customary to remove the cards. Presents, by the way, should be sent to the bride as soon as possible after invitations are received, accompanied merely by a card bearing one's name. The bride should acknowledge each at once by a friendly personal note written on dainty paper.

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The groom provides his own carriage, in which he and the bride are driven from the church; he also provides the flowers and presents the best man and ushers

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with neckties, gloves, and souvenir pins, or cuff-links. As a rule he gives the bride a pretty bit of jewelry, which is the only adornment of the kind that she wears on her wedding-day. All other expenses are paid by the bride's parents. A bride usually presents her bridesmaids with pretty gifts as souvenirs of the occasion. If the wedding is to be on the lawn pretty silk parasols are a dainty and appropriate choice. Little pins of enamelled forget-me-nots, or strings of coral beads will also be appreciated.

Just one more point: Rice should never be thrown at a wedding party at a railway station; indeed, in some places the practice has been positively forbidden, as accidents have been caused by the slipperiness of the rice on the platform so close to moving trains. Confetti may be used, but the wishes of the bride should be considered even in this. Such hoodlumism as throwing old boots, tying them to the back of the groom's carriage, tagging the suit-cases of bride or groom, or in any way making the time one of buffoonery, is distinctly vulgar. Nothing of the kind is ever seen among well-bred people.

**The Scrap Bag.**  
MICE.

Place a piece of gum camphor in a drawer in which you have anything that will attract mice, and they will not come near it.

**CULTIVATING FLOWERS.**

Stir the surface of the soil about the growing plants frequently, but be careful not to cut deeply into the soil with either hoe or weeder, or you may injure the tender roots.

**COOKING SPOON.**

If you have not a cooking spoon provided with a hook, bend the end of the handle of one into a hook, with wire pliers. There will then be no danger of the spoon sliding into the kettle, as it may be hung on the edge of the dish.

**UNDERWEAR STRINGS.**

Use narrow white tape or a crocheted cord with tassels for running through the beading of underwear, then you will not have the trouble of removing the drawing strings every wash-day. Colored ribbons are not now in favor for corset-covers.

**PROLONGING USABLE RHUBARB.**

Do not allow the blossom stalks to grow and the rhubarb will be fit to use practically all summer. Rhubarb may be mixed with almost any other fruit for canning or marmalade.

**The Beaver Circle.**

**OUR SENIOR BEAVERS.**

[For all pupils from Senior Third to Continuation Classes, inclusive.]

**A Summer Song.**

(By Alice Van Leer Carriek.)

Butterfly, flutter by, skimming the clover,  
Bee, buzz your drowsy song, over and over.

Tell of the summer sun,  
Sing that the winter's done.  
Flutter by, butterfly, hum, golden rover!

Deep in the meadows the daisies are  
swinging,  
out of the thicket a thrush-song is  
ringing.

Mellow wind, yellow light,  
All the world's warm and bright,  
Everything summer's dear praises is sing-  
ing!

**The Beaver Circle Garden Competition.**

Dear Beavers,—There are now forty entries for the Garden Competition, so I suppose forty girls and boys are now very busy in the evenings, watering, and pulling out weeds, and stirring up the surface of the soil so that the plants may grow better. By the way, if any of you use a hoe or a weeder, be careful not to cut down too deeply into the soil, as by so doing you might injure the roots. Stirring the soil to a depth of an inch is usually sufficient to form a dust-mulch on top. When the plants are large, you may cut a little deeper.

And now, won't you please keep in mind all the time that you are to write a composition about your garden in the fall? Here are a few questions that you may answer when writing it.

What seeds did you plant? Were they large or small, and how deep did you plant them?

What did the various plants look like when coming up?

How did you cultivate your garden? What weeds did you find hardest to keep out of your garden?

What insects did you notice in it, and what were they doing? (Pay attention to butterflies, caterpillars and bees.)

Did you notice any birds and hear any bird-songs while working in your garden? Name the birds if you can, and tell which you like best.

Was there a toad in your garden? If so, tell all you can about him.

**Senior Beavers' Letter Box.**

Dear Puck and Beavers,—This is my second letter, and papa has been taking "The Farmer's Advocate" for sixteen years. Well, I guess I will tell you about a funny-looking cocoon, and the pretty butterfly that came out yesterday. I picked it up in a little bush alongside the road on a hazel-bush twig. I am going to send you the cocoon and butterfly so you can tell me about it. When I brought it home I hung it in the window. Just yesterday, while mamma was sewing under the window she heard something fluttering, so she picked the insect up and showed it to us. Please, Puck, if it is not dead when you are done examining it, and is not harmful, will you please free it?

Well, now, I guess I will tell you something else. We have eight hens sitting and two have had little chickens. We have two little calves, and ten cows milking; we go to the factory, but not to school, because our teacher is sick. We have a colt and are training her to the saddle. I guess I had better close and leave room for the others. Wishing the Beavers every success.

ETHEL MAY LAMB (Class Sr. IV.),  
Jessop's Falls, Ont.

It was a moth, not a butterfly, that came out from the cocoon, Ethel. Don't you remember that, last summer, we took up the difference between moths and butterflies? Well, your specimen was a *Polyphemus* (female), and a beauty. It was very much alive when it got here, so I let it go. You are a kind little girl, Ethel, to be so anxious not to hurt even a moth.

Dear Puck,—This is my first letter to the Beaver Circle. We have taken "The Farmer's Advocate" for as long as I can remember. Now, I am going to tell you about my garden last year. The first w-

ers, I had sweet peas, nasturtiums, pansies, cemetery plant, and orange lily, and a lot of house-plants. It will take up too much room to tell you all the kinds of vegetables I had.

Now, Puck, if I am not too late, I would like you to put my name down on the list for the Garden Competition.

I have eleven little chickens, and one calf, and a colt. I think I will close, wishing the Beaver Circle every success.

GLADYS ARNOLD (age 12).

Virginia P. O.

You are No. 38 on the Garden Competition list, Gladys.

Dear Puck and Beavers,—I live on a farm a few miles from London, and we have a fine view of the city. I am going to try my Entrance examination in June.

We have a garden at school, 57 x 24 feet, and each scholar has a plot 8 x 5½ feet. We have three kinds of vegetables and two of flowers in each one. In my plot I have a border of lettuce, and at the back a row of climbing nasturtiums. For vegetables, I have onions and salsify, and in front of them a row of double poppies. Our school-garden was considered the best in this division last year.

We have an old gray pony. We call her Spot. We have had her for twenty years. She has a colt almost two years old, and we call it July. She has another two days old, and we call him Prince. We have thirty-five little chickens, and eight more hens sitting.

We did not set the incubator, because we always have had luck. I would like to try in the Garden Competition. Are there any special rules to go by?

GERTRUDE O'DELL,  
(Age 11, Book IV.)

R. R. No. 9, London, Ont.

Your name was entered as No. 36, Gertrude. There are no rules other than those which have been given already in the Beaver Circle.

Dear Puck and Beavers,—This is my first letter to your Circle. We have taken "The Farmer's Advocate" for some time, and I enjoy reading the letters. We could not do without it. I go to school nearly every day. I live about half a mile from school. My teacher's name is Miss Lambden. I like her. I hope I am not too late to enter the Garden Competition. I hope this will escape the

monster w-p. b. Will you kindly tell me what my number will be, and when the Beavers' plant their seeds?

RALPH BARNETT  
(Age 12, Sr. III.)

Curries, Ont.

Your number is 37. I think probably your mother told you when to plant the seeds. You see we could not publish your letter sooner.

Dear Puck,—This is the first time I have ventured to write a letter to your cozy little Circle, but I could not resist the temptation of writing any longer. I shall venture to describe some birds, as I am very fond of nature study.

The bluebird of America is one of the prettiest and loveliest of all the feathered tribe, and is a great favorite among lovers of nature study. This bird appears in Canada early in the spring, as soon as the snow begins to melt, but sometimes a sharp frost or heavy snow will drive it back to its hiding-place.

The bluebird builds its nest in the hollows of decaying trees, and such places. The bluebird's reason for building its nest in these places is that the young birds may be sheltered from the cold and rain, for the bluebird knows that it must guard against the weather. There are generally from four to six eggs, and their color is a pale blue. Two broods are usually reared, and sometimes a third, in a single season. This bird feeds on insects, spiders, small worms, etc., and in the autumn feeds on soft fruits and seeds.

The bluebird has very interesting habits; one of these is the great care which it takes of its young. It sits near them singing its sweetest songs, and flies off now and then for a caterpillar to feed them with. Many people make little nest-boxes for the bluebird, with a little hole in the side for entrance. The little creature is always grateful, and accepts the home thus offered it, thanking the giver with its cheerful songs.

The blackbird is another interesting bird. Its color is jet black, and it derives its popular name from the black plumage and orange-colored bill.

It possesses a great love for fruit, and in the autumn ravages fruit-gardens in a most destructive manner, picking off the best and choicest fruit for itself and throwing the rest away. It destroys other birds' nests and eats the eggs. It generally sings in the daytime, but sometimes sings at night, as the nightingale does.

I think I will close now, hoping that this letter will escape the waste-paper basket.

MYRTLE W. MOORE  
(Age 12, Sr. IV. Class).

Lakeland, Ont.

Dear Puck and Beavers,—This is the first time I have written to the Beaver Circle. My father and mother rented their farm and moved to the town of Stayner. I am staying with my grandparents, on a farm of 150 acres. I go to the same school as I went to before. The school is only a little piece from grandma's. I can go to school in about five minutes.

I am trying for the Junior IV. Book at summer holidays.

Grandpa has taken "The Farmer's Advocate" for years. I enjoy reading the good letters that are printed so much that I thought I must make an attempt, anyhow; whether it will be good or not I do not know. I will stop now, as my letter is getting long, and give someone else a change. Hoping this letter will escape the w-p. b. Good-bye.

VIOLA M. DOAN (Sr. III. Book).  
Stayner P. O., Ont.

Dear Puck and Beavers,—I have been a reader of your Circle ever since I could read. I like reading the letters which the Beavers write. My teacher's name is Miss Boufford, and I like her very much. She is not qualified, but that doesn't make any difference to the scholars. My best subjects are grammar and composition. I have good times at school with all my friends. I did not go to school nearly all winter. I have nearly two miles to walk to school. I like to go to school. Our school is large, and it is very cool in summer. We have some shade trees all around the fence. I have one little sister and one little brother going to school. My sister's name is Nora, and my brother's

name is Francis. They did not go to school all winter on account of the weather being so cold.

Well, I will close my letter, wishing the Beavers every success.

RITA COYLE (age 11, Class IV.)  
Auld, Ont., R. R. No. 4.

RIDDLES.

What crow is most useful to man?  
Ans.—Crow-bar.

Little Miss Minifore,  
In a white pinafore;  
The longer she stands  
The shorter she grows.

Ans.—A candle. Sent by Effie Sandiland, Badjeros, Ont.

Riddle, iddley, iddoly oh! As I went up the street I met little Tommy Yoe; he has a red coat and a staff in his hand, and a stone in his throat. Ans.—A cherry. Sent by Jennie Pocock, Fordwich, Ont.

The Windrow.

The editorship of the "Review of Reviews" has been taken over by Mr. Alfred Stead, son of Mr. W. T. Stead, former editor, who perished when the Titanic went down.

Robert Hamerling, an Austrian who writes in Germany, is the greatest living epic poet; Thomas Hardy (English) is usually regarded as the greatest living novelist; Selma Lagerlof (Sweden), as the greatest living woman writer.

The tallest "sky-scraper" in the world, the Woolworth Building in New York, will be, when completed, 55 stories tall, the top reaching a height of 750 feet above the sidewalk. It will be lightning-proof.

"The joy of work is only understood by the few in modern times; in ancient times, and through the ages, it was universal. The necessity for labor being recognized, it did not pall upon the laborer, but was carried out in fullest sympathy with its need, with the result that everywhere the irksomeness of work was subordinated to its delights. We of this age go about our work in a very different spirit, without the divine interest for it, and therefore without its joy. Our process is to store up the economic results of work, and then out of this store to purchase the pleasures of life. It is a deadening process. It comes too late, and the pleasures are far to seek; and if we turn to the lessons of history we shall find that the old joy of work has left the civilized world, and made it so much the poorer in mental and physical balance."—Sir Laurence Gomme, in Cornhill Magazine.

Of Wilbur Wright, the famous aviator and inventor of the aeroplane, who died recently of appendicitis at Dayton, Ohio, New York Independent says: "Wilbur Wright was content to do things, but, the shyest of men, he kept himself silent and hidden, whether perfecting his invention in the wilds of North Carolina, or in Paris or Rome, avoiding the applause of kings. There are great men who love the limelight and can pour forth torrents of words which delight the listening crowds, men who can also do things and are quick to tell that they did them, and how much more they can and will do. They are the popular idols who draw behind them a trail of welcome glory; men who, like Caesar, make sure to publish their own annals. Wilbur Wright was none of these. His was the greatest of modern victories, but not in America and not in Europe did he make one curve of flight for sensational effect. He was never interviewed. His confidants were his brother Orville and his sister Kate. The glare of publicity and praise he could not endure, for he was a simple, great man, so simple that he refused even in France and Italy to give exhibitions of flight on the Sabbath day, so retiring that even the townspeople of Dayton hardly knew him and what he was doing; and yet this plain, humble bicycle-maker will hold the world's memory and fame when statesmen are for-

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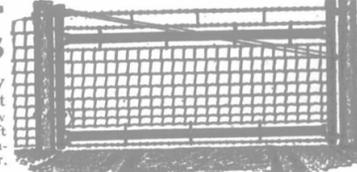
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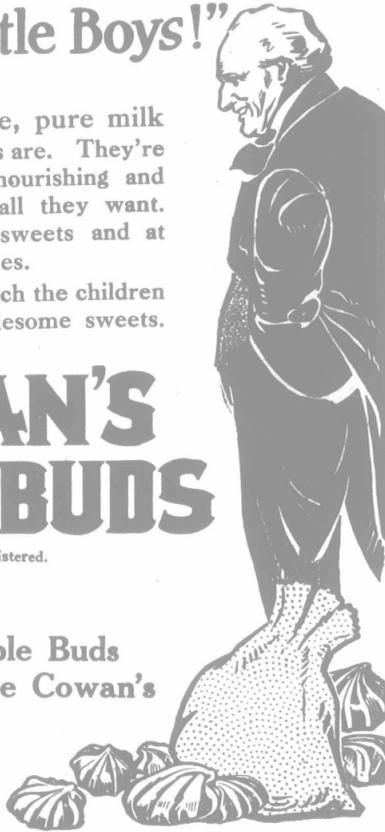
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ing-suit which he had on when Marguerite last saw him at Richmond, so many hours ago. As usual, his get-up was absolutely irreproachable, the fine Mechlin lace at his neck and wrists was immaculate in its gossamer daintiness, his hands looked slender and white, his fair hair was carefully brushed, and he carried his eyeglass with his usual affected gesture. In fact, at this moment, Sir Percy Blakeney, Bart., might have been on his way to a garden-party at the Prince of Wales', instead of deliberately, cold-bloodedly running his head in a trap, set for him by his deadliest enemy.

He stood for a moment in the middle of the room, whilst Marguerite, absolutely paralyzed with horror, seemed unable even to breathe.

Every moment she expected that Chauvelin would give a signal, that the place would fill with soldiers, that she would rush down and help Percy to sell his life dearly. As he stood there, suavely unconscious, she very nearly screamed out to him,—

"Fly, Percy!—'tis your deadly enemy!—fly before it be too late!"

But she had not time even to do that, for the next moment Blakeney quietly walked to the table, and, jovially clapping the cure on the back, said in his own drawly, affected way,—

"Odds fish! . . . er . . . M. Chauvelin . . . I vow I never thought of meeting you here."

Chauvelin, who had been in the very act of conveying soup to his mouth, fairly choked. His thin face became absolutely purple, and a violent fit of coughing saved this cunning representative of France from betraying the most boundless surprise he had ever experienced. There was no doubt that this bold move on the part of the enemy had been wholly unexpected, as far as he was concerned; and the daring impudence of it completely nonplussed him for the moment.

Obviously he had not taken the precaution of having the inn surrounded with soldiers. Blakeney had evidently guessed that much, and no doubt his resourceful brain had already formed some plan by which he could turn this unexpected interview to account.

Marguerite up in the loft had not moved. She had made a solemn promise to Sir Andrew not to speak to her husband before strangers, and she had sufficient self-control not to throw herself unreasonably and impulsively across his plans. To sit still and watch these two men together was a terrible trial of fortitude. Marguerite had heard Chauvelin give the orders for the patrolling of all the roads. She knew that if Percy now left the "Chat Gris"—in whichever direction he happened to go—he could not go far without being sighted by some of Captain Jutley's men on patrol. On the other hand, if he stayed, then Desgas would have time to come back with the half dozen men Chauvelin had specially ordered.

The trap was closing in, and Marguerite could do nothing but watch and wonder. The two men looked such a strange contrast, and of the two it was Chauvelin who exhibited a slight touch of fear. Marguerite knew him well enough to guess what was passing in his mind. He had no fear for his own person, although he certainly was alone in a lonely inn with a man who was powerfully built, and who was daring and reckless beyond the bounds of probability. She knew that Chauvelin would willingly have braved perilous encounters for the sake of the cause he had at heart, but what he did fear was that this impudent Englishman would, by knocking him down, double his own chances of escape; his underlings might not succeed so well in capturing the Scarlet Pimpernel, when not directed by the cunning hand and the shrewd brain which had deadly hate for an incentive.

Evidently, however, the representative of the French Government had nothing to fear for the moment, at the hands of his powerful adversary. Blakeney, with his most inane laugh and pleasant good-nature, was solemnly patting him on the back.

"I am so demmed sorry . . ." he was saying cheerfully, "so very sorry . . . I seem to have upset you . . . eating soup, too . . . nasty, awkward thing, soup . . . er . . . Begad!—a friend of mine died once . . . er . . . choked . . . just like you . . . with a spoonful of soup."

And he smiled shyly, good-humoredly, down at Chauvelin.

gotten and emperors and kings are distinguished in history only by the numbers attached to their names. Such men as Wilbur Wright do not need to blazon themselves with medals and orders of distinction, or to herald their claims to glory, for the world is their country, and the world takes care of their fame."

**The Scarlet Pimpernel.**

A STORY OF ADVENTURE.

By Baroness Orczy.

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(Continued from last week.)

CHAPTER XXV.

The Eagle and the Fox.

Marguerite's breath stopped short; she seemed to feel her very life standing still momentarily whilst she listened to that voice and to that song. In the singer she had recognized her husband. Chauvelin, too, had heard it, for he darted a quick glance towards the door, then hurriedly took up his broad-brimmed hat and clapped it over his head.

The voice drew nearer; for one brief second the wild desire seized Marguerite to rush down the steps and fly across the room, to stop that song at any cost, to beg the cheerful singer to fly—fly for his life, before it be too late. She checked the impulse just in time. Chauvelin would stop her before she reached the door, and, moreover, she had no idea if he had any soldiers posted within his call. Her impetuous act might prove the death-signal of the man she would have died to save.

"Long to reign over us,  
God save the King!"

sang the voice more lustily than ever. The next moment the door was thrown open and there was dead silence for a second or so.

Marguerite could not see the door; she held her breath, trying to imagine what was happening.

Percy Blakeney on entering had, of course, at once caught sight of the cure at the table; his hesitation lasted less than five seconds, the next moment Marguerite saw his tall figure crossing the room, whilst he called in a loud, cheerful voice,—

"Hallo, there! no one about? Where's that Red Brazero?"

He wore the magnificent coat and rid-

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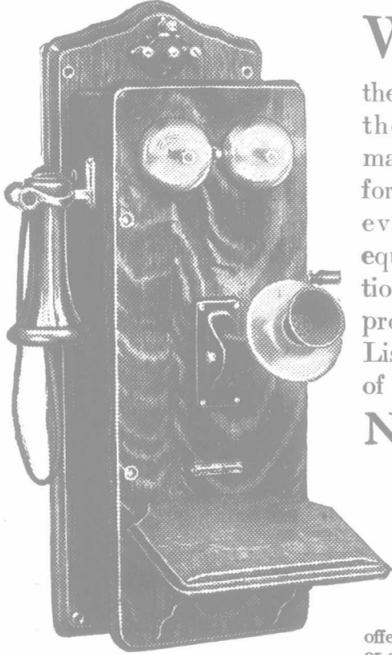
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"Odd's life!" he continued, as soon as the latter had somewhat recovered himself; "heastly hole this . . . ain't it now? La! you don't mind?" he added, apologetically, as he sat down on a chair close to the table and drew the soup tureen towards him. "That fool Brogard seems to be asleep or something."

There was a second plate on the table, and he calmly helped himself to soup, then poured himself out a glass of wine.

For a moment Marguerite wondered what Chauvelin would do. His disguise was so good that perhaps he meant, on recovering himself, to deny his identity; but Chauvelin was too astute to make such an obviously false and childish move and already he too had stretched out his hand and said pleasantly,—

"I am indeed charmed to see you, Sir Percy. You must excuse me—h'm—I thought you the other side of the Channel. Sudden surprise almost took my breath away."

"La!" said Sir Percy, with a good-humoured grin, "it did that quite, didn't it—er—M.—er—Chaubertin?"

"Pardon me—Chauvelin."

"I beg pardon—a thousand times. Yes—Chauvelin of course. . . Er . . . I never could cotton to foreign names. . ."

He was calmly eating his soup, laughing with pleasant good-humour, as if he had come all the way to Calais for the express purpose of enjoying supper at this filthy inn, in the company of his arch-enemy.

For the moment Marguerite wondered why Percy did not knock the little Frenchman down then and there—and no doubt something of the sort must have darted through his mind, for every now and then his lazy eyes seemed to flash ominously, as they rested on the slight figure of Chauvelin, who had now quite recovered himself and was also calmly eating his soup.

But the keen brain, which had planned and carried through so many daring plots, was too far-seeing to take unnecessary risks. This place, after all, might be infested with spies; the innkeeper might be in Chauvelin's pay. One call on Chauvelin's part might bring twenty men about Blakeney's ears for aught he knew, and he might be caught and trapped before he could help, or, at least, warn the fugitives. This he would not risk; he meant to help the others, to get them safely away; for he had pledged his word to them, and his word he would keep. And whilst he ate and chatted, he thought and planned, whilst, up in the loft, the poor, anxious woman racked her brain as to what she should do, and endured agonies of longing to rush down to him, yet not daring to move for fear of upsetting his plans.

"I didn't know," Blakeney was saying jovially, that you . . . er . . . were in holy orders."

"I . . . er . . . hem . . ." stammered Chauvelin. The calm impudence of his antagonist had evidently thrown him off his usual balance.

"But, la! I should have known you anywhere," continued Sir Percy, placidly, as he poured himself out another glass of wine, "although the wig and hat have changed you a bit."

"Do you think so?"

"Lud! they alter a man so . . . but . . . begad! I hope you don't mind my having made the remark? . . . Demmed bad form making remarks. . . I hope you don't mind?"

"No, no, not at all—hem? I hope Lady Blakeney is well," said Chauvelin, hurriedly changing the topic of conversation.

Blakeney, with much deliberation, finished his plate of soup, drank his glass of wine, and, momentarily, it seemed to Marguerite as if he glanced quickly all round the room.

"Quite well, thank you," he said at last, drily. There was a pause, during which Marguerite could watch these two antagonists who, evidently in their minds, were measuring themselves against one another. She could see Percy almost full face where he sat at the table not ten yards from where she herself was crouching, puzzled, not knowing what to do, or what she should think. She had quite controlled her impulse by now of rushing down and disclosing herself to her husband. A man capable of acting a part, in the way he was doing at the present moment, did not need a woman's word to warn him to be cautious.

Marguerite indulged in the luxury, dear to every tender woman's heart, of looking

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at the man she loved. She looked through the tattered curtain, across at the handsome face of her husband, in whose lazy blue eyes, and behind whose inane smile, she could now so plainly see the strength, energy and resourcefulness which had caused the Scarlet Pimpernel to be revered and trusted by his followers. "There are nineteen of us ready to lay down our lives for your husband, Lady Blakeney," Sir Andrew had said to her; and as she looked at the forehead, low, but square and broad, the eyes, blue, yet deep-set and intense, the whole aspect of the man, of indomitable energy, hiding, behind a perfectly acted comedy, his almost superhuman strength of will and marvellous ingenuity, she understood the fascination which he exercised over his followers, for had he not also cast his spells over her heart and her imagination?

Chauvelin, who was trying to conceal his impatience beneath his usual urbane manner, took a quick look at his watch. Desgas should not be long; another two or three minutes and this impudent Englishman would be secure in the keeping of half a dozen of Captain Jutley's most trusted men.

"You are on your way to Paris, Sir Percy?" he asked carelessly.

"Odd's life, no," replied Blakeney, with a laugh. "Only as far as Lille—not Paris for me . . . beastly uncomfortable place Paris, just now . . . eh, Monsieur Chauvelin . . . beg pardon . . . Chauvelin!"

"Not for an English gentleman like yourself, Sir Percy," rejoined Chauvelin, sarcastically, "who takes no interest in the conflict that is raging there."

"La! you see it's no business of mine, and our damned government is all on your side of the business. Old Pitt daren't say 'Bo' to a goose. You are in a hurry, sir," he added, as Chauvelin once again took out his watch; "an appointment, perhaps. . . I pray you take no heed of me. . . My time's my own."

He rose from the table and dragged a chair to the hearth. Once more Marguerite was terribly tempted to go to him, for time was getting on; Desgas might be back at any moment with his men. Percy did not know that and . . . oh! how horrible it all was—and how helpless she felt.

"I am in no hurry," continued Percy, pleasantly, "but, la! I don't want to spend any more time than I can help in this God-forsaken hole! But, begged! sir," he added, as Chauvelin had surreptitiously looked at his watch for the third time, "that watch of yours won't go any faster for all the looking you give it. You are expecting a friend, maybe?"

"Aye—a friend!"

"Not a lady—I trust, Monsieur l'Abbe," laughed Blakeney; "surely the holy church does not allow? . . . eh? . . . what! But, I say, come by the fire . . . it's getting damned cold."

He kicked the fire with the heel of his boot, making the logs blaze in the old hearth. He seemed in no hurry to go, and apparently was quite unconscious of his immediate danger. He dragged another chair to the fire, and Chauvelin, whose impatience was by now quite beyond control, sat down beside the hearth, in such a way as to command a view of the door. Desgas had been gone nearly a quarter of an hour. It was quite plain to Marguerite's aching senses that as soon as he arrived, Chauvelin would abandon all his other plans with regard to the fugitives, and capture this impudent Scarlet Pimpernel at once.

"Hey, M. Chauvelin," the latter was saying airily, "tell me, I pray you, is your friend pretty? Demmed smart these little French women sometimes—what? But I protest I need not ask," he added, as he carelessly strode back towards the supper-table. "In matters of taste, the church has never been backward. . . Eh?"

But Chauvelin was not listening. His every faculty was now concentrated on that door through which presently Desgas would enter. Marguerite's thoughts, too, were centred there, for her ears had suddenly caught, through the stillness of the night, the sound of numerous and measured treads some distance away.

It was Desgas and his men. Another three minutes and they would be here! Another three minutes and the awful thing would have occurred: the brave eagle will have fallen in the ferret's trap! She would have moved now and screamed

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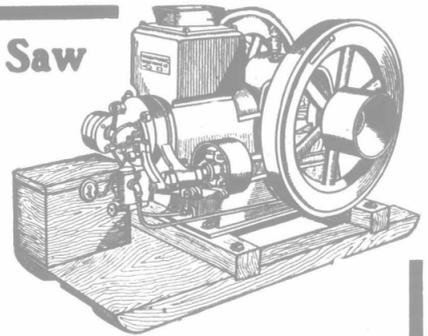
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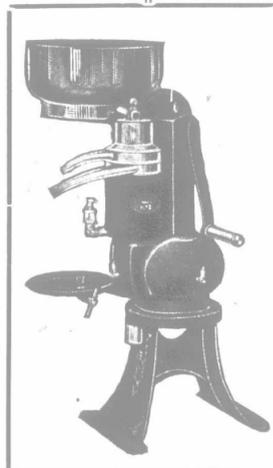
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Twentieth Century methods adopted in construction, large capacity, light running, perfect skimming, under a wide range of conditions.

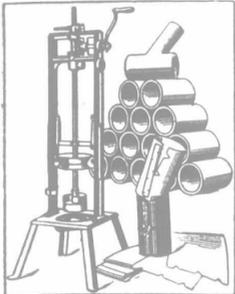
For catalogue No. 5, apply to:

**THE D. DERBYSHIRE CO.**  
 Brockville, Ont.

Or **G. A. GILLESPIE, Peterborough, Ont.**

BEST RESULTS ARE OBTAINED FROM ADVOCATE ADVERTISEMENTS.

**MAKE YOUR OWN TILE**



Cost \$4.00 to \$6.00 per 1,000

Hand or Power

Send for Catalog

Farmers' Cement Tile Machine Co. WALKERVILLE, ONT.

When writing mention this paper

**BOVRIL**

HELPS TO DIGEST OTHER FOODS

In addition to its palatable and highly nutritive properties, BOVRIL is a valuable aid to digestion when taken with other foods.

Mix a little with your soups, gravies, bouillions, sauces, stews, salads, etc.

but she dared not; for whilst she heard the soldiers approaching, she was looking at Percy and watching his every movement. He was standing by the table whereon the remnants of the supper, plates, glasses, spoons, salt and pepper pots were scattered pell-mell. His back was turned to Chauvelin, and he was still prattling along in his own affected and inane way, but from his pocket he had taken his snuff-box and quickly and suddenly he emptied the contents of the pepper pot into it.

Then he again turned with an inane laugh to Chauvelin,—

"Eh? Did you speak, sir?"

Chauvelin had been too intent on listening to the sound of those approaching footsteps to notice what his cunning adversary had been doing. He now pulled himself together, trying to look unconcerned in the very midst of his anticipated triumph.

"No," he said presently, "that is—as you were saying, Sir Percy—?"

"I was saying," said Blakeney, going up to Chauvelin, by the fire, "that the Jew in Piccadilly has sold me better snuff this time than I have ever tasted. Will you honour me, Monsieur l'Abbe?"

He stood close to Chauvelin in his own careless, debonnaire way, holding out his snuff-box to his arch-enemy.

Chauvelin, who, as he told Marguerite once, had seen a trick or two in his day, had never dreamed of this one. With one ear fixed on those fast-approaching footsteps, one eye turned to that door where Desgas and his men would presently appear, lulled into false security by the impudent Englishman's airy manner, he never even remotely guessed the trick which was being played upon him.

He took a pinch of snuff. Only he, who has ever by accident sniffed vigorously a dose of pepper, can have the faintest conception of the hopeless condition in which such a sniff would reduce any human being.

Chauvelin felt as if his head would burst—sneeze after sneeze seemed nearly to choke him; he was blind, deaf and dumb for the moment, and during that moment Blakeney quietly, without the slightest haste, took up his hat, took some money out of his pocket, which he left on the table, then calmly stalked out of the room!

(To be continued.)

**Save Work in Hot Weather.**

Save yourself work and give the children comfort by providing them with "rompers" in which they can play happily all day long. No ironing of frills and white undershirts for the little tots,—just "rompers." See the advertisement for these useful garments elsewhere in this issue—"Children's Wear" Company, Room 403, 518 St. Catherine St. West, Montreal.

**GOSSIP.**

**AYRSHIRE SALE AT SYRACUSE, N.Y.**

On Tuesday, June 25th, 1912, the Empire State and New England Ayrshire Clubs will hold their fourth annual consignment sale of Ayrshire cattle, at the New York State Fair grounds, Syracuse, New York. This will be one of the greatest sales ever held in America. One hundred head have been consigned by Frank S. Peer, a recent importation, headed by the champion bull, Spicy Sam. Other consigners are Penhurst Farm, Narbeth, Pa.; Branford Farms, Groton, Conn.; The Lotus Fields, West Berlin, Vt.; M. J. Karr & Son, Almond, N. Y.; S. S. Karr & Son, Almond, N. Y.; Matthew Hannah, Brownsville, Vermont; L. Huffstater, Sandy Creek, N. Y.; Jesse I. Carrier, Fulton, N. Y.; J. E. Converse & Co., Woodville, N. Y. This great sale offers a rare opportunity for Ayrshire breeders to strengthen their herds, and for those contemplating making a beginning in dairy stock to lay the foundation of a herd.

In addition to the cattle, fifty lots of Berkshire pigs will be offered. These pigs are selected from the noted herds of Hood Farm, Lowell, Mass.; Branford Farms, Groton, Conn.; and Kenotin Farms, Washington Mills, N. Y. They are all bred from prizewinners, and, like the Ayrshires, are top-notchers. See the advertisement elsewhere in this issue, and plan to attend the sale.



**FARM FOR SALE**—North half of Lot 1, Con. 2, Innisfil, consisting of 100 acres, all cleared; first-class grain farm; soil, clay and clay loam, well fenced and watered; hip-roof bank barn, 46x92, with shed attached; frame house, good orchard; within one mile of Cookstown, where are 3 churches, good school and market. Terms to suit the purchaser. If not sold, will rent in the fall. Orlando Lewis, Box 31, Cookstown.

**IMPROVED FARMS FOR SALE** in the famous County of Wellington, near Ontario Agricultural College. Jones & Johnston, Guelph.

**IMPORT YOUR BULBS and Perennial Plants** direct from Holland at half the regular prices. Get our import bulb list at once. Morgan's Supply House, London, Canada.

**SPLENDID TWO-HUNDRED ACRE FARM**, in the Township of Tuckersmith, County of Huron, within two miles of Seaforth, on G. T. R., in one of the best farming sections in Ontario; soil best clay loam; seventy-five acres under crop; in excellent state of cultivation; well tile drained; never-failing spring creek near buildings; substantial two-story brick dwelling, beautifully situated, heated by furnace, bath-room, hot and cold water, divided cellar, cement floor, long-distance telephone, orchard with spruce wind-break on west and north; good barns with stone stabling, all in first-class repair. Farm in splendid shape to make money raising crops, or would make fine dairy farm or stock farm; an ideal country home. Any one looking for a good farm would do well to see this. Apply to John T. Dickson, Seaforth, Ontario.

**THE HOUSEKEEPING EXPERIMENT STATION**, Cedar Gate, Darien, Conn., U.S.—Experts in The New Housekeeping.—Information on housekeeping problems furnished at lowest terms. Letters of not over 10 questions answered for \$1.00. Four Bulletins on Housekeeping, Efficiency, \$1.00. Alfred and Georgie Boynton, Child.

**VANCOUVER ISLAND, BRITISH COLUMBIA**, offers sunshine, mild climate; good profits for men with small capital in fruit-growing, poultry, mixed farming, timber, manufacturing, fisheries, new towns. Good chances for the boys. Investments safe at 6 per cent. For reliable information, free booklets, write Vancouver Island Development League, Room A, 23 Broughton Street, Victoria, British Columbia.

**WANTED**—A good steady man to work on farm. Edw. Bettger, West Monkton, Ont.

**WANTED**—A good steady man, married man preferred, steady employment on stock farm. L. W. Cooper, Fordwich, Ontario.

**WANTED**—Position as farm manager. Two years' experience at O. A. College; ten years' experience in breeding and exhibiting Shorthorns, Clydesdales and Standard-bred horses; best of references. Box Y, "Farmer's Advocate," London, Ontario.

**WANTED**—Experienced man or boy for general farm work by year or month. Good wages. Apply: G. S. Belton, The Grove, Ont.

**WANTED**—Herdsman for Shorthorns. Married man preferred. W. A. Dryden, Brooklin, Ontario.

**WANTED**—Cash paid for Military Land Grants in Northern Ontario. Please state price and location. Box 88, Brantford.

**WANTED**—An experienced girl for general housework; no washing. Wages, \$25.00 month. Write at once, Mrs. E. A. Wells, R. No. 1, Eden Bank Farm, Chilliwack, B.C.



**BUFF LEGHORN EGGS**—\$1.00 per fifteen. J. E. Griffin, Dunnville, Ontario.

**EGGS**—S.-C. White Leghorn, heavy layers and prizewinners, 75c. per 15. A batch guaranteed; \$3.50 per 100. Geo. D. Fletcher, Binkham, Ontario, Erin Sta.

**PEACHGROVE FARM**—Eggs reduced. Single-comb Reds, 75c. per 15; \$1.25 per 30; Indian Runners, \$1.00 per 15. Frank Bainard, Glanworth, Ontario.

**SINGLE-COMB WHITE LEGHORNS**—Disposition of our fine breeding pens. Five hens and cock, eight dollars. E. W. Burt, Paris.

**WANTED**—A peacock, must be nice bird. Reply, stating price and particulars to Dave A. Sturton, Ailsa Craig, Ontario.

**\$6.41 PER HEN**—Write for our beautifully illustrated catalogue. Photos from He. B. P. Rocks, White Wyandotten, R. C. R. 1, Reds, S.-C. White Leghorns. Eggs: \$1.50 per 15; \$2.75 per 30; \$7.00 per 100. L. R. Guild, Box 16, Rockwood, Ont.

**SINGLE COMB BROWN LEGHORNS** Eggs for hatching, \$1.00 per 15. Bred from good laying strains. WM. BARNET & SONS, LIVING SPRINGS Fergus station, Ont., G. T. R. and C. P. R.



**Canadian Industrial Exhibition**

**WINNIPEG**

**Visit Winnipeg for the Exhibition**

NATIONAL ENCAMPMENT BOY SCOUTS OF CANADA. Great Review of the Boy Scouts by H. R. H. the Chief Scout. \$30,000.00 RACING CARD. \$40,000.00 IN PRIZES. AEROPLANE RACES DAILY. Monoplane against Biplane. HORSE SHOW. Dog Show. Poultry Show. Stock Parade. GREATEST HIPPODROMIC SHOW Exhibition has had. HISTORIC PAGEANT: Selkirk's Settlement to Greater Winnipeg of To-day. CONSTANT ENTERTAINMENTS. HUGE ATTRACTIONS.

Special Engagement: "ROYAL BESSES O' TH' BARN BAND" Coming Direct Here from England.

**The Greatest Year of the West's Great Fair**

**JULY 10th - 20th 1912**

EXCURSIONS from EVERYWHERE

**POWER FOR THE FARM**

**\$33** Complete Ready to Run. power. Water cooled—fuel tank in base—comes wired up ready to run in three minutes after unloading. Big stock on hand—we can make immediate shipments—all sizes.

No extras to buy. Starts easy and delivers big Record Breaking Pumping Output. Here's a compact pumping outfit. Runs in any kind of weather. Engine is portable and can be used for many other jobs on the farm. Will pump 3000 gallons of Water for 5 Cents.

Uses Kerosene. Wonderful economy. Operates successfully on gasoline, alcohol, distillate, gas, kerosene (or coal oil.)

12 Sizes to Let us solve your Select From power problems. Tell us what you want an engine to do—we will give you an honest estimate of the best outfit for your needs.

30 Days No chance to lose—on Trial. Take all the risk—if engine is not satisfactory in every detail return it—we pay the freight. Ask about complete. Light outfit for country homes.

**GRAY MOTOR COMPANY**  
6335 U. S. Motors Bldg., Detroit, Mich.

**\$39**

# ◆ BINDER TWINE ◆

**650 FEET  
PURE MANILLA**

**9<sup>80</sup>**

**FOR  
100 LBS.**

Freight  
Paid in  
Ontario

**550 FEET  
MANILLA AND SISAL**

**7<sup>80</sup>**

**FOR  
100 LBS.**

Freight  
Paid in  
Ontario

**NOTE  
OUR LOW  
PRICES ON**

**GUARANTEED  
BINDER TWINE**

**TELL** your neighbors about our wonderfully low prices for Binder Twine this season. We will esteem the courtesy greatly if you will tell your friends who use binder twine, and tell them we will be glad to supply them with binder twine at the prices quoted in our Spring and Summer Catalogue.

**WHAT WE SAY OF THIS TWINE**

It is as good binder twine as is made, strong as any made, smooth and even as any made. We say this regardless of make, brand or price. Our 550 feet Diamond Brand Binder Twine is prepared with special care from the choicest manilla hemp and first quality long fibre sisal. Our Diamond 650 feet is made from pure manilla. Both are perfectly free from lumps, snarls, thin or uneven spots, and will measure full length to the pound. It is unusually strong, therefore every inch of it can be used.

**ORDER EARLY** Send in your order promptly—to-day if possible. If you do not want us to ship the twine at once, say so in your order. State when you will want it, and we will ship it so it will reach you on the day specified; but in all events we would suggest that you order before July 1st.



## SEE THE FARM IMPLEMENTS IN OUR SPRING & SUMMER CATALOGUE

**T**HE HAYING SEASON will soon be at hand, so be prepared for it. Our Mowers, Rakes, Tedders and Loaders are unexcelled in quality and our prices represent a big saving to you if you take advantage of them. If you have not received our Spring and Summer Catalogue write for a copy to-day. It is mailed FREE upon request. Note the big values we are offering on pages 206 to 211.

**SATISFACTION OR  
YOUR MONEY  
BACK**

**THE T. EATON CO** LIMITED  
TORONTO CANADA

**50 LBS. IS THE SMALLEST  
TWINE SHIPMENT  
WE MAKE**

## Get the Engine That is Easiest To Keep Running

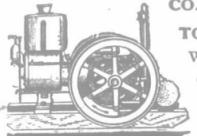
**SIMPLEST** engines to operate—that's the reason most farmers choose and recommend

**Chapman & Stickney Gasoline Engines**

No expert engineering knowledge needed to run them, no intricate parts that easily get out of order. If you want most service, write for our FREE books of "Engine Facts and Experiences."

**ONTARIO WIND ENGINE & PUMP CO., Limited**

**TORONTO**  
Winnipeg  
Calgary  
104



## MERCHANTS PRODUCE CO.

**Butter Eggs Poultry Honey Beans Apples Potatoes, etc.**

Our constantly growing trade demands large supplies of choice farm produce. We need yours. Write for weekly market letter.

**57 Front St. E., Toronto**  
Established 1889

Clerk (to Patent Medicine Man)—Here is a curious testimonial from one of our customers.

Medicine Man—Read it.  
Clerk—"Before I took your elixir my face was a sight. You ought to see it now. Send me another bottle for my mother-in-law."



## WINDSOR DAIRY SALT

**Is The Cheapest You Can Use**

not alone, because it is the purest and best salt for salting butter. But because it will salt more butter, pound for pound, than any other salt you can use.

The big creameries will tell you this—and show you tests to prove it. The Agricultural Colleges demonstrate this every day.

Every farmer and dairyman—who is getting good prices for butter—is using Windsor Dairy Salt.

It is pure—it makes beautiful butter—it works in quickly—and it is the cheapest in the end. Just try it yourself.

70D

### GOSSIP.

H. F. Hudson, of the Dominion Department of Agriculture, in referring to an article on the "Chinch Bug," which appeared in our issue of May 30th, page 1017, and who is now working on this insect, informs us that he would be pleased to hear, through "The Farmer's Advocate," from farmers, relative to the extent of injury to their pastures by the insect, and also as to whether or not its presence has been detected in any fields this spring.

Gerald Powell, commission agent and interpreter, Nogent-le-Rotrou, France, who is well known to horsemen in connection with the trade in Percheron and Belgian horses, informs us that all the winners at Calgary and Edmonton shows in the Percheron class, including both stallions and mares, with one exception, were bought through him. He has just made a shipment to L. T. Lyster, of Richmond, Que. This speaks well for Mr. Powell's judgment. Anyone wishing to import Belgians or Percherons from France should see his advertisement in another column.

Attention is called to the change of advertisement in this issue of Ormsby Grange Stock Farm, D. McEachran, proprietor, Ormstown, Que. Some extra choice Clydesdale fillies, and a two-year-old stallion just imported from A. & W. Montgomery, of which Mr. McEachran says, "This lot is the best I have yet had bought for me, and they are all in salable condition, having stood the journey well," are offered. This stock must be sold immediately to make room for a large importation in September, for the purchase of which Mr. McEachran is making a trip to Scotland in August. Look up the advertisement, and inquire about these good animals.

H. M. Vanderlip, breeder and importer of Large English Berkshires, Cainsville, Ont., in making a change of advertisement, writes: "Inquiries for Berkshires continue to pour in, and sales have been good, having sold over 50 head since January 1st, to as many satisfied customers. Most of our brood sows offered have been sold, and we only have two or three left due to farrow in September and October. Our stock at present comprises gilts and boars under six months from imported stock, and customers may rest assured of fair treatment. Money returned cheerfully if the purchaser is not satisfied with the selection made for him." See the advertisement in another column.

### BOOK REVIEW.

#### FEEDS AND FEEDING REVISED.

In 1898, Dean W. A. Henry, of the Wisconsin College of Agriculture, published his first edition of "Feeds and Feeding." In 1910, the tenth edition, revised and entirely rewritten, was issued. The twelfth edition of 10,000 copies has just come from the press, and the one before us is a volume invaluable as a reference, and containing results of innumerable experiments. All the information of former editions has been enlarged upon, revised, and rewritten. Later and better material supplants some of the experiments reported in earlier editions, and the new edition is a great improvement.

Feeds and Feeding is now printed in three languages. In 1907, a Portuguese translation by F. H. Draenert, Sao Paulo, Brazil, was published. A Russian translation prepared under the direction of Paul Dubrovsky, editor of "Agriculture and Forestry," by order of the Russian Government, for use of the Imperial Parliament of Agriculture, and for schools, was published at St. Petersburg, Russia, in January, 1912.

Practically all of the agricultural and veterinary colleges of America, and many of the secondary schools of agriculture, use Feeds and Feeding as a text and reference book. It is found in many of the public and school libraries, and thousands of copies have gone into the libraries of farmers and stockmen.

This latest edition may be procured through this office at \$2.25, postpaid.

# To Stock Breeders

## ANNOUNCEMENT OF EXTRA CASH PRIZES

### AT CANADIAN NATIONAL EXHIBITION, TORONTO, 1912

To every owner of an animal (horses, cattle, sheep or pigs) winning a first prize at the Canadian National Exhibition at Toronto, 1912, that was fed regularly with the original Molassine Meal, made in England, we will give

## \$25.00 IN CANADIAN GOLD

as an extra prize. The only condition is that the animal must have been fed regularly from July 1st, 1912, up to the time of the Exhibition on Molassine Meal to the extent of not less than three quarts per day.

The only proof we require is a certificate from your dealer stating the amount of Molassine Meal you purchased.

# MOLASSINE MEAL

The best feed for Live Stock known to Science

There is hardly a Farmer, Race Horse Trainer, Stock Breeder, Horseman, &c., in the British Isles that does not use Molassine Meal regularly for his stock

MOLASSINE MEAL is a food and replaces other food stuffs. It will keep all animals in good health. Prevents and eradicates worms.



The Original Molassine Meal, made in England, bears this Trade Mark on every bag.

**HORSES** will do more and better work, keep in better health and do not chafe from the harness so much when fed on Molassine Meal. Is equally suitable for heavy draft horses, hunters and race horses, and will bring Show Animals to the pink of condition quicker and better than any ordinary methods of feeding.

**MILCH COWS** will increase the flow and quality of their milk and make rich flavored butter and cheese, and will prevent any taint in the milk when cows are fed on roots.

**STOCKERS** can be fattened quicker on Molassine Meal than anything else. It aids and digests their other foods and keeps them free from worms.

**PIGS** will be ready for the market ten days to three weeks earlier when fed on Molassine Meal than when fed on any other food.

**SHEEP AND LAMBS**, fed on Molassine Meal, produce the finest mutton and meat obtainable, securing top prices.

**POULTRY** will fatten quicker and the hens will lay more eggs when fed on Molassine Meal.

MOLASSINE MEAL is put up in 100-lb. bags.

Order from your nearest dealer but be sure and get the genuine. Be sure that the trade mark is on the bag, as above.

### FREE SOUVENIR.

Fill in and mail the following coupon to-day and get one of our souvenir gifts free. Put a cross against the souvenir you would like to have.

To The Molassine Company, Ltd.,  
402 Board of Trade Building,  
Montreal, Que.,  
Distributors for Canada for Molassine Meal.

Please send me your free souvenir (Fountain Pen, Pocket Pencil or Match Box) also full particulars regarding Molassine Meal.

Name.....  
Occupation.....

Name of your feed dealer..... Address.....

**THE MOLASSINE COMPANY LTD., LONDON, ENG.**  
L. C. PRIME CO., LTD., Distributors, 402 Board of Trade, Montreal. 437

BEST RESULTS ARE OBTAINED FROM ADVOCATE ADVERTISEMENTS.

## CAUGHT HEAVY COLD.

### Left Throat and Lungs Very Sore.

There is no better cure for a cough or cold than Dr. Wood's Norway Pine Syrup.

It is rich in the lung-healing virtues of the Norway pine tree, and is a pleasant, safe and effectual medicine that may be confidently relied upon as a specific for Coughs, Colds, Bronchitis, Hoarseness, Sore Throat, Quinsy, and all Throat and Lung Troubles.

Mr. S. Monaghan, Charlottetown, P.E.I., writes:—"I certify that Dr. Wood's Norway Pine Syrup is an excellent medicine for coughs and colds. Last winter I contracted a heavy cold which left my lungs and throat very sore. I had to give up work and stay in the house for two weeks. I used several cough mixtures, but got no relief until a friend advised me to use Dr. Wood's Norway Pine Syrup. Three bottles entirely cured me, and I can recommend it as the best medicine for coughs."

Don't be imposed upon by taking anything but "Dr. Wood's" as there are many imitations of this sterling remedy on the market.

"Dr. Wood's" is put up in a yellow wrapper; three pine trees the trade mark; price 25 cents. Manufactured only by The T. Milburn Co., Limited, Toronto, Ont.



**WHITE STAR DOMINION**  
LARGEST STEAMERS FROM CANADA

**MONTREAL—QUEBEC  
LIVERPOOL**

SAILING every SATURDAYS by the  
"LAURENTIC" AND "MEGANTIC"

Fitted with every up-to-date device for comfort and safety. Elevators. Orchestras carried.

"TEUTONIC" & "CANADA"  
One Class Cabin (11) \$50 and \$55  
Third class passengers berthed in closed rooms only

THE ST. LAWRENCE IS  
THE SHORTEST ROUTE TO EUROPE  
ONLY 4 DAYS AT SEA

For full particulars apply to any Local Agent or Company's Offices, Montreal, Toronto or Winnipeg.

**INTERNATIONAL**  
SOLD On A spot Cash Guarantee

**GALL CURE**

Cures Horses While They Work or Rest  
PRICE 25¢ AT ALL DEALERS  
INTERNATIONAL STOCK FOOD CO. LIMITED, TORONTO

#### 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.

#### Messrs. Hickman & Scruby COURT LODGE, EGERTON, KENT, ENG.

EXPORTERS OF PEDIGREE

**Live Stock of all Descriptions**  
During the spring months we shall be shipping large numbers of Percherons, Shires, Belgians, Clydesdales, Suffolks, etc., and all those who wish to buy imported stock should write us for full particulars.

**For Sale** Valley Dale Shires, Imported and Canadian bred Stallions, Mares and Fillies from 1 to 7 years old. For description and particulars apply to

Wm. Pearson & Son, West Flamboro,  
46 Victoria 103 York Street,  
HAMILTON, ONT.

#### GOSSIP.

The latest shipments of Clydesdales from Scotland, included eight fillies and colts to Quebec, and thirty head to New Jersey, U. S. A.

A most satisfactory sale was that of the Ayrshire herd of James R. W. Wallace, of Auchenbainzie, Thornhill, Scotland, on May 23rd last, when 114 head, of all ages, averaged over £22 16s. The top price of the sale was 100 guineas, for the seven-year-old cow, Ellis (18315), by Auchenbrack King, and a descendant of Drumlanrig stock on the male side. A five-year-old cow, Economy (21275), reached 50 guineas, and her heifer calf brought 24 guineas. Several of the cows sold for upwards of 40 guineas. Two-year-old heifers went as high as 46 guineas, and yearlings up to 42 guineas.

#### THE TURNER AYRSHIRE SALE.

In young bulls to be sold at the great sale of record-breaking Ayrshires, at Ryckman's Corners, three miles south of Hamilton, on Tuesday, June 18th, are seven under one year of age. All of them are out of official R. O. P. dams, and four of them are sired by Pearlstone of Glenora, the balance by the present stock bull. One of them is out of Snowflake, who made a record of 12,616.1 lbs. milk testing 4.41 per cent., and 556.79 lbs. butter-fat in 299 days, and freshened again inside 11 months. Another is out of Flora of Metcalfe, with a one-year record of 11,908.85 lbs. milk testing 3.59 per cent, and 427.346 lbs. butter-fat. Both these cows will be sold, as well as the following, and many others not mentioned here, but all in the official records. Briery of Springbank, record at three years, 10,172.9 lbs. milk, 376.6334 lbs. butter-fat; test, 3.70. She is the dam of Briery 2nd of Springbank, the world's two-year-old champion mentioned last week. She also was third in the dairy test at Guelph, and was sired by the Dominion champion R. O. P. bull, Hamilton Chief. Scotland Princess 2nd has a one-year record of 11,385.95 lbs. milk, and 511.978 lbs. butter-fat; test, 4.48 per cent.; this is a four-year-old. Sybella of Springbank, mature record 11,468.8 lbs. milk, 428.68 lbs. butter-fat; test, 3.74 per cent. Canadian Princess, as a three-year-old, made a record of 11,377.55 lbs. milk, and 521.91305 lbs. butter-fat; test, 4.59 per cent. White Flos, record 12,945.65 lbs. milk, 533.6 lbs. butter-fat. She was second in the test at Guelph and third at Ottawa. Of her descendants to be sold are one daughter, three granddaughters and one grandson. Enough have been enumerated to show the strictly high-class quality of the offering. All will be in the pink of condition, and everything offered will positively be sold to the highest bidder. Anything like an accurate description of the young things is utterly impossible in these columns. Strictly high-class in type and quality is the predominating feature of the entire lot, while under development in the yearling heifers is phenomenal, a proof that like begets like. On the day of sale conveyances will be at the top of the incline railway, foot of James street, Hamilton, from 10 to 11 a. m., to convey visitors to the farm, where lunch will be provided for those from a distance.

#### TRADE TOPIC.

The Helderleigh Fruit Farms and Nurseries at Winona, Ont., of which E. D. Smith is proprietor, are too well known to need any comment through these columns. Their new catalogue containing descriptions of every kind and variety of fruit and shrub that can be successfully grown in Canada is just out. This catalogue also contains many useful hints on planting (especially fall planting, for which the catalogue is particularly issued), mulching, pruning, etc. If desiring anything in the way of fruit or ornamental trees or shrubs, see the advertisement in another column.

#### A WAITER.

Diner—"Is it customary to tip the waiter in this restaurant?"  
Waiter—"Why—ah—yes, sir."  
Diner—"Then hand me a tip. I've waited three-quarters of an hour for that steak I ordered."



### Long Life Added to Fire Protection

This roofing resists the attack of fire—will not catch from flying embers or sparks. Saved a barn when a house burned within 30 feet. It wears as long as old-fashioned wooden shingles. The name is

## NEPONSET PAROID ROOFING

No Metal to Attract Lightning or to Rust Out

You make a direct saving when you buy it. Every seam is cemented water tight—no leaks, nor repair bills, nor damaged crops. Poor stock and poor machinery are bad investments. Roofing of short life is also a bad investment.

When you buy NEPONSET Paroid you are backed by the good judgment of Governments, of leading Railways, as well as that of good farmers. Backed by years of hardest wear in every climate. Write today for dealer's name and new

#### Blue Print Barn Plans—FREE

Plans of barns that appeal to the pride of every Canadian farmer.

NEPONSET Roofings are made in Canada.

F. W. BIRD & SON, 443 Heintzman Building, Hamilton, Ont.

(Established 1795)

Winnipeg

St. John, N. B.

Vancouver, B. C.

### Ormsby Grange Stock Farm Ormstown, P. Que.

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Shire Stallions and Mares, Shorthorn Cattle (both sexes); also Hampshire Swine. Prices reasonable.

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**Clydesdales, Imp., Just Arrived** Our new importation has arrived safely, and we are now in a position to supply the trade with stallions from 1 year old up to 4, with more draft character, big, strong, flat bone, and better breeding than any other firm in the trade. Prices and terms as favorable as any other importer in Canada. **BARBER BROS., GATINEAU PT., QUEBEC, NEAR HULL.**

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I have for sale mares and fillies, from foals up to 5 years of age; richly bred and big in size; a number of them in foal; matched pairs, the kind to make you money. They will be sold at prices that defy competition. **L.-D. 'phone. ALEX. F. McNIVEN, St. Thomas, Ont.**



**Imp. Clydesdale Stallions of Size and Quality**  
Our latest importation of Clyde stallions include several that were 1st prizewinners in Scotland. We have them from one year old up, of choicest breeding, big, flashy quality fellows, full of draft character. Our prices are the lowest, and our terms the best. **L.-D. 'phone. CRAWFORD & McLACHLAN, Thedford P.O. and Sta.**

We still have on hand a few good **Clydesdale Stallions** with both size and quality, all prizewinners and breeding of the best blood in Scotland. Prices and terms the best in Canada. **John A. Boag & Son, Bay View Farm, Queensville, Ont.** On the Toronto & Sutton Radial Railway Line. Long-distance 'Phone.

**A Few Choice Clyde Fillies**—I am offering several choice and particularly well-bred Clydesdale fillies from foals of 1911 up to 3 years of age, imp. sires and dams. Also one stallion with 1911 imp. sire and dam. These are the kind that make the money. **HARRY SMITH, Bay P.O., Ont. Exeter Sta. L.-D. 'Phone.**

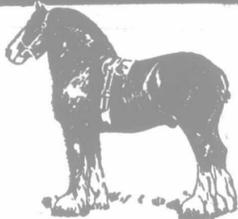
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**ANGUS BULL**  
 FOR SALE, 12 months old, from good milking dam. **J. W. BURT & SONS**, Aberdeen Farm, CONNINGSBY P. O., Erin Station, C. P. R.

**QUESTIONS AND ANSWERS.**  
 Miscellaneous.

**STALLION LEGISLATION.**

Will you kindly publish in your next issue, the facts about the Ontario Stallion Act. I saw in one of your recent issues where it had its first reading in the House, but have not seen anything about it since.

J. E. R.

Ans.—This has been published several times. See issue of April 18, page 745, articles on "Ontario Agricultural Legislation and appropriations." The Act was passed.

**BUCKWHEAT—ALFALFA—FLAX.**

1. When is the best time to sow buckwheat, and how much to the acre so that it will load and not fall?

2. Should alfalfa be clipped off the first year if it has a good top? At what time, and at what height should it be cut?

3. Would flax straw be injurious to stock if it were sowed with spring grain?

R. M.

Ans.—1. About the first of July. From half to one bushel.

2. Usually, no, especially when seeded with a nurse crop. Sometimes in a favorable season where sown alone, it may be clipped if done early. Never clip late in fall.

3. In small quantities, not appreciably so.

**HACKNEY BREEDING—RASPBERRIES.**

1. I bred a general-purpose mare to a pure-bred Hackney horse. She had a filly colt and I bred it to another pure-bred Hackney. Can her colt be registered, or how many crosses do they require?

2. In propagating raspberries, is it last year's canes or the new ones that are used?

J. A. S.

Ans.—1. We understand that fillies with two top crosses of registered Hackney blood are eligible for registration in the Canadian Hackney Horse Society Studbook. Write the Accountant of the National Live-stock Records, Department of Agriculture, Ottawa, for full particulars.

2. Raspberries are usually propagated from suckers, or sometimes root cuttings are made.

**HEAVES.**

Horse seemingly caught a cold about six weeks ago, coughs a lot, especially at night. When I go into the stable in the morning his flanks are like a pair of bellows, contracting and relaxing. Has been worked hard all winter in frosty weather. Have given V. S. medicine and oil of tar. What do you suppose the matter, and remedy?

STRAW.

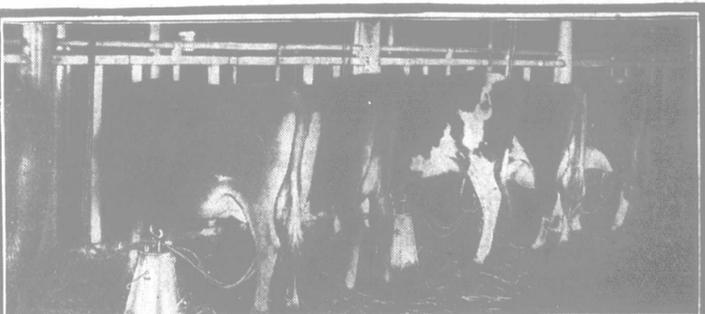
Ans.—The symptoms indicate a case of heaves. Dampen everything the horse eats with lime water. Feed lightly on hay, and more liberally on grain. Heaves well established cannot be cured. Avoid all dusty material, and feed only first-class feed. Give only a pail of water at a time. Water before feeding, and give every morning a ball composed of 1½ drams of powdered opium, 2 drams solid extract of belladonna, 1 dram camphor, and 20 grains digitalis, with sufficient oil of tar to make plastic. Roll in tissue paper and administer.

**KNUCKLING.**

Have a two-year-old mare, weighs 1,200, when coming out of barn, or if she hits her toe on anything, knuckles over (in front) on one hind fetlock for about a dozen steps, and is very lame. Is all right while doing any light work, but is worse the next morning. Leg is slightly swollen above and below fetlock. What is the cause? Would a blister do any good?

H. P.

Ans.—Knuckling is a partial dislocation of the fetlock joints, due to weakness, strain, or overwork when young. A long rest and blistering will effect a cure. Blister with 2 drams each of biniodide of mercury and cantharides, mixed with 2 ounces of vaseline. Clip the hair off all around the joints; tie so she cannot bite the parts, and rub well with the blister once daily for two days, and on the third day wash off and apply sweet oil. Let loose now and oil every day until the scale comes off. Let her out on pasture. Repeat the blister every four weeks until cured. Keep her feet trimmed to prevent stumbling.



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One man and a boy (to carry milk and assist) milk 100 cows in two hours with a Sharples Mechanical Milker.

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"The Sharples Milker produces cleaner milk than hand milking and is easy to keep clean. I do not see how it can affect the cows, or affect the milk flow except a tendency to increase it by the uniformity of its milking. We are handling a herd of 140 cows with one-third the labor that was required before. Very truly yours, John V. Bishop."

One secret of the success of The Sharples Milker is "The Patented Teat Cup With the Upward Squeeze"

Instead of continually drawing the blood down with the milk as ordinary suction machines do, it gives the teat a gentle "upward" squeeze after each suction or pulsation, and thus avoids the congestion, swelling, soreness and other objections. We can't explain it all here. Just send for Catalog and see for yourself the wonderful advantages of this wonderful machine. We gladly put them in and give you ample time for trial.

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Our past record for many years in the leading show-rings of Canada and in the yearly increase in volume of business is our best recommendation. This has been our best year. We have still some of the best of last year's importation in both stallions and fillies. We solicit your trade and confidence.

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**BLAIRGOWRIE IS OFFERING AT PRESENT:**  
**CLYDESDALE MARES**, imported and Canadian-bred, from one year up to 5 years; also a pair of Canadian-bred stallions, rising three years. Young cows with calves by side, and a pair of Canadian-bred stallions, well broken and quiet, from 11½ to 14 hands. Heifers well on or in calf. Children's ponies, well broken and quiet. **JOHN MILLER, JR., Ashburn, P.O.**  
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**IMPORTED CLYDE FILLIES**

A choice bunch of young imp. Clyde fillies just landed, from two to four years old; also a few young stallions left, two and three years old; all big size and quality. Prices away down, as they must be sold.

**W. B. ANNETT, Alvinston, Ont.** Watford Sta., G.T.R., 30 miles west of London.

**IMP. CLYDESDALE STALLIONS AND FILLIES**  
 In my late importation of Clydesdale stallions and fillies I have exceptionally choice breeding idea draft characters; as much quality as can be got with size, and I can under sell any man in the business. Let me know your wants.  
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We have for service this season the champion imp. Clydesdale stallions, Netherlea, by Pride of Blacon, dam by Sir Everard; also Lord Aberdeen, by Netherlea, and the champion Hackney stallion, Terrington Lucifer, by Copper King. For terms and rates apply to the manager.  
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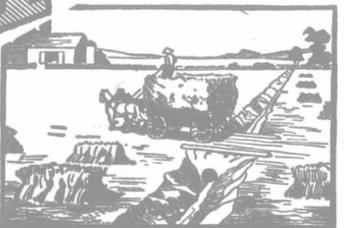


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**EVERY** farmer wants to reduce his taxes and statute labor. Pedlar's strong, non-rusting corrugated culvert saves excavation hauling and time, and makes a culvert that will not wash out or cave in like brick or cement. Much better than wood. Needs no attention. Time you now give to culvert repairs can be given to the road surface only. Learn about Pedlar culvert and how much better it is.



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|---|--|--------------------------|

## QUESTIONS AND ANSWERS. Miscellaneous.

### HOGGING CORN.

We would be glad to have some information about hogging corn.

1. What variety of seed is best?
2. How should it be planted?
3. Where can the seed be obtained?

W. J. A.

Ans.—1, 2 and 3. The term "hogging corn" does not refer to a variety of corn, but to a system practiced extensively in some parts of the United States, and to some extent in Canada, by which the corn is fed off the land, being harvested, so to speak, by the hogs, which are turned in it and allowed to feed at will. The corn is planted in the usual way, in rows or hills, as for a crop to be harvested, and when the ears are nearing or at maturity, the hogs are turned in. Any of the heavy-yielding flint varieties, or any dents which will mature in the section, are suitable for the purpose.

### FEEDING SILAGE.

1. Would feeding silage to a bull have a tendency to make the bull not sure? Some of my patrons think it would. This is my first year with silage.

2. Does feeding silage have a tendency to loosen cows' teeth after feeding a few years?

3. Does feeding silage affect the kidneys, as I notice my cows' make far less urine than they did, and some of them are a little stiff. I feed twice a day, about half a feed of silage and half hay, with hay at noon. Hay is timothy and clover.

NEW SUBSCRIBER.

Ans.—1. Experience has not indicated this to be true. Silage is a good feed for all classes of cattle, calves, bulls and cows, and fattening cattle.

2. No.  
 3. It has not been found to give trouble in this way. Fed in moderation, as indicated in the question, it could do no harm, provided the silage is kept in good condition.

### AGE FOR MARRIAGE.

1. What age does a girl have to be before she can legally get married?

2. Can a girl get married at seventeen years of age and claim her belongings at home, such as her clothing, trunk and chest, providing she is willing to do so and live with her man, after keeping company with him for two years, and having found him true and honest in every respect?

3. Can her parents part them by law after they are married?

Ontario.  
 Ans.—1. At least 14, excepting in one case of special circumstances, as to which see Sec. 16 of the Marriage Act (Ontario Statutes, 1911; Chap. 32).

2. Not without the consent of her father. She must be 18 years of age before she can lawfully marry without such consent.

3. Yes, although, perhaps, not permanently. But they would be unable, legally, to obtain a license to marry; that is, to make the necessary affidavit, would, under the circumstances, involve committing perjury.

### POTATO AND CORN PLANTING—OATS AND BUCKWHEAT.

1. What is the proper time to plant late potatoes? Mine now have about three inches of sprouts on them, and are growing wiltly. What shall I do with them?

2. How much of Stowell's evergreen corn will I require to plant 45 rows, 234 feet long, by planting the hills fifteen inches apart one way and three feet the other? How many kernels per hill?

3. When should I sow oats to have for pasture the first of August?

4. How much buckwheat do you sow per acre?

C. M. W.

Ans.—1. Any time the latter part of May or early in June. All potatoes put forth sprouts at this season. If required for cooking, rub the sprouts off. For planting, they will not do damage, except that they use up a certain amount of the plant food in the tuber.

2. About 1 peck of shelled corn, at 4 kernels to the hill. Fifteen inches is too close in the row. Better make it three feet each way.

3. About the middle of June.

4. From 2 pecks to 1 bushel.

**Aberdeen-Angus**—A few bulls to sell yet; also females. Come and see them before buying. Drumbo Station.

**Walter Hall, Washington, Ont.**

**Balmiedie Aberdeen-Angus** I am offering for sale young bulls and heifers of the highest type of the breed. Show stock in show condition a specialty. Bred on the most popular lines. Thos. B. Broadfoot, Ferguson Sta., Wellington Co., Ont.

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**Shorthorns and Leicesters**

Herd established 1855, flock 1848, have a special good lot of Shorthorns of either sex to offer of various ages; also a grand lot of Leicester sheep of either sex—a few imported ones to offer.

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**"The Manor" Scotch Shorthorns**

Present offering: Three choice yearling bulls. Young cows in calf. Yearling heifers: Clippers, Minas, Wimples, Julias, etc. Inspection solicited. Prices moderate. Phone connection.

**J. T. GIBSON, DENFIELD, ONTARIO**

**Shorthorns and Swine**—Am now offering a very choice lot of cows and heifers, safe in calf, and some choice young bulls for the fall trade; also Berkshire and Yorkshire pigs; showyard material.

**ISRAEL GROFF, Elmira Ont.**

**Greenock Shorthorns!**

For sale: Two registered bulls, 12 and 13 months; red and roan, highly bred; good quality; reasonable. Neil A. McFarlane, Box 41, Dutton, Ont. Elgin Co.

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Champions of 1911 shows, winning both senior and junior herds at Winnipeg, Brandon, Regina, Edmonton, Toronto and London; also fifteen championships. Young stock, both sexes, for sale at reasonable prices.

Long-distance Phone L. O. CLIFFORD Oshawa, Ont.

**THIS IS A GOOD TIME, AND I HAVE A GOOD PLACE, TO GET A HIGH-CLASS SCOTCH SHORTHORN BULL CALF** by my great Whitehall Sultan sire, or a young cow in calf to him, to start a herd that will be gilt-edged SHROPSHIRE RAMS AND EWES, too, at low prices. CHILDREN'S PONIES. A CLYDES DALE FILLY, such as I can send you, is one of the best things any man can buy. Just write me and say as nearly as possible what you want, and I will surprise you with prices on goods that are genuine **ROBERT MILLER, STOUFFVILLE ONTARIO**

**Scotch Shorthorn Females for Sale** I am offering at very reasonable prices, females from one year to five years of age. The youngsters are by my grand old stock bull, Scottish Hero (imp.) = 55042 = (90065), and the older ones have calves at foot by him, or are well gone in calf to him. Their breeding is unexcelled, and there are show animals amongst them. **A. EDWARD MEYER, Box 378, GUELPH, ONT.**

**SHORTHORNS AND CLYDESDALES** We have for sale four good sired by His Grace (imp.) = 69740 = One stallion rising three years old—a big, quality celt, and can spare a few heifers and cows. Write us, or come and see them. Farm one mile north of town. **A. B. & T. W. DOUGLAS STRATHROY, ONTARIO**

**SALEM SHORTHORNS** Headed by (Imp.) Gaioford Marquis, undefeated in Britain as a calf and yearling, and winner of junior championship honors at Toronto, 1911. Have on hand two yearlings and a number of bulls under a year for sale at reasonable prices. **J. A. WATT, Salem, Ont. Elora Sta, G. T. R. and C. P. R.**



Get rid of them and help make your home and premises sanitary by the liberal use of **Tanglefoot Fly Paper**. There is fully one-third more compound per sheet on **Tanglefoot** than on any other fly paper; hence it lasts longest, catches the most flies and is the best and cheapest fly paper. If you ask for "fly paper" or "sticky fly paper" you may get a cheap imitation that will soon dry up or glaze over. Ask for **Tanglefoot**.

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**MAPLE LODGE STOCK FARM**  
1854-1912

Have desirable Shorthorns and Leicester sheep. Cows are high-class milkers. A handsome young Clydesdale stallion for sale.

**A. W. SMITH, Maple Lodge, Ontario**  
Luan Crossing, G. T. Ry., one mile.

**Shorthorns of Show Calibre**

At present one nice red bull 12 months old (of the Belloona family) for sale at low price. Heifers of breeding age all sold.

**Geo. Gier & Son, Grand Valley, Ont.**

**WOODHOLME SHORTHORNS,**

I have for sale a number of choicely-bred Scotch Shorthorn heifers and several young bulls, all of high-class quality and sired by Imp. Dorothy's King =55009=, a Lady Dorothy.

**G. M. FORSYTH, North Claremont P.O. & Sta.**

**SPRING VALLEY SHORTHORNS**

Herd headed by the two imported bulls, Newton Ringleader, =73783=, and Scottish Pride, =36106=. The females are of the best Scotch families. Young stock of both sexes for sale at reasonable prices. Telephone connection.

**KYLE BROS. - - - Ayr, Ontario**

**OAKLAND SHORTHORNS!**

Present offering is five choice young bulls, from 7 to 22 months old, reds and roans, out of good dual-purpose dams, and sired by our champion Scotch Grey bull 72692. Visitors find things as represented. Good cattle and no big prices.

**JOHN HLDER & SON, HENSALL, ONTARIO**

**IMPORTED BULL FOR SALE**

Fletcher's Shorthorns—(Imp.) Spectator =50094=, and choice heifers for sale

**GEO. D. FLETCHER, Binkham, Ont.**  
Erie Sta., C. P. R.

MENTION "FARMER'S ADVOCATE."

QUESTIONS AND ANSWERS.  
Miscellaneous.

COW LOSES TEAT.

Have a cow which had one front teat completely severed. Could you tell me, through your magazine, what would be best to do with it? If that quarter of the udder will go dry, or if it is likely to always leak out the milk?

R. W. S.

Ans.—In all probability the teat will leak for a time, and after it is completely healed, the cow is likely to lose the use of the quarter. This is an unusual case, and one which any of our readers who have had actual experience might discuss through these columns.

WEED SEEDS IN CLOVER.

We bought clover seed that had bladder campion in it. Can we claim damages? If so, how should we proceed?

R. J. G.

Ans.—Bladder campion is one of the weeds coming under the Seed Control Act, Sec. 7, and to be No. 1 common red clover or alfalfa, must not contain more than 5 of these or any other noxious seeds, under the Act, per ounce, while alsike may contain 10 seeds per ounce. If you still have a sample of the seed, send it to the Seed Branch, Ottawa, together with a clear statement as to the grade which the seedsmen represented it to be, and get their report on the same. They will inform you as to how to proceed.

TARRING CORN.

Please let me know, through your valuable paper, if there is any way of coal-tarring seed corn to keep the crows from pulling it up? Also if there is any other way of keeping the crows off, as the field is down by the bush? E. F.

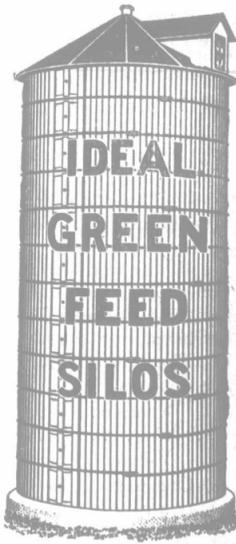
Ans.—Coal-tarring corn has been found to give good success in saving corn from the crows. Some take a small quantity of coal-tar and heat it to almost boiling point, or until it is very thin. The corn is dumped in tubs, or large vessels, and stirred well with a stick frequently dipped in the heated tar. This just darkens the corn a little and gives it a strong odor. The corn is then exposed to the sun for a few hours until dry. The corn must be dried thoroughly, or it may stick together in the planter or seeder. Another method favorably reported upon is to place the corn in a vessel, pour hot water on it (not so hot as to kill the germ), then a little tar is put on and the whole stirred. In place of standing the corn in the sun to dry, a little land plaster is added, which makes cleaner handling. Do not use pine-tar. Some growers use turpentine. As crows are generally very wary, a string stretched on sticks around the field is often beneficial, the crows hesitating to alight inside it. Papers hung from sticks in the field are also beneficial.

ABOUT DUCKS.

1. How many ducks would you advise me to start with to make a success of duck-rearing?
2. How many ducks to one drake?
3. What number can I have to an acre of land?
4. What breeds are the best for eggs and table use?
5. Can you give me the address of two or three poultry-packing companies in Canada?
6. How many eggs do ducks lay, as a rule, before sitting?
7. About what time do ducks want to sit, and how many eggs required to one sitting?
8. Can duck eggs be hatched under a hen?
9. At what hour do ducks lay their eggs, as a rule? A SUBSCRIBER.

Ans.—1. Start on a small scale, with from three to six mature birds.  
2. About five or six.  
3. This depends upon equipment. Start as suggested on a small scale, and gradually increase the number.  
4. There are several good breeds. Rouen, Aylesbury, and Pekin are good.  
5. Only through our advertising columns.  
6. This depends upon the breed, care, and conditions.  
7 and 8. Eggs are usually set under hens. Keep the ducks laying as long as possible.  
9. Usually during the night.

Why Wood Silos are the Best



Many Government experiment stations, especially in the United States, have made exhaustive experiments as to the most suitable material for silo construction, and the general conclusion seems to be expressed in the following statement from a recent experiment station bulletin: "A round, wooden stave silo, taking all things into consideration, has proved most satisfactory."

The reason for this is simple.

The very best silage is obtained when the whole mass is kept at an even temperature and all air excluded. Cement, stone or brick silos conduct away the heat generated in the silage, and thus prevent proper fermentation; furthermore, both cement and brick are porous, and permit the air to get at the silage, thereby causing it to spoil.

The many experiments and tests made have gone to show that frequently as much as one-third of the silage in a cement or brick silo will be spoiled and unfit for use, while in properly constructed wood silos the only spoilage will be a little on the top.

Due to our colder Canadian climate wood is the only material suitable for silo construction. If you have any doubts on this point write to us, and we will be glad to give you further information on this vital subject, and show you why it is to your interest to erect an Ideal Green Feed Silo in preference to any other kind, not only from the standpoint of first cost, but also from the standpoint of more satisfactory service.

We are the oldest and best known silo manufacturers in Canada. Thousands of our Ideal Green Feed Silos are in use on many of the most prosperous farms, and they always give entire satisfaction.

Send for our new Silo Book. It will explain fully why the

Ideal Green Feed Silo Is the Best Wood Silo

**DE LAVAL DAIRY SUPPLY CO., LIMITED**

LARGEST AND OLDEST SILO MANUFACTURERS IN CANADA

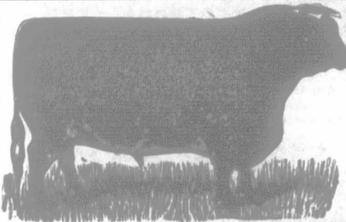
173 William Street, MONTREAL. 14 Princess Street, WINNIPEG.

Present Special Offering

- 20 High-Class Scotch Shorthorn Heifers
- 10 High-Class Young Shorthorn Cows
- 5 High-Class Scotch Shorthorn Bulls

At moderate prices, including Marr Missies, Emmas, Cruickshank Nonpareils, Duchess of Glosters, Village Girls, Bridesmaids, Butt rlys, Kinellar Clarets, Miss Ramsdens, Crimson Flowers; also a number of the grand old milking tribe, which have been famous in the showing.

**ARTHUR J. HOWDEN & CO.**  
Columbus, Ontario



Shorthorn Bulls and Clydesdale Mares

If you are in the market for a young bull, write us for particulars, or, better still, come and see them. We have 13 young bulls, from 8 to 14 months old, of good breeding and quality. We also have four imported Clydesdale mares, safe in foal.

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

Bell 'phone.

Burlington Jct. Sta., G. T. R., 1/2 mile from farm

SHORTHORNS

Have now a choice lot of young bulls to offer; also with something nice in heifers. Catalogue of herd and list of young animals on application.

**H. CARGILL & SON, Proprietors, Cargill, Ont., Bruce Co.**  
JOHN CLANCY, Manager



10 SHORTHORN BULLS 10

If you are looking for a young bull to head a purebred herd, or one to cross on grade cows to raise first-class steers, I have them to suit all customers at very reasonable prices. They are reds and roans, and one extra good white show calf; ages from 9 to 14 months, nearly all sired by imported bulls and from the best Scotch families of cows. Will be pleased to furnish breeding and prices.

Claremont Sta., C.P.R., 3 miles.  
Pickering Sta., G.T.R., 7 miles.

**JOHN MILLER, Brougham P.O., Ont.**

Scotch Shorthorns

FOR SALE. Imported Bandsman, a grand individual and an extra sire; one 10 months imported bull calf, a Marr Flora; 30 choice cows and heifers in calf; at reasonable prices. Farm 1/2 mile from Burlington Jct. Station.

**MITCHELL BROS., Burlington, Ont.**

## Malted Corn Feed

THE growing demand from wide-awake farmers for concentrated feeds rich in Protein, has led this company to put another Dairy Feed on the market. We have had a careful analysis made of this feed, and had it tested by some of the leading dairies in and around Toronto with splendid results.

The guaranteed analysis is as follows:

Protein... 15 per cent.  
Fat..... 3.11 "  
Fibre.... 6 "

Compare this with Prof. Day's report on the feed value of coarse grains:

PROTEIN.  
Corn... 7.1 per cent.  
Oats... 9.1 "  
Barley... 9.5 "  
Wheat... 9.2 "

In Malted Corn Feed you get, therefore, 100 per cent. more Protein than in corn; 80 per cent. more than in either oats, barley or wheat. Do you see the point? Several dairymen who have tried this feed report an increase in the flow of milk of from 5 to 8 per cent. Would any one want any better proof of the feeding value of Malted Corn Feed than this? It is better than whole pages of theory.

Ask your dealer for a sample lot of this feed. If he cannot supply you, write:

**The Farmer's Feed Co.**  
TORONTO LIMITED CANADA  
108 Don Esplanade

**FEED  
PRO - FAT**  
(Dried Malt)  
AND  
**"MALTED CORN FEED"**  
AND WATCH THE  
MILK FLOW INCREASE



Lump Rock Salt, \$10.00 for ton lots, f.o.b. Toronto  
Toronto Salt Works, 128 Adelaide St. E.,  
G. J. CLIFF, MANAGER. Toronto, Ont.

### WANTED-CREAM

Highest Toronto prices paid for cream delivered at any express office. We pay all charges, furnish cans free, pay accounts fortnightly, engage man to collect at some points. Ice not essential. Write for particulars.

**THE TORONTO CREAMERY COY., LTD.**  
Toronto, O. tarlo

### Stockwood Ayrshires

are coming to the front wherever shown. This herd is now headed by White Hill Free Trader (Imp.) No. 33273, championship bull at Sherbrooke; also headed the 1st-prize aged herd. Stock of all ages for sale. Satisfaction guaranteed.

**D. M. WATT, ST. LOUIS STATION, QUE.**  
Telephone in house.

**Dungannon Ayrshires and Yorkshires**—For immediate sale are: Three choice young bulls and a few heifers; also young sows of breeding age, quality and breeding combined.  
**W. H. FURBER, Cobourg, Ont.** L.-D. Phone.

**HIGH-CLASS AYRSHIRES**  
If you are wanting a richly-bred young bull out of a 50-lb. a day and over cow, imported or Canadian-bred dam and sire, write me. Females all ages. Prices are easy. **D. A. Macfarlane, Kelso, Que.**

### QUESTIONS AND ANSWERS. Miscellaneous.

#### BUCKWHEAT ON MUCK SOIL.

Will buckwheat grow and mature on black muck soil, and what amount is sown per acre? **V. F.**

Ans.—Yes, if the land is not too wet. Buckwheat usually does very well on low, damp land. Anywhere from one-half to one bushel per acre is considered good seeding.

#### TRANSFER OF PERCHERONS.

Where would I have to apply, and what procedure would I have to take, as I have two Percheron mares seven years old which I brought from the State of Iowa when they were yearlings, and I wish to get them transferred to my name. I have the certificates of registration of both, but they have never been transferred from the Iowa owner. **R. W. R.**

Ans.—We presume the mares are recorded in the books of the Percheron Society of America. If so, full particulars might be obtained from Wayne Dinsmore, Secretary of the Society, Union Stockyards, Chicago, Ill. If recorded in Canada, write the Accountant, National Livestock Records, Department of Agriculture, Ottawa. It will be necessary for you to obtain certificates of the transfer of the animals from their former owner to yourself. These transfer slips are furnished by the Association, and must be duly filled in and signed by the seller of the animal. Record is then made on the books at the office of the Association, with the buyer as owner of the animal.

#### WOOL QUERIES.

1. Which is the proper way to fold a fleece, the inside out or the outside out?
2. Does it pay to wash the sheep before shearing or not?
3. Does it pay to sell fat ewes before shearing or after if they have no lambs?
4. How is it that wool-buyers won't pay within a third of as much for black wool as white?
5. What is washed wool worth per pound? **M. R. L. B.**

Ans.—1. Outside out.  
2. Some claim it does, others that it does not. Our best breeders generally clip quite early in the season without washing.  
3. There should be very little difference. Dealers usually make allowance in buying sheep with the wool on, as when they are clipped the skin is of little value.  
4. There must be a difference in the quality of the fibre. Black wool may contain more hair-like fibres than white.  
5. There are no quotations given in our market reports to date. Write some of the wool dealers advertising in these columns.

#### PLOWS—SPIDERS.

1. Which would you prefer to do your plowing on a clay-loam soil, a twin plow that has an eight- or nine-inch share, or a single plow with a fourteen- or fifteen-inch share, and what would be your reasons?
2. Has the O. A. C. made any experiments along that line? If so, what was the result?
3. When would be the best time to sweep down spider webs to give the best results, in spring or fall? Could you give a short account of their life; how the young ones are reared, and so on? **J. McP.**

Ans.—1. Of the two, the two-furrowed plow would be preferable. It would not turn so wide and flat a furrow, and would leave more comb to be worked down, and thus a better seed-bed would result. A plow which would turn a furrow intermediate between the two, might be more desirable than either of these.

2. We are not aware of the fact, if they have.  
3. Sweep them down as soon as they appear, regardless of the season. There are some thirty families of spiders in America. Eggs are laid in sacs. Some species hatch early in winter, but do not emerge until spring, the stronger young being on the weaker until this time, spiders, young or old, live on other insects, killing them with their mandibles. Some lose the power of their bodies.

## THE WORLD'S GREATEST AYRSHIRES

BY AUCTION



Briery 2nd of Springbank

**Tuesday, June 18th, 1912**

At the farm, **SPRINGBANK**, three miles south of Hamilton, A. S. TURNER & SON will sell by auction their entire herd of 80 head of high-record official Ayrshires, practically all of them in milk are in the official R. O. P. records. Among them are world's champions, American champions and Canadian champions, Toronto and London winners, dairy test winners. Without doubt the best lot of producing Ayrshires ever offered by auction in this or any other country, including the stock bull, Imp. Lessnessock Forest King, and several other young bulls, from calves up to one year, all of them out of official record dams.

Conveyances will be at the head of the H. & B. incline railway, foot of James St., every few minutes from 10 to 11 a.m.

TERMS: Cash, or 6 months on bankable paper, with 6% interest per annum. Catalogues on application to

**A. S. TURNER & SON, Ryckman's Cors., Ont.**

**ANDREW PHILIPS, Huntingdon, Que., Auctioneer**

Lunch for those from a distance. Positively no reserve. Sale at 1 p.m. sharp.

## LIVINGSTON'S OIL CAKE MEAL

Is the most wholly nutritious stock food you can buy. Made of the purest Linseed—by the celebrated Old Patent Process (which makes it keep three or four years, if necessary)—proved by feeding tests, both practical and scientific, to be 95% digestible.

Even if LIVINGSTON'S OIL CAKE MEAL costs twice as much as the other foods which do not keep and cannot be half digested, it would pay every farmer and dairyman to get LIVINGSTON'S OIL CAKE MEAL. The cost is only a trifle higher.

LIVINGSTON'S OIL CAKE MEAL is really cheapest in the end—quickly increasing and improving the milk and healthily fattening cattle.

As your dealer. If he cannot supply you, write us:

**THE DOMINION LINSEED CO., LIMITED**  
Baden, MANUFACTURERS Ontario

### GLENHURST AYRSHIRES



Established over 50 years ago, and ever since kept up to a high standard. We can supply females of all ages and young bulls, the result of a life time's intelligent breeding: 45 head to select from. Let me know your wants.

**JAMES BENNING, Williamstown P.O.** Summerstown Sta., Glengarry

### AYRSHIRES FOR SALE

Seven bulls and a few heifers of different ages, sired by Woodroffe Comrade, whose first heifer in milk, gave 11,392 lbs. milk, 480 lbs. butterfat in one year. Prices right. **H. C. HAMILL, BOX GROVE P. O. ONT.** Markham, G. T. R.; Locust Hill, C. P. R. Bell phone connection from Markham.

### CHERRYBANK AYRSHIRES

We are offering 5 young bulls fit for service, from dams of 40 lbs. to 50 lbs. daily of 4% milk. Anything else in the herd priced reasonable. This herd won over \$1,200 prize money in 1911.  
**P. D. McArthur, North Georgetown, Que.**

**Ayrshires and Yorkshires**—We have still some good young bulls. Now is the time to buy for the coming season, before the best go. We have females any age, and can fill orders for carlots of Ayrshires. Pigs of either sex on hand.  
**ALEX. HUME & CO., Menie, Ont.**

**City View Ayrshires** All from R. O. P. ancestors. Young bulls of January, March, May and July, 1911; also calves of 1912. Right good ones. Males only for sale. Write, phone or call. **JAMES BEGG,** R. R. No. 1 half mile west. **ST. THOMAS, ONT.**

**Hillcrest Ayrshires**—At head of herd is Ivanhoe of Tanglewild, a son of the champion Ayrshire cow, Primrose of Tanglewild, R. O. P. test 16,195 lbs. milk and 625.62 lbs. fat; 60 head to select from. Inspection invited.  
**F. H. HARRIS, Mt. Elgin, Ont.**

### STONEHOUSE AYRSHIRES

Are coming to the front wherever shown. Look out for this at the leading exhibitions. Some choice young bulls for sale, as well as cows and heifers.  
**HECTOR GORDON, Howick, Quebec.**



BEST RESULTS ARE OBTAINED FROM ADVOCATE ADVERTISEMENTS.

## Who Pays the Duty?

You can't get away from the fact that **directly or indirectly the DUTY has to be paid by the consumer**; therefore, why pay fancy prices for calf meals of foreign manufacture when you can buy **CALFINE** 15 to 20 dollars a ton cheaper and secure at least equal, and in most cases superior, results.

### CALFINE

"The Stockman's Friend"

is a pure, wholesome, nutritious meal for calves. It is now in use on many of the largest and best equipped dairy farms in the Dominion.

Ask your dealer for a 100 lb. bag of **CALFINE** as a trial—you will soon be back for more. If your dealer does not handle it, write us. We will do the rest.

Feeding Directions Sent on Application.

**Canadian Cereal & Milling Co.**  
Limited  
TORONTO, CANADA

### Cattle and Sheep Labels

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

No postage or duty to pay. Cattle sizes with name and address and numbers; sheep or hog size, name and numbers. Get your neighbors to order with you and get better rate. Circular and sample. Mailed free. **F. G. JAMES, Bowmanville, Ont.**

Purebred Registered  
**Holstein Cattle**  
The most profitable dairy breed, greatest in size, milk, butter-fat and in vitality. Send for FREE illustrated descriptive booklets  
**HOLSTEIN-FRIESIAN ASSO.**  
F. L. Houghton, Sec'y, Box 127, Brattleboro, Vt.

### Holsteins of Quality

Write us to-day for our proposition, telling you how any good dairyman may own a registered Holstein bull from a Record-of-Performance cow without investing a cent for him. **Monro & Lawless, "Elmdale Farm," Thorold, Ont.**

**The Maples Holstein Herd**  
offers a splendid lot of bull calves, all sired by Prince Aaggie Mechthilde and all from record of merit dams. For pedigrees and prices write  
**WALBURN RIVERS, Ontario**

**HOLSTEINS & YORKSHIRES**  
**MINSTER FARM** offers a choice young boar fit for service, and bull calves from Lakeview Burke Payne, whose sire has ten sisters averaging 30.63 lbs. butter 7 days. For extended pedigrees write:  
**R. HONEY & SONS, BRICKLEY, ONTARIO**

**Maple Grove Holsteins**—Herd headed by King Lyons Hengerveld, the greatest 30 lbs. back butter bred bull of the breed in this country. For stock of this kind, address:  
**H. BOLLERT, Tavistock, R. R. No. 5, Ont.**

**Holstein Bulls for sale**—Springbank farm is offering two choice bred Holstein bulls for sale at reasonable prices. For particulars write to: **Wm. Barnett & Sons, Living Springs P. O., Ont.** Ferguson station, C. P. R. and G. T. R.

The vicar had been suddenly ill, and his church warden was in great difficulty about getting a substitute, when the bishop of the diocese kindly offered to take the Sunday services himself.

The church warden, wishing "to do the right thing," at the close of the service, went up to the bishop and, after thanking him, stammered out:

"A poorer preacher would have done such folk as us, your lordship, but we were unable to find one!"

### QUESTIONS AND ANSWERS. Miscellaneous.

#### GOAT FARMING.

As a subscriber to "The Farmer's Advocate," I would like to know if goat farming would be a profitable business in this country, and would they stand the extreme cold?  
**B. B.**

Ans.—It is doubtful whether goat farming would prove successful in Quebec, although, with special care, it might bring in fair returns. Goats are not used in this country for milking purposes, and the trade would necessarily be largely with fanciers. Goats require to be housed at night throughout the year, and day and night during the severe weather of winter. Goats cannot be herded together like sheep, for those with horns use them disastrously against their weaker fellows. The young kids are more tender than young lambs, and do not withstand the cold nearly so well.

#### LINE FENCING.

A and B own each one hundred acres of land, one at the back of the other. A has a fence at the back from 3 to 8 rods away from the line, onto himself. B has a fence too, further away from the line. There are some 20 rods without a line fence at all. A and B have had peaceable possession until now. They agreed about the putting up of a new line fence, each to put up half. B comes onto A and takes rails off A's fence to build B's share of line fence without any permission whatever. All A's fence was put there some years ago, by the owner then, from the center fences. He being a cattleman, and to take care of his cattle, built the fence all himself with his own rails, this 3 to 8 rods from the line.

1. Can B come onto A's place and take A's rails and build B's share of line fence?
2. Can A pull down the fence that B has built of A's rails and take them back to build A's share of line fence?
3. Has B any claim on land between the line fence and A's fence?
4. Any other advice will be thankfully received.

A SUBSCRIBER.  
Ontario.  
Ans.—1. No.  
2. Yes.  
3. No.  
4. In recovering his rails A should be careful to avoid a breach of the peace; and in the event of his being interfered with by B while in the act of removing the rails he should consult his solicitor as to his next step.

#### AIR-PRESSURE WATER SYSTEM

I would like to hear, through your paper, of anyone having a watering system and tank for stock that is operated with the air system, forcing the water through the stables by air pumped into tank. What would it cost to get a tank to hold 500 gallons, and what is the cost of a pump, and is the system satisfactory?  
**J. D. G.**

Ans.—The air-pressure system has been found by many to be quite satisfactory. In this system an iron cylinder similar to the hot-water boiler in common use, but larger, is attached to a pump driven by hot-air or gasoline engine, and pipes leading from the cylinder to points of use. As pumping proceeds, water is forced into the cylinder, which is already full of air, and soon a high pressure is generated. When a tap at house or barn is opened, the air pressure forces the water from the tank through the pipe and out at the tap. This method has the advantage that the tank may be placed in the basement away from frost, and avoiding the danger of damage by water, should any leakage occur. These systems are usually installed to supply both house and stable with water, and the tank is very often located in the house basement. If there is no room in the basement, the tank may be located outside underground to avoid freezing. Inside in the best place for it, however, a hot-air engine suitable for this system would cost about \$200, and a tank about \$100, after which there would be the piping and taps to be reckoned. A good size and shape of tank or cylinder, is one 3 feet in diameter and 10 feet long, placed horizontally. Of course, it must be air-tight and made of steel. If the tank becomes water-logged, all that is necessary is to open a small valve at the pump and pump in air. Where practicable, this is one of the best systems in use.

## THE SUMMER PESTS

At last you can keep flies off your cattle

With the thermometer rising up continuously, think of the suffering of your domestic animals that are tortured by flies, mosquitoes and other insects.



As an experienced farmer YOU KNOW that the torment to which your cattle is submitted during the summer months, exhausts them, causes them to decline, to lose weight, and in many cases even endangers their life.

There is **only one way** to keep away the flies, destroy all parasites (lice, ticks, fleas, etc.), and restore your animals to perfect health. Simply sprinkle that most wonderful insect destroyer and disinfectant

### COW COMFORT

on your cows, horses, swine, goats, sheep, dogs, poultry, and all insects will be quickly destroyed. The chemicals in this preparation will positively prevent flies and mosquitoes from swarming about your animals.

Cow Comfort also has soothing, antiseptic qualities that will cure all sores or skin diseases that may affect your cattle.

We cannot insist too strongly upon the benefits YOU will derive from the use of Cow Comfort on your cows—you will find that when they are rid of flies and other insects their yield of milk will be greatly increased and of better quality.

Sold in gallon cans at \$2 each, but as the contents of a can are to be diluted in four gallons of water, it makes the price really 40 cents a gallon.

Write for descriptive circular—it's free.

**The McLAREN IMPERIAL CHEESE CO., Ltd., WOODSTOCK, ONT.**

DISTRIBUTORS FOR ONTARIO

**THE SAPHO MANUFACTURING COMPANY, LIMITED**  
586 Henri Julia Ave. (formerly Sanguinet St.), MONTREAL

## KING SEGIS WALKER

The highest pedigreed sire in Canada. Average record of dam, gr. dams, and g. gr. dams: Butter, 28.36 lbs.; milk, 544.42 lbs.; fat, 4.24 lbs. Fee for service, \$25. This sire's get are 80 per cent. females. For sale: A grandson of King Segis and Pontiac Pet, record 37.67 lbs. butter and the world's champion; also a bull calf whose dam is a daughter of Pontiac Korndyke, and **A. A. FAREWELL, OSHAWA, ONTARIO** just completed a record of 722 lbs. in 7 days.

### LAKEVIEW HOLSTEINS!

Bull calves sired by Dutchland Colantha Sir Mona, and out of heifers sired by Count Hengerveld Fayne De Kol.

Telephone. **E. F. OSLER, BRONTE, ONTARIO**

### Fairview Farms Herd

Is where you can secure a son of Pontiac Korndyke, admitted by all breeders to be the greatest Holstein sire that ever lived. Look what his daughters are doing. Two of them with records over 37 lbs. each. Then, look at the work his sons are doing. HE IS THE GREATEST PRODUCING SIRE OF THE BREED, THROUGH HIS SONS. Every son of Pontiac Korndyke that has daughters old enough to milk is a sire of good ones. We can offer you several young ones that will give you great daughters.

**E. H. DOLLAR, HUEVELTON, N. Y.**

### SUMMER HILL HOLSTEIN CATTLE and YORKSHIRE HOGS

Our senior herd bull, Sir Admiral Ormsby, is the sire of the world's record 2-year-old for yearly butter production. Also sire of the three highest record four-year-olds in Canada. The dam of our junior herd bull made 34.60 lbs. butter in 7 days, and gave 111 lbs. milk per day. Come and make your selections from over 70 head.  
In Improved English Yorkshires we have won 95 per cent. of all first prizes at Toronto Exhibition for ten years. We are still breeding them bigger and better than ever.  
Buy Summer Hill Yorkshires, the big, quick-maturing kind, and double your profits.

**D. C. FLATT & SON, R. F. D. No 2, Hamilton, Ontario, 2471, Hamilton.**

**HIGH-CLASS REGISTERED HOLSTEINS.** Nothing more for sale until June 12th. On that date the Oxford Holstein Breeders Club will hold a Consignment Sale and we have decided to contribute sixteen head of choice females, all ages, and our splendid stock bull "Prince Abbeckerk Merceua". Any one wanting choice cattle at his own price should attend this sale as it is sure to be the best of the season.  
**A. E. HULET, Norwich, Ontario**

### HOLSTEINS, YORKSHIRES, HACKNEYS

Our herd of over 30 Holstein females, from calves up, are for sale. Come and make your own selection. In Yorkshires we have a large number of young sows, bred and ready to breed, of the Minnie and Bloom tribes. Also one two-year-old Hackney stallion; black with white points. No fancy prices asked. **A. Watson & Sons, R. R. No 1, St. Thomas, Ont.** L.-D. phone from Fingal.

**Silver Creek Holsteins** We are now offering about a dozen yearling heifers and 3 young bulls. They are all of superior type, and 7-day records that average 27 lbs., is at head of herd. **A. H. TEEPLE, CURRIES P. O., Ont., Woodstock Station.** Phone connection.

**High Grove Stock Farm** No better Jersey blood in Canada. Stock all ages and both sexes for sale.  
**Arthur H. Tufts, P. O. Box 111, Tweed, Ont.** When writing please mention The Advocate

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How close to a line fence could a man plant trees? Is there any law to stop a man from setting trees right up to the line fence? What steps would have to be taken to have them removed?

Ontario.

Ans.—He may plant trees anywhere on his own land; but if he should plant them close to the line fence he would be taking the risk of having his neighbour cut away overhanging branches—which the neighbour would have the legal right to do.

### DUCKS DIE.

What is the cause of young ducks dying? We had quite a bit of trouble with them last year. They would get crippled one day and be dead the next. They had plenty of water. Would it be the feed? I fed shorts and bran, and sometimes middlings and bran, but at the first for a little while I feed bread soaked in water, the same as for chickens. Will someone tell me the best way to feed young ducks?

J. S.

Ans.—For the first two weeks of their lives, young ducks should be kept out of the sun or rain. Although they are water birds, they cannot stand much rain. Shade is also necessary. There is a chance that your ducks got too much sun or wet. Sometimes the gizzard becomes jammed with sand, which is fatal. Corn-meal, bran, oatmeal, or shorts, or low-grade flour and animal meal, all mixed, make a good mash for ducks. From 25 to 40 per cent. green food is necessary.

### SCALE ON OLEANDER—LEAF HOPPERS.

1. Please find inclosed a leaf of an oleander which has some brown scale or shell on under side of leaf, which I think hinders the growth of the plant. When washed off with soap and water it will return again in a short time. Am going to try formaldehyde and water, but wish to know the name, also the best remedy to keep them off. One lady put turpentine on the leaves with a soft rag, but the leaves died, although the plants are living.

2. What is the name of the insects inclosed in envelope? Have heard of the Buffalo moth, and wish to know if they are the same. If so, what is the best means to get rid of them? I have destroyed all I have seen, which was about a dozen.

3. What is the best method to keep off the small white or light fly that comes on the leaves of rose bushes? Tobacco (smoke) I have tried, but they soon gather again, and it is difficult to get the plug tobacco to burn.

M. J.

Ans.—1. The oleander leaf has upon it some Lecanium scales, which are commonly found attacking greenhouse and window plants. The only effective remedy, where a few plants are concerned, is to scrape them off with an old tooth or nail brush, dipped from time to time in strong soapuds. This operation will require to be repeated occasionally, as some of the eggs and minute young scales would probably escape. By keeping a lookout from time to time the insects may be controlled. Turpentine would certainly destroy the foliage, and, if it reached the stems, would cause the death of the plant.

2. The small insects inclosed in the envelope are the Buffalo beetle, an account of which will be found in another column at as early a date as space permits.

3. The little white insects on rose leaves are evidently leaf hoppers, which belong to the bug tribe, and suck the juices of the plants they attack. They are extremely lively, and, therefore, difficult to control. Syringing the under side of the leaves with strong soapuds, or a decoction made by soaking coarse tobacco in boiling water, will destroy them. Kerosene emulsion is also used with good effect. Another plan is to tack a sheet of sticky fly paper on a piece of board, then hold it near the bush and tap the twigs lightly so as to cause the hoppers to fly off. Numbers of them will be caught on the sticky surface.

C. J. S. BURNETT.

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vices are easy to clean. Empires are sanitary separators.

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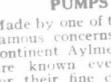
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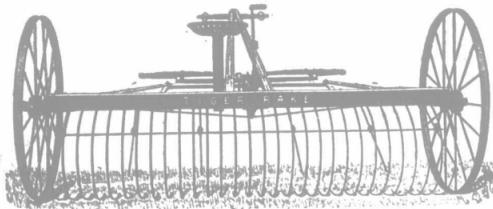
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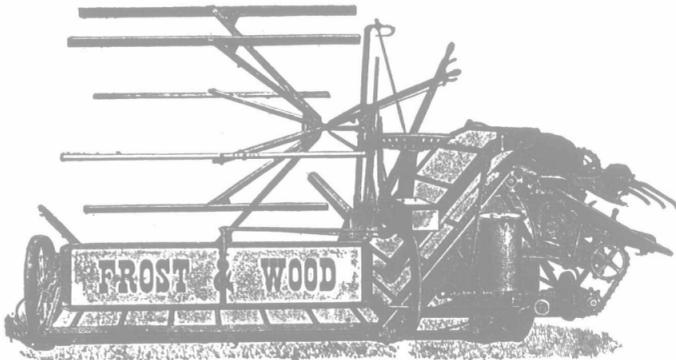
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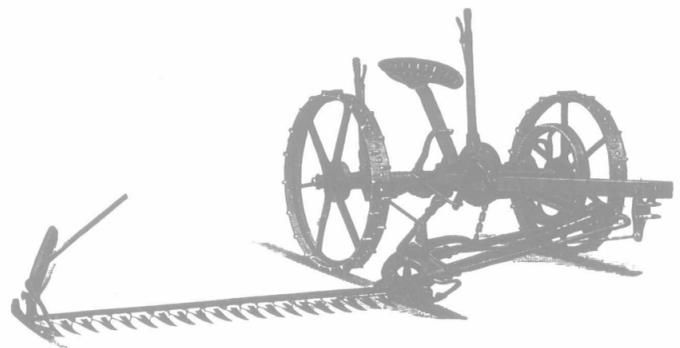


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