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THE FARMER'S ADVOCATE
 AND HOME MAGAZINE

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 Dept. of Agriculture
 Dec. 31, 11

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

VOL. XLVI.

LONDON, ONTARIO, AUGUST 17, 1911.

No. 986

A Fire-pot That Won't Crack

Less than one per cent. of Sunshine Fire-pots have been replaced.

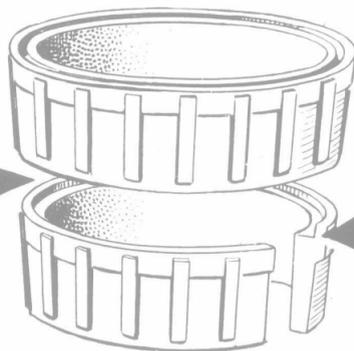
THE greatest strain falls midway between the top and bottom of a one-piece fire-pot, because the live coals are located at the centre of the fire. This continued strain overtakes the expansion powers of a one-piece fire-pot, and causes it to bulge out and crack at the centre, and through the cracks, dust and deadly coal gas escape and eventually pass through the registers. In self-defence you have to buy a new fire-pot. Every fire-pot you

Oil Cement this joint is absolutely gas-proof, smoke-proof and dust-proof.

The layer of cement acts as a "buffer" between the two sections, and allows each section to expand or contract independently of the other. This feature prevents the Sunshine fire-pot from cracking.

Less than 1 per cent. of Sunshine fire-pots have been replaced. This shows conclusively that the Sunshine two-piece fire-pot will save

2 Piece Fire-Pot



cup-joint

replace is so much added to the cost of the maintenance of your furnace.

Now, the Sunshine fire-pot is built in two sections, which are joined together with our "famous" cup-joint. Because of the shape of the cup-joint and the layer of McClary

you money, and that's the kind of a fire-pot you want in the furnace you are going to have installed in your new house.

Get the Sunshine—the economical guarantee furnace. It's the A1 furnace investment.

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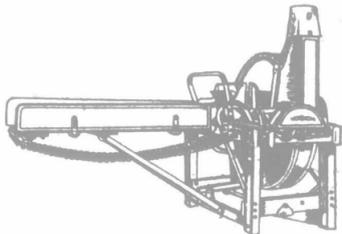
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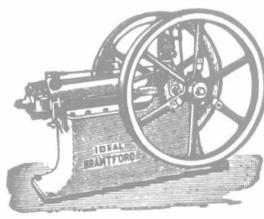
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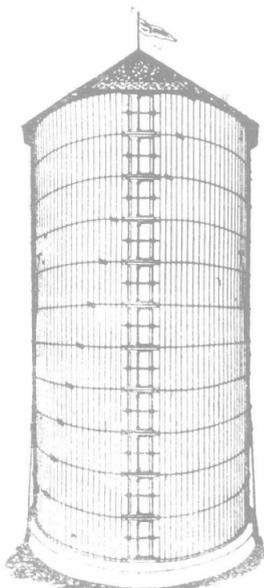
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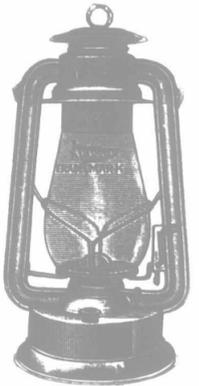


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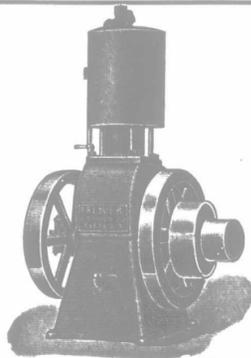
Louden's Litter Carrier

has a box made of galvanized steel, with either steel or wooden ends, and rivetted together so that it is water-tight. Its gear is very simple, yet strong and durable. The track is double-headed steel, and can be curved or bent to suit any stable or passage-way. If you use our Swinging Crane Hinge the litter may be carried far away from the stable without having any posts placed in the yard.

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Cow Stalls and Stanchions, Feed and Litter Carriers, Barn Door Hangers, Haying Tools, etc.

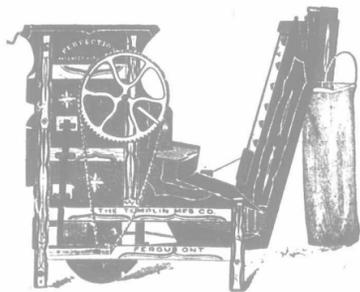


It will soon be time to use power for cutting feed, pumping and other farm requirements. NOW is a good time to consider the merits of the various engines. We offer in the

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a gasoline engine which is simple in construction, and will carry any load that the water-cooled engines of the same size will. 2 and 4 H.-P. only, but big enough for any farm work. When writing, it is a help to state the purpose for which the engine is wanted.

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The Perfection Seed and Grain Separator

Patented 1901

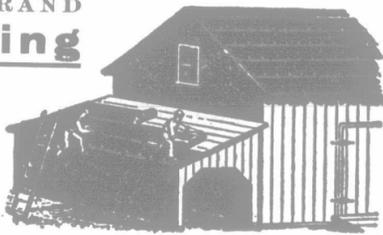
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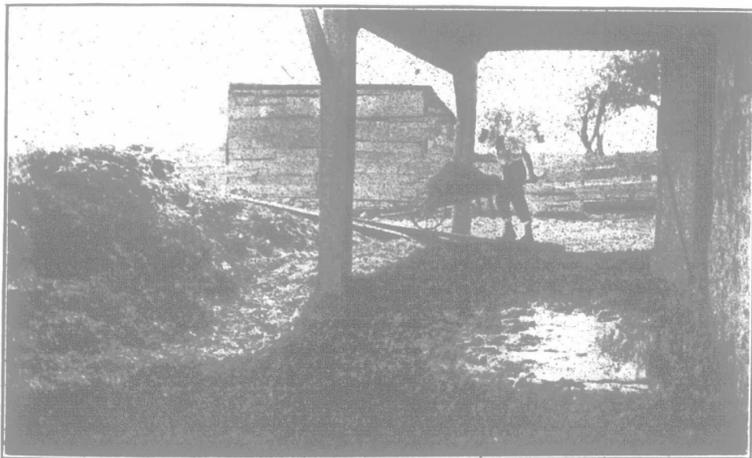
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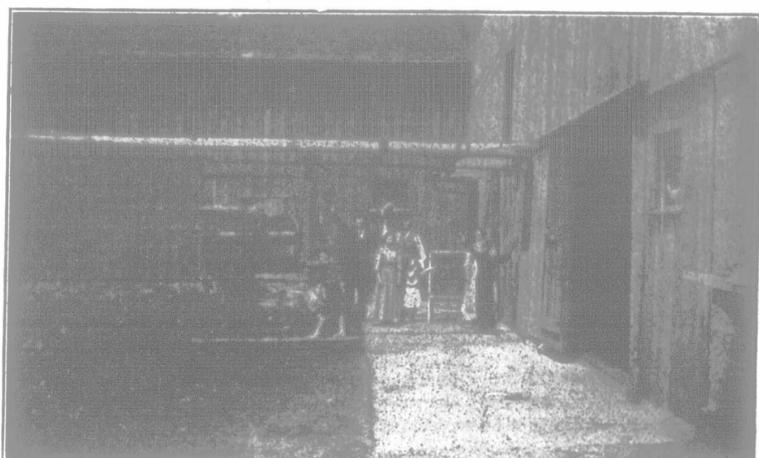


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HARD WORK MADE EASY!



200 lbs. is mighty hard work on a slippery plank for a man. Note the condition of the barnyard caused by the manure being piled near the barn. It makes a disagreeable yard and an unsanitary bad-smelling stable.



1,000 lbs. is easy work for a boy when it is in a BT Litter Carrier. On a strong level overhead steel track it is easy to run the manure a good distance away from the barn, where it can be dumped either on a pile or directly into a wagon.

Cleaning out stables is one of the hardest and most disagreeable jobs on the farm. With a BT Litter Carrier you can take five times as much manure at a trip as with a barrow, and the Carrier is so easily handled that a boy can do the work. Surely that is better than making five trips through the mud and snow. No planks to lay—no paths to shovel—you have always a solid overhead track to run on. Decide now to have a BT Litter Carrier to help you. You will appreciate it every day. No other machine on the farm is used so many days of the year.

A GOOD PAYING INVESTMENT

A Litter Carrier is a permanent investment. Running as it does on a level overhead track, there is nothing whatever to go wrong with it. We guarantee the BT Litter Carrier absolutely for five years. Other farm machinery is guaranteed for one year only. The BT Litter Carrier will last for 50 years. If there are any defects, they should develop in five years, and we guarantee our Carrier absolutely for this length of time. With no other Litter Carrier is such a guarantee given. In fact, most of the firms change their Carrier every year, and they will have to keep on changing, for they simply cannot possibly get around the patented points on the BT Litter Carrier. Get our catalogue and see why the BT Litter Carrier is such a success. When you understand the different styles, you would not take any other Litter Carrier at any price.

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More BT LITTER CARRIERS were sold last year in Canada than all other makes combined. Here are some of the reasons why:

The BT Litter Carrier is the simplest in construction and more heavily built. It weighs 50 lbs. more than the next heaviest. It has no gearing, cogs or ratchet.

Double purchase is used in lifting. It goes up easily.

There are no worm gears to wear out.

Large wheels on double roller arms run on the track, which means steady and easy running.

The Carrier is windlassed by a crank-wheel. There is no noise and rattle as with a chain lift.

The crank wheel never comes in contact with the box, so that it always remains clean for windlassing and also to shove the Carrier along the track by.

The bucket is made of 18-gauge galvanized steel—four gauges heavier than others.

The track is 2 inches in depth—next deepest is only 1½ inches. The BT Litter Carrier Track will carry a much bigger load than any other. It is also easier to erect, as the hangers will suit any style of ceiling.

It costs no more than others.

Write and get our prices, as now is the best time for installing a Litter Carrier, and we will make you a special proposition at the present time.

It will pay you to write us now. Fill out the coupon before you forget. You will be surprised how cheaply you can put in a BT Litter Carrier.

We also build Steel Stalls and Cow Stanchions and all kinds of Hay Carrier Goods.

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Kindly send me (free) your book on Litter Carriers and prices.

I will need about ft. of track.

And expect to put in a Litter Carrier about

Will you need any steel stalls or stanchions this year?

If you indicate that you will need stanchion we will be pleased to send you (free) our catalogue and prices on them.

Name.....

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Bigger Cream Checks Sure For Years To Come



Just because a separator skims close is not sufficient reason for buying it. Equally important is the question of durability.

An IHC Cream Harvester was put to a year's test at the factory—running steadily for 10 hours every working day. This is equivalent to 20 years of ordinary use, figuring on a basis of half an hour's daily service. Yet in all this time there was no perceptible wear. What better proof of IHC durability can you ask?

IHC Cream Harvesters Dairymaid and Bluebell

have been paying cow owners big dividends for years. Their skimming qualities are unequalled—their ease of turning—ease of cleaning—and durability are easily proved by the testimony of owners. Why not investigate?

You will find that IHC Cream Harvesters are the only separators with dust-proof gears, which are easily accessible. The frame is entirely protected from wear by phosphor bronze bushings. The IHC has large shafts, bushings, and bearings. The patented dirt-arrester removes the finest particles of dirt from the milk before the milk is separated.

IHC Cream Harvesters are made in two styles—Dairymaid, chain drive, and Bluebell, gear drive—each in four sizes. The IHC local agent will be glad to point out the above features and many others, or, write nearest branch house for catalogues.

CANADIAN BRANCHES—International Harvester Company of America at Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London, Montreal, North Battleford, Ottawa, Regina, Saskatoon, St. John, Weyburn, Winnipeg, Yorkton.

International Harvester Company of America
(Incorporated)
Chicago USA

IHC Service Bureau

The Bureau is a clearing house of agricultural data. It aims to learn the best ways of doing things on the farm, and then distribute the information. Your individual experience may help others. Send your problem to the IHC Service Bureau.

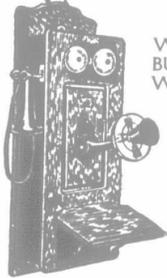


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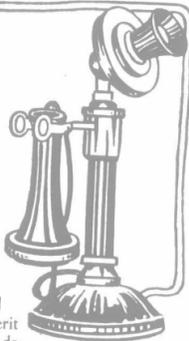
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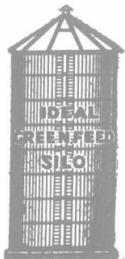
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EDITORIAL.

The mouth of the cannon is being stopped.

War drums did not beat nor trumpets blare when the peace treaties were signed.

Do not let the weeds go to seed. It is far easier to kill one plant than the scores which will come from its seed next year.

Great Britain and the United States and France and the United States have agreed hereafter to settle all international disputes by arbitration, instead of fighting.

In discussing tariff revision in the United States, Wallace's Farmer says, in so far as the old wool tariff was concerned, the farmer got the crow, while the other fellow took the turkey.

The results of good, careful spraying are becoming more evident every day. The grower who sprayed his trees well this spring is now enjoying a crop of clean fruit that will sell in any market, while a large percentage of the unsprayed fruit is fit only for hog feed.

Take a look at the pasture fields and see if the grass hasn't become very dry. It is short parched grass which suggests the feeding of some green feed, as alfalfa or corn, to keep the stock in good condition. It is a mistake to allow stock to fail in flesh, especially in fall.

In sections where the drouth has been severe the corn should be worked as long as possible. After it has become impossible to get through it with the large cultivator the one-horse cultivator can be used, and good results will follow such a practice, even until the time the ears are pretty well developed.

In many sections the drouth and heat have been so severe that the crop has been comparatively light. This should serve the purpose of impressing upon the minds of the people the need of cultivation with a view to conserving soil moisture. Next year's crop depends largely upon the amount of this autumn's rainfall, that is held in the soil for use next year.

One of the drawbacks of the dairy business is the shortage of real good heifers. The female progeny of the best cows should be kept in the herd rather than sold for veal. There is no surer method of building up a high milking average than by keeping records of the cows in order to ascertain which cow's offspring should be discarded, and which kept in the herd.

As a result of preventive and curative measures in the last ten years in England and Wales, mortality from tuberculosis has diminished 19 per cent.; in Scotland, 24 per cent.; in Ireland, 24 per cent.; in Germany, 18 per cent.; in London (England), 30 per cent.; in Berlin, 24 per cent., and in Paris, 3 per cent. This improvement has been concurrent with a proportionate decline of the general death-rate and with a decline of alcoholism. All these declines were co-incident with better housing, improved education, the social improvement of the people, and their moral elevation.

A Little Extra Feed and Care.

The last of a series of articles on the dairy farm investigation appears in this issue, and contains some valuable information on winter feeding and on the care and handling of the milk, etc. Feeding is one of the main factors in milk production. Invariably, the man who is feeding heavily is getting larger returns than the poor feeder. It requires a certain quantity of feed to keep up the animal system, and where a cow is only receiving a small ration, all or nearly all of it is used for this purpose, very little being left for milk production. It is a fact, however, that the cow's maternal instinct is so strong that she will draw on the reserve material of her body to produce the milk which is intended to feed her progeny. No cow can produce satisfactory results from such low feeding. When the reserve of the body is exhausted, the animal is in a very poor condition. It pays to feed, and to feed well. There are few, if any other, animals kept on the farm which will yield as large returns for extra care and feed, particularly the latter, as will the dairy cow.

The herds which constituted the subject of this particular investigation were very well cared for. A feature of the care given cattle during the winter months is regular cleaning or currying. All owners practicing this have no hesitancy in recommending it as a profitable operation. It keeps the skins clean and free from dirt, and the stock thrive much better than when left uncurried. Another very simple yet commendable feature is clipping the cows' tails, leaving only a switch at the end. This is a great aid in keeping this appendage clean, and during the milking process the tail is very often in motion, so that any measure which will tend to keep this member free from dirt is worthy of a trial. Special separator and dairy buildings are necessary adjuncts to good dairying. It is impossible to produce a sanitary article if no special care is taken. Cream separators situated on a block in a corner of the stable or feed-room collect a number of bacteria beyond comprehension, and a position of this kind is no place for this machine. The separating and cooling room does not need to be very large, and consequently will not be very costly. It is understood by all that the harmful organisms in milk do not develop so rapidly when the milk is kept at a low temperature; therefore, the more quickly the milk is cooled after milking, the better. Most of the dairymen producing milk for city use have ice for cooling, but many are using special coolers.

There are very many little things which can be done to promote cleanliness. Where certified milk is produced, the cows' udders are all washed with antiseptic water previous to each milking. Each cow's milk is taken to the dairy and cooled immediately after being milked, and the milkers wash their hands in antiseptic water after each cow is milked. In one dairy, even the milking stools were taken to the dairy, and thoroughly scrubbed each morning and evening. It is the little things like these that demand attention in the production of the highest class of sanitary milk. Few dairymen produce certified milk, but it is within the reach of every owner to produce a high-class article by paying just a little more attention to the handling of the milk. A small dairy building, entirely separate from the stable, should be the aim of every milk producer who does not already possess one. Cement seems to be the best floor for this building. It is cool and lasting. The walls are all the better for a coat of white-

wash, and plenty of water should be used at all times to keep the building cool and clean. Dairying means work, if it is properly done, and to get the most out of it requires care and labor, but there are few other phases of agriculture which pay as well for the labor, one year with another, as does the dairy business.

Political Issues Tabooed.

"The Farmer's Advocate" has been asked to publish an article discussing the issues before the electors in the pending political campaign, with a view of assisting them towards a wise exercise of their franchise. We must respectfully decline. "The Farmer's Advocate" is not a political paper. Business and economic questions it occasionally touches upon, but the moment one of these becomes a party question it is frankly eschewed.

The great function of this journal is to promote the cause of agriculture and country life. In this behalf it appeals to all classes, distinguishing between no parties, races or creeds. Persons of all shades of political and religious conviction welcome it as a helpful and uplifting agency, and may it ever be so.

"But," says someone, "why not treat these questions impartially?" Every sentence that might be printed would be weighed as to its fairness or alleged bias by honest readers with all shades of deep-seated political prejudice, and prejudice is still in many cases stronger than reason. The net result would be few changes of opinion, many enmities and substantial weakening of influence in our especial sphere.

The central issue in the present campaign—the one which precipitated the election—is reciprocity. Upon that issue the position of the paper has already been clearly manifested. We expect to say no more about it till the election is over. Furthermore, we close our columns for the time being to correspondence upon the subject—correspondence which, however logical and disinterested it might be, would quite certainly be misinterpreted as to its motive by those who did not agree with the writer's politics.

We state our position thus frankly, confident that it will commend itself to the common sense of practically all readers. If a word of adjuration were added it would be to keep clear of the party machines, thereby preserving a detached point of view. Many a sovereign elector's tendency to independence has been nipped in the bud by a wily political strategist who succeeded in getting him publicly identified with his old allegiance, smothering the pleadings of judgment and principle with election heat and party fervor. The hope of democracy rests upon the unpurchasable independent vote. The larger this is the better.

The Struggle for Existence.

Give Nature half a chance, and she will do the rest. Nature does not shirk. She always plays her part in the game. In driving through certain sections of the country lately, one could not fail to be struck with the way in which scores of oat fields were struggling instinctively to produce a crop. Owing to drouth and other causes the grain had been in some cases almost a failure, but had been cut and removed. The roots still lived, but, no doubt, ashamed of the little stand of straw and less grain produced, had thrown up a fresh set of shoots along the old drills all over the fields. At the time of writing, many of the stools had reached a height of from six inches to nearly a foot, and in some cases had actually again headed out. Occurring in a poor, sandy

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

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JOHN WELD, MANAGER.

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field examined, the struggle of the plant, under discouraging conditions, to reproduce itself was almost pathetic. Most of the fields were quite green, even with the few light showers, and would afford no little fall pasturage for the stock.

After "The Entrance" What?

Recently the newspapers published lists of the names of pupils successful at the recent entrance examinations. To the credit of the youth, the list was large, indicating that the boys and girls of the Ontario public schools are not idlers. The entrance examination is a somewhat severe one when examiners know their business and have the courage to do their duty.

What is to be the future of the country boy who has passed this examination? Has his success made him feel that he is forever done with the farm and its varied interests? Do his parents feel that his success proves that he is fitted for "something better" than farming, with its toil and slow rewards? In far too many instances it is to be feared that the boys and their parents thus feel. Already many a wardrobe is being fitted out for the son who is to be sent to High School this fall, in the hope that he may become a doctor, a lawyer, or a minister, and in this way enter, as they foolishly imagine, the ranks of men whose standing is far above that of the farmer. Against such folly, let the most earnest protest be entered. The average farmer's work is as good any day as that of any other man in the commonwealth. His toil is not one whit harder or more exacting or disagreeable than that of the men who do things in the professions or in politics or in merchandise, while the rewards of the average farmer are better and surer than the rewards of men in business or in the professions, time, labor and financial investment considered. Let no farmer or his son be deceived about this just now, when the boy's career is under consideration. To one who is not afraid to work and to put enthusiasm and hard thinking into his occupation, the farm holds out inducements that vie with any other business under the sun.

This is no plea for parents to insist that their sons be farmers. Still less is it intended to shut the door of the High School or of the university in the face of any boy. But it is a plea that the farmer's son should know the merits of farming before he leaves the farm behind him forever. The better education he has, the better farmer he

is likely to prove; but at no period of his High School or University course should a teacher belittle the farm or slur the farmer. Indeed, it should be treated as a serious misnomer for teacher or professor to discourage any boy from taking up the work upon which national virility and prosperity depend so largely. Before the safe and sure and wholesome life of the farm is abandoned as a possible career for the successful candidate at the entrance examination, parents and candidates alike should do some sober thinking.

J. M.

"Burning a Candle at Both Ends" SOME ASPECTS OF AGRICULTURAL CONSERVATION IN CANADA.

By A. Donnell, Assistant Editor, Commission of Conservation.

Agriculture will probably always be the most important of Canada's industries. Her vast areas of fertile lands, and her almost unequalled transportation facilities present opportunities for development and advancement such as are possessed by no other country. The methods followed in the utilization of these resources will, therefore, always be a matter of supreme importance to all Canadians. While the land is being used, it is essential that it should not be abused. There is no reason, other than selfish greed, to prevent the present generation of farmers leaving the farms of Canada to posterity in as good or better condition than they found them.

James J. Hill has said that, "the highest conception of a nation is that of a trustee for posterity." It would be fortunate, indeed, if this sentiment could be indelibly impressed on the minds of all Canadians, and especially of those who are engaged in the development and utilization of our natural resources. It is only too true that far too many Canadian farmers use the soil as if it had been given to them by a kind Providence for their benefit exclusively. Apparently, they have never even had a thought concerning the rights of future generations. What, for example, does the feverish haste to acquire large farms in the West result in? Frequently it results in the land being actually mined for all that is in it, and then the fields are abandoned to the weeds and the jack-rabbits. Every year sees an increasing number of these Western farmers—if the title is not a misnomer—leave the prairies to spend the winter in more congenial climates. For the most part, such men burn their straw, sell their grain, and keep little or no stock to assist in maintaining the fertility of the soil. It is a lamentable fact that considerable areas in the Canadian West, which a generation ago were amongst the finest wheat lands on the continent, have been abandoned as worthless. As a matter of fact, they are worse than worthless, as they have become overrun with weeds, and so constitute a serious menace to the lands bordering on them. Dr. Robertson, in an address before the Commission for the Conservation of Natural Resources, last winter, said: "There are some Western (Canada) cities that may follow the fate of Nineveh, smothered into oblivion from want of care in protecting the soil."

Fortunately, soil-mining has not been practiced to the same extent in Eastern Canada. From the first, conditions made general farming a necessity, and, as a consequence, fertilizers were always available. Further, the need for growing different kinds of grain led to the adoption of some form of crop rotation. But it goes without saying that more scientific farming in the East would make possible a greatly increased production. In referring to the results of the agricultural survey, begun by the Commission for the Conservation of Natural Resources in 1910, Dr. Robertson said: "If the farmers on the average throughout Canada would farm as well as the fifty best farmers whose farms have been surveyed, the result would be the doubling of the quantity of the field crops from the land now occupied in Canada within a period of three years." That is a sweeping statement, and one that should do much to awaken farmers to a realization of their opportunities. It is indeed fortunate for Canada that there are at least a few farmers who farm intensively, who make the proverbial two blades of grass grow where but one grew before, and at the same time, too, enhance the productive value of the soil.

The question naturally follows, what, then, can be done to make such methods of farming as general as possible? The Department of Agriculture for Ontario is making progress in the solution of the problem by what might be called personal agricultural instruction. Under the direction of C. C. James, C. M. G., the Department maintains well-trained, resident instructors in a number of counties (the number is steadily increasing) of the Province. By actual demonstration on the farms,

these instructors make plain what exact knowledge, backed up by common-sense management, can do to increase the productiveness of the soil. This appeals to the farmer, because it helps him to do work on his own farm, by which he increases his profits. It may be noted, in passing, that this method has been in vogue for some years in a number of the Southern States, where it was introduced by Dr. Seaman A. Knapp, and where it has proved an invaluable boon to farmers.

In addition to this work, the Lands Committee of the Commission for the Conservation of Natural Resources is at present making a survey of the farms in each of the Provinces of the Dominion. The purpose of this survey is to ascertain, as far as possible, the methods followed by Canadian farmers. Such questions are asked as: "Is a systematic rotation of crops followed, and to what extent? What uses are made of fertilizers and manures? What is being done to combat the plant and insect pests that attack the various crops? What is being done to check the growth of weeds? To what extent is selected seed sown, etc.?" Work along these lines was commenced during the summer of 1910, and is being continued during the present year. Over one hundred farms in each of the Provinces were visited last summer, and the data obtained is not very reassuring. Of the nine hundred farmers visited, only about nine per cent. follow any intelligent and effective system of crop rotation. In some sections, as many as fifty per cent. of the farmers use good rotations, but in a number of other districts not a single farmer was able to report any systematic rotation whatever. Many farmers take rotation to mean any order of sequence for one crop to follow another. Instead, it implies that, during each year, while the crop is growing, the soil is being carefully prepared for the succeeding crop, by the preservation of the fertility of the soil and the keeping down of weeds.

The use of manures in fair quantities is general in the Eastern Provinces, and many farmers use commercial fertilizers, as well. With regard to the latter, in many instances they are wasted, owing to the lack of knowledge of how to apply them properly. On about sixty-two per cent. of the farms in the Western Provinces manure is used for gardens, and in some cases for root crops. As but comparatively little stock is kept, only small quantities are available, and the amount used is quite insufficient to maintain soil fertility. Thirty-eight per cent. of the Western farmers visited used no fertilizer of any kind.

In every Province but Alberta, plant pests, such as grain rust, smut and potato beetles, were reported. In the Maritime Provinces, especially, these cause serious losses every year. Very little is known by the farmers of the best methods of combating these pests, and comparatively little grain is treated for smut. Weeds are plentiful in all the Provinces. Prairie farmers, however, regard wild oats as the most dangerous. All the farms visited in Manitoba were infested with this weed. In Saskatchewan, seventy-one per cent. of the farmers reported wild oats, and in Alberta only three per cent. Evidently, this weed is moving steadily westward. As yet, the number of varieties of weeds found in the West is not as large as in the Eastern Provinces. In Manitoba, only thirteen varieties were reported, while in Nova Scotia thirty-nine were reported, and in New Brunswick thirty-three.

The farmers of Quebec, too, are face to face with serious weed problems. The most dangerous variety apparently being the Russian thistle. Sixty-three per cent. of the farmers visited stated that they were troubled with it, and thirty per cent. claimed that it was getting worse.

In the matter of seed selection, less than ten per cent. of the farmers visited throughout the Dominion use carefully-selected seed grain. A considerable number use the fanning mill, but in very many instances not even that precaution is taken. Comparatively few farmers realize the great importance and value of using only seed that is free from weeds, and that possesses sturdy germinating powers.

So far, the survey has been of value mainly in proving the existence of careless, ill-advised methods on many farms. While the soil was virgin, slipshod methods gave the farmer a fair living, and in some cases even a competence. But that is fast passing. In the older districts, it is already an impossibility. The tremendous economic waste that has gone hand in hand with North American agriculture is a disgrace that can only be wiped out by the prevention of further soil depletion. But, it may be asked, what purpose does an agricultural survey serve? Obviously, such a work merely points out where the conditions are that need remedying. It is a great deal to be able to place a hand on the sores and to say, "thou ailst here and here." Diagnosis is of first importance, for unless it be right, the remedy that may be applied is likely to be all wrong. Judging by the results already obtained, it would seem that a system of education such as has begun in Ontario, would go very far towards preserving for future generations of Canadians an unimpaired soil.

HORSES.

Nothing takes the energy out of the work horses more than being exposed to the broiling sun during the heat of mid-day.

A drink of fresh cold water is one of the most effective means of restoring the horses' weakening energy.

Thirst depresses a horse's vigor and only serves to intensify his exhaustion due to oppressive heat.

A colt that is being heavily fed should have sufficient exercise to keep the proper balance between exercise and feed so that his bone and muscle develop properly.

If your horse is poor in flesh and wears a staring coat despite a reasonable supply of food, examine his teeth. Elongated and irregularly worn teeth are often responsible for poor condition.

It should always be remembered that hard-worked horses should have rich food. As a rule, the richer the food the more easily it is digested, and a food that is easily digested and assimilated has a much larger proportion available for work than a food that is difficult to digest, because much of the energy of such a food is used up in the work of preparing it for the use of the body.

It is said that horses sleep only from three to four hours out of the twenty-four. This is a very short time, and it is necessary that the animal have all possible comfort during his short rest. Wide stalls and abundance of bedding give the horse encouragement to stretch out and ease his tired limbs. Narrow, cramped stalls and bare floors cause stiffened joints and tend to discourage lying down. Surely the faithful animal is deserving of all possible comfort during the few short hours of his repose.

Most farmers endeavor to follow some system of managing their human labor, but few pay any considerable attention to the management of their horse labor. It is needless expense oftentimes to keep more horses for working purposes than are really required. Some system should be worked out which would get over the difficulty of having to feed a number of idle horses in winter. The work should be so planned as to distribute it throughout the year, winter as well as summer. Brood mares which raise foals each year are one means of solving the problem. They do the work when it is needed, and the colt more than pays for the mare's keep during idleness.

Weaning Foals.

When the colt has attained an age of from four to five months he is old enough to wean. Most of the brood mares in the country are required for the rush of fall work, and it is not fair to them to be expected to feed the colt while they are thus expending most of their energy tilling the soil. Both the mare and the colt will do better if the colt is weaned, provided the youngster is liberally fed and has been taught to eat previous to the time his dam is removed. Weaning does not offer any special difficulties, provided the preliminaries of care and feeding have been properly attended to.

Two methods are practiced by horsemen, either of which will give fair results. By one method the colt is taken suddenly away from the dam, and is never again allowed to suck, while with the other the colt is allowed to suck at intervals, which are made more infrequent from day to day until the mare is nearly dry. There is very little to be gained by prolonging the separation, as is done in this latter method, and it has little to recommend it, save that it lessens the danger of trouble with the mare's udder from the milk not having been drawn, but this can be averted by drawing a little of the milk by hand. At this time of year, when the grass is dry, the mare, unless she be an exceptionally good milker, does not produce a very heavy flow, and the better plan is to take the colt away abruptly and not allow him to see or hear his mother until he has forgotten her. It is very important that the colt and the dam are kept separated far enough so as not to be able to see or hear each other, because it will take much longer for them to forget if they are not kept well removed. The mare should be placed on dry feed, which should only constitute a limited supply of hay. No grain should be

fed, and if kept at work no trouble will result from the flow of milk, which will gradually diminish and soon cease. As soon as it has ceased the mare can and should be fed liberally.

The colt should be placed in a box stall, or in a grass plot; the former is the better—and he should be well fed. There is nothing better than oats mixed with bran for concentrate, and an abundance of grass and green feed should be given. It is a good plan to place halters on the colts at this time, and to leave these on, leading the colts as much as possible during the weaning process. This serves to get them handy, and also help them to forget the loss of their mothers. The colt abhors solitude. He enjoys mixing with his kind, and there is nothing that will cause him so much trouble as to be left alone, and especially is this so at the time he has lost his dam. He will fret and be very restless if he has no company, consequently it is advisable to place two or more colts together, that they may, as it were, console each other. If the box stalls open into nice grass paddocks, so the colts can run in and out at will, so much the better. A few days is usually time enough to keep them in the stalls, after which they can be turned away to the fields, where there is plenty of water and a feed trough containing feed constantly. When the colt is turned away to the field he is too often allowed to rustle for himself. This should not be, for it is in the young and growing stages that good care is absolutely essential to the best development of the horse. Older horses can stand hardship, because they are fully developed, but the young colt if placed under adverse conditions receives a setback which is rarely if ever overcome, and he is injured for life. He has been in the habit of taking milk a great many times a

The Suffolk Horse.

Peculiar to the eastern counties of England in general, and the County of Suffolk in particular, is the third of the British draft breeds of horses—the Suffolk—one of the most distinctive types of the drafter known. It enjoys the unique distinction of having but the one color—chestnut. This varies throughout all the different shades of that generic hue, from the dark liver to the bright golden sorrel, with the most general shade the medium sorrel, as we understand the term in this country. Here and there white markings are met with, but more rarely now than formerly, the white being deemed objectionable by the British breeders. Unlike the other two breeds of drafters in Britain, the Suffolk has a very clean leg, with no more hair about it than the Percheron.

Regarding the origin of the Suffolk, investigators seem to have agreed that in its present habitat there practically always has been a race of chestnut horses. At least it was there back in the beginning of the eighteenth century, and it does not appear that any infusion of foreign or other alien blood has ever been made. Certain it is that the clean leg and characteristic conformation were never brought about by crossing with French stallions. What the breed is to-day is solely the result of another lone very small territory to which this breed seems to have been indigenous. The chestnut color is readily transmitted to the Suffolk's grades, and I have seen some very good specimens among them.

It is doubtful if this breed has ever received in America the recognition to which its many good qualities entitle it. This perhaps is accounted for in the fact that the color is not a popular one among draft-horse breeders generally,

and from the personal experience of the writer there has always been some sort of a lurking suspicion in the public mind that these clean-legged, heavy-quartered chestnuts were French horses of some sort masquerading under a name to which they had no right. It is hard to persuade some folks that the very hairy-legged Shire and the very smooth-legged Suffolk are bred in the same island. Nevertheless the Suffolk can trace his lineage back to the middle of the eighteenth century and beyond in an absolutely unbroken line.

In so far as they have been given a trial here they have made good. The individuals do not run as large as the Shire or Clydesdale, and

have proved themselves eminently well suited for crossing on rather small mares, on the ranch and elsewhere. Their progeny is wonderfully uniform and they make most excellent workers. It is doubtful if there is in the entire list of draft breeds one which has a better disposition or greater tractability. In their native land it is the custom of their dryers to break these horses to work entirely without reins. In the plow, on the road, in the show ring, you may see them often hitched three tandem, guided by one man, and not a rein in sight. For simple endurance it is again questionable if this breed is surpassed. In that part of England where they are used it is the custom to hook up the Suffolks as early in the morning as the daylight will permit, and keep them plowing continuously until the daylight fades.

It is on account of their docility and good tempers that the Suffolks are sought for crossing on range mares. In addition to putting neat bodies on their foals, arching up the neck and making them generally desirable in point of conformation, the Suffolk stallions almost invariably imbue their get with such even tempers that the breaking process is comparatively simple. On account, however, of the clean legs and the common chestnut color the foals by Suffolk stallions have no distinguishing marks, and hence are swept into the great commercial maelstrom without their sires obtaining due credit for them. Suffolks are being bred successfully in a number



Monston Peters.

Suffolk stallion. First and champion, Royal Show, England, 1911.

of the States, and a ready market is found for the surplus annually, while a few are brought from England each year, both by the big importers and by private individuals, who have tested the breed and discovered its real merit.

Properly speaking, the Suffolk is an agricultural horse rather than a draft horse. He is in spots and places large enough for truck work in the great cities, but not as a rule is he used in the lorry in Britain. Indubitably his size is increasing from generation to generation, and he is in the hands of most careful breeders who are pushing his interests in a most intelligent manner.

LIVE STOCK.

Keep the Good Breeders.

Owing to the dry weather which many sections have experienced this summer, rough feed, especially where corn is not grown for this purpose, may be scarce, and because of this, some stockmen may be obliged to feed rather short rations this coming winter, or dispose of some of their stock. In districts where the hay was short, the straw crop is also quite light, so there only remains one class of feed to make up for this shortage, and this is the corn and hoed crops. Everything possible should be done to keep these crops growing. The corn crop will soon be too far advanced to permit of much work being done in it, but the root crops can be worked for some time yet.

Should it be found that, even after every effort to increase the production, there is still a shortage, the owner may hesitate between selling off some of the stock, leaving only what he has sufficient feed for, or trying to run the entire lot over winter on a small and insufficient ration. This latter method is seldom advisable, unless it be valuable breeding stock, for which a satisfactory price cannot be obtained. Where this is the condition of affairs, it would no doubt pay the breeder to buy feed and keep the stock. In fact, for the good of the farm, it would be advisable, in most cases, to keep it and buy a little feed, but it seldom proves profitable to keep animals on starvation rations. If the owner decides to dispose of some of his herd, he should retain all those that have proved themselves to be the most valuable breeders. It will afford a good opportunity to weed out the inferior specimens. Under no circumstances should the best breeding animals be sold on this account, because, if this is done, the value of the herd is impaired for many years to come. It should always be the aim of breeders, in reducing their herds, flocks or studs, to dispose of the inferior stock first. Too many stockmen are induced to part with their very best breeders for what appears to them a large price, while, if the real value of the animal and the progeny in future years was considered, the price would seem a mere pittance. The fact that outside breeders come into Ontario and take away with them the very best mares in the Province, is given by many as the cause of the scarcity of really high-class breeding mares and fillies in this Province. To keep up the very highest standard in all classes of breeding stock, it is necessary that nothing but the best animals be kept and used for this purpose. If you must sell off some stock, let the inferior scrubs go. Many of these are expensive burdens on the farm, and the sooner disposed of the better. If all the animals are reasonably good breeders, and the prices are not high enough to warrant selling them, the owner should not hesitate in keeping the entire lot, provided he can purchase feed at a reasonable price. Wholesale disposal of stock because of shortage of feed, should be discouraged, as should also the keeping of more animals than can be properly fed and cared for. In selling the stock, follow some system that will tend to raise the individual excellence of the herd, flock or stud, rather than the indiscriminate discarding of those animals which sell most readily. Depend upon it, the animal that the other fellow is keenest to get is usually the one most profitable to retain.

Experiments With Hog Pasture.

Without a doubt, hogs which have access to some kind of pasture or green feed can be raised much more cheaply than those which are closely confined and fed solely on a grain ration. In support of this contention, it will be readily granted that the majority of farmers who raise pigs provide them with pasture during the summer and fall. In the recently-published report of the Alberta live-stock commissioner, it was stated that, of the 263 farmers heard from re methods of feeding, 72 per cent. provided summer pasture, and that 33 farmers in every 72 preferred rape to any other kind of pasture.

To turn to the experiment stations, Professor Day, of the Ontario Agricultural College, found that hogs were raised much more cheaply if green

feed was substituted for some of the grain usually fed; that rape was the most valuable crop for this purpose, and that it was cheaper to feed the rape as a soiling crop, rather than as pasture; but the former method took just twice as much time, and for this reason was often impracticable. Again, Professor Carlyle, of the Wisconsin Experiment Station, found that hogs pastured on rape made average daily gains of 1.06 pounds, and cost \$2.73 per hundred pounds of gain; and that, on the other hand, hogs fed grain alone made average daily gains of only .85 pounds, and cost \$3.36 per hundred pounds of gain. He concludes thus: "Pigs are more thrifty, have better appetites, and make correspondingly greater gains when pastured on rape, in conjunction with a grain ration, than when fed on grain alone. Rape is the most satisfactory and cheapest green feed for swine that we have fed."

Rape is usually considered to be about the best pasture that can be grown for hogs, though some prefer oats or barley, or a mixture of the two grains. Alfalfa is very highly spoken of, but at present, in this country, it is only in its experimental stage. The writer seeded some rape, mixed with wheat and oats, on May 24th, and at the present date, July 8th, is eighteen inches high. Some of it did not do so well, for parts of the plot were rather low, and rape does not thrive on low, wet ground. The plot of rape is one-quarter of an acre in extent, and at the present time has on it eleven growing pigs and two brood sows. One of these sows will pig in the middle of July. An acre of rape will, I think, support about forty pigs, but the number depends somewhat on how much grain the pigs are fed, in addition to the rape.

It has been proven by experiment that a greater gain per hundred pounds of grain fed is obtained when hogs are fed soiling crops in the pens than when they are pastured. Against this fact, however, is the great amount of time entailed in cutting the rape, or whatever the soiling crop may happen to be, and carrying it to the pens. The pigs would sometimes be apt to go without their green feed, especially during harvest and threshing times.

There is money in pigs at the present prices. Stay with them and raise them as cheaply as possible by the use of skim milk and of some kind of good pasture or green feed. Get the right type of pigs to make the quick gains, and you will get a good price for your barley and your labor.—[A. B. D., in Winnipeg Farmer's Advocate.]

THE FARM

Filling the Silo.

By W. J. Kennedy.

The problem of filling the silo for the first time is going to confront more farmers this year than ever before. Thousands of men are asking these questions: When should the corn be cut? What length should the corn be cut? Should the silo be filled rapidly or slowly? How should the corn be distributed and packed? Should water be added during the filling? How should the cracks or other air spaces be filled? What is the best way to prevent waste on the top of silo? What does it cost per ton to fill the silo? How soon after filling is the silage fit to use?

In attempting to answer some of these questions, the author, in addition to drawing upon his own personal experience of many years with silos, has consulted all of the leading experiment station workers who have had silo experience, and in addition, many of the leading beef producers and dairymen. The answers brought out many points of interest. Chief among them was a marked tendency on the part of the beef producers to advocate a more mature corn at filling time than in the case of the dairymen.

TIME TO CUT CORN FOR THE SILO.

While there is some slight difference of opinion on this matter, practically every answer indicated that the corn should be dented, in the dough stage, or when about one-fourth the husks and the lower leaves were turning brown in color. This would indicate that the best results are obtained when the corn is mature enough to cut for shocking purposes. The nearer the corn is to maturity, the more food nutrients it contains. Thus, the more valuable from a silage standpoint, providing there is enough moisture to insure proper fermentation. Immature corn makes a dark-colored, sour silage which may cause animals to scour badly.

LENGTH OF CUT TO USE.

In the discussion of the lengths in which the corn should be cut when put into the silo, much difference of opinion was manifested. Some advocate 1 1/2 inches, others 1 inch, others 3/4 inch, many 1/2 inch, while some advocated less than 1/2 inch. The longer the cut used, the more economical from the standpoint of power, and the more rapid the filling of the silo. The shorter cut, such as

the 3/4-inch length, insures less waste in feeding the silage, and makes it possible to put a greater quantity of corn in the silo. Taking everything into consideration, either the 3/4-inch cut or the 1/2-inch cut should be used. This will make a very palatable form of silage for the animal, and also make it easier to pack the silage so as to eliminate the air, thus preventing waste.

RAPID OR SLOW FILLING.

This is a point on which there is much difference of opinion. Where slow filling is practiced, it is always possible to pack the silage thoroughly by tramping and allowing it to settle. In this way the full capacity of the silo may be utilized. The objections to this system are that, where a large quantity of silage is to be put up on a farm, or on several farms, with the one filling outfit, it takes so much time that some of the corn must be put in too green at the beginning, and some more of it too dry at the finish. It is also more expensive than where rapid filling is practiced.

Where rapid filling is practiced, say from 80 to 100 tons per day, the cost of filling is reduced to the minimum. A large quantity of corn can be put in the silo in a short time, thus insuring a more uniform quality of silage. The chief objection to this method is, unless provision is made for refilling in about a week or ten days' time, that, after the corn is through settling in the silo, it will only be about two-thirds full. This may be partially overcome on a farm where two or more silos are built side by side, by filling one for a day then the other for a day, allowing some time for the corn to settle, until the two or more silos are filled. In some instances, where about three days are required for the filling, the work is commenced on Friday and Saturday, allowing the corn to settle over Sunday, and the work is finished on Monday. Where fast-filling is practiced, the only way to utilize the full capacity of the silo is to fill to the top, let it settle for a week or ten days, remove the waste on the top of the silo, then refill. This requires a resetting of the machinery when used by more than one farmer, but it will pay.

DISTRIBUTING AND PACKING CORN.

There are several different ways for distributing and packing the corn in the silo. The principal points to be observed are that the light and heavy portions of the corn should be uniformly distributed. That is, the stalks and ears should not be in the center or at one side, and the lighter portions, such as the leaves, at the other side. The corn should be uniformly packed or tramped in all parts of the silo. This is necessary to insure a good quality of silage. The majority of the silo-owners prefer having the surface of the silage saucer-shaped, about two feet higher at the sides than in the center, for the reason that the center, where the corn drops and the men usually stand, gets solid and hard, and does not settle afterwards as much as the sides. This is especially true of those silos filled without some form of distributing device. If the sides are constantly kept about two feet higher than the center, and well trod or tramped when the silo is full, the silage is wedged tightly against the sides and the heat of fermentation retained, thus killing the germs of mold. One reason why silage molds more at the sides than in the center is that it is not packed closely enough against the sides to prevent the air from reaching the heated silage, thus furnishing mold-making conditions.

There are several patented distributing devices on the market. The majority of these are very helpful in filling the silo. A very simple and cheap device may be made by sewing together a number of sacks (with the ends cut out), making a tube. This is attached to the end of the blow-pipe, and manipulated by a man inside of the silo. In this way the corn can be evenly distributed over the entire surface of the silo. The packing of the corn is an important point. True, in time it will settle down of its own accord, but more corn can be put in a silo, and much better silage made, when the packing is given careful attention. Tramping on the part of the men is helpful. The best way, however, is to use two good reliable men with cement tampers. The best silage the writer has ever seen was in a silo which had been packed by cement tampers. There was not a particle of waste after a few inches on the top had been removed.

ADDING WATER DURING FILLING.

Ordinarily, corn cut at the proper time does not need any water added to make good silage. There are times, however, when it is necessary to add water to the corn in filling the silo. The corn in the silo at the time of filling should feel moist; if not moist, water should be added. Under any of the following conditions water should be added to the corn when filling the silo: First, when the corn is too ripe, and the leaves and part of the stalks are dried out to such an extent that they will not pack well. Second, when the corn is severely frozen before it has reached the proper degree of maturity, liberating the moisture, and leaving the leaves and stems

dry. Third, when refilling the silo late in the fall with shocked corn, it is always necessary to add water.

There are two ways to add water. First, put a hose in the silo and thoroughly saturate the dry portions, especially around the walls. Second, where the blower cutter is used, run an inch stream of water into the blower when it is at work. This will add a sufficient amount of water to insure good results.

FILLING CRACKS AND AIR-SPACES IN SILO.

The silo should be air-tight. Any crack or space which lets in the air will cause more or less moldy silage. These troubles in wooden silos may be avoided at filling time by having a pail of soft clay at hand; as the silo is filled up, anything that looks as though it was not air-tight should be filled with a handful of clay. Any cracks or openings in masonry silos should be properly fixed with cement before filling. Great care should be taken to have the door fit well and air-tight. In a good silo, properly filled, there should be no waste, except at the top.

PREVENTING WASTE ON TOP OF SILO.

There is always some waste on the top of the silo, unless feeding operations are commenced as soon as the silo is filled. The amount of waste material varied under different conditions of management, from two inches, where great care is exercised, to ten or twelve inches, where practically no precautions are taken to protect the same. Various methods of lessening the amount of waste have been tried out. One of the first precautions is to thoroughly pack and level the top of the silo. Some use oat chaff or cut straw. Others thoroughly soak the top with water, then seed with oats. The oats germinate and form a thick covering which serves to keep out the air, thus lessening the waste. One of the easiest and most satisfactory methods to pursue is to pick the ears of the last three or four loads of corn, then run the stalks through the cutter into the silo. Thoroughly tramp the same. Then put on from twenty to thirty barrels of water. This has the effect of hermetically sealing the silo, and only a very thin layer of waste will be on top.

COST PER TON OF FILLING SILO.

The cost of filling the silo (cutting the corn in the field, hauling it, putting it through the silage cutter, tramping, levelling and covering the silo) varies from 40 cents to \$1.00 per ton. It depends on many factors. First, the distance corn must be hauled from field to silo. Second, the kind of weather, as it will cost about fifty per cent. more to fill a silo during wet and broken weather than during dry, clear weather. Third, the kind of machinery used. The cutter must be a strong, well-built machine, with a wide feed-mouth, because at times it is put to very severe tests. The motor power must be ample; a 15-horse-power engine is much more satisfactory than a 10, where rapid filling is practiced. Fourth, a well-organized crew of men will fill a silo much cheaper than where organization is lacking. The machinery should be kept going at full blast all of the time.

The following statement, furnished by a very successful dairy farmer, gives an idea of the cost of filling a silo: "We hire an extra man or two, and make long days with the regular help during the filling season. We have our own outfit—silo, cutter and engine (16-horse gasoline), also corn-binder. We use our regular low-wheel, flat-rack wagons, and have two pitchers in the field, and let one of them take the herdsman's wagon for first few loads in the morning and the last few at night.

Four teams and drivers	\$16.00
Corn-binder, man and team	10.00
Cutter and engine, with one man	15.00
Two extra men to pitch	5.00
Two men in the silo	5.00
Thirty gallons of gasoline	3.60
Total cost per day	\$54.60

"This crew will put in from 85 to 90 tons per day; thus, it costs around 60 to 65 cents per ton to fill the silo."

The above statement is a fair one. It has cost from 60 to 75 cents per ton to fill the silos at the Iowa Experiment Station during the past eight years. The higher cost was due to hauling a long distance, or to rainy weather, when the loading was more difficult, and the sand and dirt on the corn made it very difficult to keep the knives on the silage-cutter in good working condition.

WHEN TO OPEN THE SILO.

The corn may be used for feeding purposes as soon as the silo is filled. For the first few days it will be simply cut corn, as it is not silage until it has gone through the heating process. In a week or ten days' time the real silage will be reached. When managed in this way, there is no waste on the top of the silo. If allowed to stand for several weeks, there will be some waste, in the

form of decayed corn. This should be removed and hauled to the field in a manure spreader, as it is not always a safe feed for any class of live stock.

Filling 125 Tons Silage Per Day.

Editor "The Farmer's Advocate":

I herewith send you the methods followed as the result of 13 years' experience with the silo:

1. Let your corn mature as much as possible. Light frosts do not appear to injure the silage so long as the stock is not frozen. A few days wilting does not appear to do any harm, but it goes through the cutter nicer when green, or as soon as possible after cutting.
2. We cut and bind with the corn binder.
3. An ordinary low wagon with two stout poles 18 to 20 ft. long makes a very easily constructed and useful rack for hauling corn to the silo. If the wagon has a 5 ft. track and 42 inch bolster all the better.
4. A blower of 100 to 150 ton capacity per day is very satisfactory for the filling process.
5. It will take from 4 to 6 teams, according to the length of haul, and about 20 men, placed as follows: 5 loading, 5 teamsters, 3 unloading, 5 in silo, feeder and engineer. A fork may be used to advantage in most cases for loading, especially when the corn is damp from rain or dew. This staff should handle 125 tons per day.
6. A good hood on end of pipe that can be moved back and forward is a great help in spreading the corn in the silo.
7. Neighbors co-operate wholly.
8. I have never sprinkled with water, and never saw it coming out too dry. If corn lay a long time after cutting or dried up, a great deal of sprinkling might be a benefit.
9. I refilled once after settling; took a few inches off the top and filled up again. I could not see any difference in the silage. I have also had silage left from the year before filled right on top; could see no difference, only a little darker mark on the wall of the silo. We were feeding this ensilage up to the time of refilling.
10. The cost of harvesting and packing in the silo is about 40 cents per ton. I cannot say that tramping or covering the top is of any special benefit, so long as the corn is evenly spread and not left with the leaves at one side and the stocks and cobs at the other.

I am only too glad to think that some of these suggestions may be a benefit to others in silo filling. Following advice in "The Farmer's Advocate" has often been of much benefit to me. Lanark Co., Ont. R. G. BOURNES.

Filling Ten Silos.

I have had four years' experience in silo-filling. Though not as long as some, my way of taking care of the corn crop may be of benefit to others. As regards maturity of corn, three years ago my corn was so ripe that the husks were leaving the cobs. It was cut and piled in large heaps in the field, and left there for a number of days. I never had better silage. As regards cutting, we use a corn-binder. It is owned and operated by four neighbors. We generally have two teams to cut with, and let them take turn about. We do not stop the binder at meal time, and cut from eight to nine acres a day. We use the common farm wagon, leaving on the bottom of the hay rack. We then put on cross-pieces about six or seven feet long, and board all over, which makes an easy rack to load and convenient to unload.

We have always used a 20-horse-power traction engine and a 13-inch-mouth cutting-box, with blower attached. This outfit is the property of a neighbor who does the threshing in this vicinity. He goes from one to another, until all are completed. The number of men and teams required depends on the distance from field. In drawing the corn about 80 rods, we have four teams, with four men to help load in the field. One man stays at the box, two help the teamsters to unload, one to feed the box, and two tramping in the silo. We have a funnel-shaped piece of galvanized iron for spreading the corn, which requires a man on top of the silo. It is about 2 1/2 feet long, 10 inches across at one end, and 20 inches at the other. There is a long elbow on the blower pipe, and this funnel goes on the elbow; it hangs loose, and the man on top moves it to shoot the corn in any place wanted.

There are ten silos in this neighborhood, and the owners change help, which makes it very convenient. We hire the engine and box. Three men and a team go along, for which we pay \$10 a day. We never have used water to wet the corn; I could not see any use in it. My neighbors have used it, but not of late years. I would like to refill after settling, but find it very inconvenient to have men and outfit come back. Instead, we put poultry netting around to the height of about four feet, which we fill to top. After that settles we have our silo filled within two feet of the top. We use a movable top of corrugated iron, which gives good satisfaction. I do not know exactly, but think the silage costs me 60 cents a ton to put in the silo. JOHN FORBES. Lambton Co., Ont.

Good Silage Costing \$1 Per Ton.

Editor "The Farmer's Advocate":

In this neighborhood we try to cut our corn as near the glazing stage as it is possible. If, in the event of our corn being late sown, we leave it until a good sharp frost comes, and then cut it immediately and put in silo. I don't mean to say that we desire it frosted, but, in leaving it to mature as much as possible, it sometimes gets frosted. When this happens, we believe in cutting immediately, and always cut with a corn binder. In hauling it to the blower, we use the ordinary farm wagons, with reach let out as far as possible, and a rack similar to those used for hauling cordwood, using from four to six teams to draw in to the cutting box, and can fill a hundred-ton silo in a day, without extra exertion. We aim to use at least a 16-horse-power threshing engine to do the work. We place two men in the field, two in the silo, from four to six teamsters, according to distance of hauling, two men at the blower, one to feed, the other to help unload (these two men relieve each other alternately), and the engineer. This requires from eleven to thirteen men. There is nothing like plenty of help to make the work go satisfactorily.

We try, as far as possible, to co-operate, but occasionally hire a man and team at \$2.50 per day, as well as providing board and horse feed for dinner and supper.

Only on one occasion did we sprinkle with water. In 1909 we had more corn than our silo would contain. This we stooked and left in the field until after the ground froze. The first week in December we refilled our silo, using water as the corn was going in. The ensilage was of a fair quality, but not as good as the first filling. It is a good act to tramp the silo once every day for four or five days after filling. This is all that is necessary. There is always a certain amount of decayed silage on top, which, I believe, will result in any case. Have tried the thick sowing of oats as a cover, but could not see as this protected the top ensilage from decay. However, it did no harm.

The best silage is always made from well-earred corn, nearly ripe. If your corn is frosted and green, with few ears, don't expect too much from it. If you do, you will be disappointed. Six to seven acres of corn should fill a 100-ton silo.

Rent of 7 acres, at \$4	\$28.00
Plowing 7 acres	12.25
Harrowing and seeding	2.50
Seed, at \$2 per bushel	3.75
Twelve men, at \$1.50	18.00
Engine and blower	8.00
Cultivation of corn	15.00
Total	\$87.50

This does not take into account cost of manuring, but as the corn crop leaves the land in much better condition for succeeding crops, we will allow a charge of \$12.50 for manure used by corn, and the balance of the cost of manuring we will charge to succeeding crops. This makes the cost of silage about \$1.00 per ton. If for any reason the corn was a poor crop, such as poor seed, destroyed by crows, drouth, etc., and it took 14 acres of corn to fill the 100-ton silo, you would still have your silage for \$2.00 per ton, or thereabout.

Those having no silo often say, "My cows milk as well without a silo as Jones' do with one," forgetting the fact that Jones produces his milk for less money by the means of his silo. Silage is a cheap food; therefore, every feeder of cattle should have one. J. A. CASKEY. Hastings Co., Ont.

Tin Pipe in Silo.

Editor "The Farmer's Advocate":

One of the best additions to a silo-filling outfit I know is a pipe down the inside of the silo to distribute the cut corn. Made of ordinary stovepipe tin, and buckled together by means of strap and buckle on each side, they cost but very little, while the wear on them is practically nothing. A boy with this can do more efficient work than several men can do with the old way of dropping down the center, or any other method I know of. There are two methods of attaching these to the ordinary blower pipes. A funnel or flaring pipe, buckled to the ordinary hood or elbow, is the simpler way; the other is to have a number of elbows made of heavy sheet iron, which, when coupled together, will form a semicircle of about ten feet. These pipes should be made to couple easily, and two and a half feet is a good length to have them. Carry your pipe into the silo in short lengths, put two men into the blow-hole, with a rope long enough to reach the bottom of the silo; fasten your rope around the funnel of pipe, according to the system used, and couple them from below, until all are put together, then the men above must join them to the hood. These pipes should reach within four feet of the bottom, and as the silo is filled, each

succeeding length is taken off. While a boy can lead the pipe around, the man should be there to keep it tramped.
BERT LEUSZLER.
Oxford Co., Ont.

Neighbors Help Each Other Fill Silos.

Editor "The Farmer's Advocate":

My personal experience with silos and silage has been short, but I have watched the game all my life. The time of cutting the corn, in my estimation, is very important, as last winter, while visiting a lot of silos, I found the silage too dry, and in some cases moulded, from the effect of not enough moisture, either natural or unnatural, to properly heat it, the owners themselves admitting the mistake they were making. The corn should be just nicely in the dough stage, and not allowed to get flinty, as the object of any plant is to produce seed, and, therefore, the nutriment will be in the corn, and not evenly distributed through the stalks. The effect of frost on any plant lessens its feeding value. The wilting of the corn before filling, in my estimation, matters but little, so long as it does not lie on the ground long enough to cure.

A machine capable of handling from 15 to 20 tons per hour makes it much easier on men and machinery than a smaller size. A machine blowing from 10 to 16 tons per hour, 35 or 40 feet, requires some power, say about 15 horse-power, or more makes it better. The wagons used for hauling should have racks just as flat as a floor.

The men and teams required for filling depends on length of haul. Four pitchers in the field, and an extra man or two at the silo, with teams enough to keep the machine supplied, say from four to six, will fill a 14 x 40-foot silo in 10 hours, if they are not afraid to exert themselves. Three men in silo should be enough, providing they use some sacks on the end of pipe to distribute the corn evenly about silo. The neighbors change work and help each other, as in threshing, and hire all we can, beside. Two men, with engine and blower, cost us \$13 per day. Sprinkling is only necessary where corn has become too dry. Refilling is only a matter of getting as much in the silo as possible, which is very important. After the silo is filled for the last time, a lot of chaff should be blown on, and sprinkle well with water to prevent air from going down in silage: 8 or 12 inches will rot, anyway, so it might better be chaff than corn. In this vicinity, we consider \$1.00 per ton will grow the corn and put it in the silo ready to feed, counting \$5.00 an acre for rent of land, plowing, cultivating and filling. I might say I prefer corn planted in squares 3 or 3½ feet apart, with not more than four stalks in every hill to corn drilled. Early and late cultivation counts when filling time comes.

CARMEN METCALFE.

Prince Edward Co., Ont.

In preparing for a dry season, the real problem is to construct a seed-bed, in which a great deal of moisture can be stored, and then cover it with an earth mulch that will hold the moisture there for the growth of the crop.

THE DAIRY.

Dairy Farm Investigation.—III.

WINTER FEEDING.

In last week's issue the methods of summer feeding were given at some length, and it is the purpose of this, the last instalment of the article, to discuss the methods of winter feeding and the special means and appliances for the handling of the milk from the time it is drawn until it reaches the consumer. It will be seen from the rations given that the owners of the respective herds visited feed quite liberally, and that silage forms the most important winter feed. Corn and clover or alfalfa constitute the roughage on most dairy farms, and as stated in one of the previous articles, corn and alfalfa make the best balanced roughage ration. The system of numbering each dairy in order, which was followed in giving the summer feeding, is again used for the winter rations. The following is the feed and the amount for an animal in each herd each day during the winter months:

Herd Number 1.—Silage, 20 pounds, twice each day, with 1 pound of mixed grain for every 3 pounds of milk given by the cows, and all the alfalfa hay the cows will eat. The mixed grain consists of 2 parts of bran to 1 of oats, with 50

pounds of oil meal to ½ ton of the mixture. A little corn meal is fed on very cold days to keep up the animal heat.

Number 2.—Alfalfa and clover hay, and all the silage the cows will take, together with mixed grain twice per day.

Number 3.—This herd is fed all the clover hay in winter that they will eat, together with all the silage they will clean up. Mixed grain is fed also to keep up the milk supply. The owner of this herd does not believe in forcing the cows, but favors liberal feeding to keep them producing a fair quantity of milk.

Number 4.—No silage is fed in this herd. Roots (mangels and turnips) are used in its stead. Corn is cut from time to time throughout the winter along with hay and straw. This cut feed, along with the chop and mangels, is fed three times per day during the winter. The chop consists of oats, corn, shorts and bran mixed, just half as much of the latter as of any of the other three, which are in equal quantity. Three quarts of meal are given at a feed, and long hay is fed twice per day; this making in all five feeds per day for these cows. What is lost by not having silage seems to be made up with other material.

Number 5.—Each cow in this herd receives 8 pounds of rolled oats and bran mixed per day, and about 30 pounds of silage at a feed twice per day. Alfalfa and clover hay are fed cut, the proprietor believing that the cows will eat more when it is fed this way, and the more they eat the higher are the returns.

Number 6.—Clover hay and silage are fed on this farm, together with turnips and mangels. Very few turnips are fed, because there is difficulty in keeping the milk from being tainted. The meal ration is made up of bran, shorts and oats, about 4 pounds each at a feed.

Number 7.—Hay is fed on this farm at noon, and silage with cut straw and hay, a bushel each morning and evening, with about 10 pounds of brewer's grains twice a day.

Number 8.—Forty pounds of silage and 8 quarts of brewer's grains fed in two feeds, one-half in the morning, the remainder at night after milking in each case, and a liberal feed of clover hay at noon constitutes the ration fed to this herd in winter.

Number 9.—Hay is fed at noon, and 28 pounds of silage and 10 pounds of brewer's grains are fed night and morning.

Number 10.—A bushel of silage and 20 pounds of brewer's grains, one-half in the morning, the remainder in the evening, with clover hay at noon, is the ration of each cow in this herd in winter.

Number 11.—A bushel of silage at a feed twice per day, and 4 quarts of chop, consisting of a mixture of oats and barley, fed with it, and good clover hay at noon, is fed to the dairy cows in this herd.

Number 12.—This is a very well cared for herd. In the morning previous to milking alfalfa is fed. After milking each cow gets ¼ bushel of silage and about 20 pounds of mangels fed whole, and 4 quarts of mixed grain—oats, barley and bran. Alfalfa hay and silage are fed again at noon, and in the evening the morning feed is repeated.

Number 13.—Each cow in this herd receives 1 bushel of silage per day and 6 quarts of bran and chop mixed, in the proportion of two of the former to one of the latter, and hay three times daily. The silage and concentrates are fed in two feeds.

Number 14.—Cows in this herd get 1 bushel of silage and 8 quarts of chop, of a mixture of bran, oats and barley, divided into two feeds. Hay is fed three times daily.

Number 15.—Bran, oat and barley chop is used as concentrate in this herd; 10 to 12 pounds per day being fed together with 1 bushel of silage. Hay is fed at noon.

Number 16.—This herd is fed highly, getting 1 bushel of silage and 4 quarts of chop and bran twice per day, with hay at noon and roots after milking.

Number 17.—Four quarts of bran and shorts at a feed three times a day, with hay at noon, and 1 bushel of silage morning and evening make a good ration for cows in this herd.

Number 18.—Cows get 1 bushel of silage among three twice daily, and 2 quarts of oat chop twice per day, and all the hay they will take. A peculiar incident was noted by this dairyman in the feeding of silage. In his herd of 25 cows he noticed a falling off of over 100 pounds of milk a day when changing from old silage, which has been used for summer feeding, to new silage in the fall.

Number 19.—Silage is fed a little heavier in this herd than Number 18, the cows getting one bushel a day. The grain ration consists of 3 quarts of oat chop twice a day, and the cows get hay morning and evening.

Number 20.—Hay is fed in this herd three times a day, with 1 bushel of silage and 8 quarts of chop.

Number 21.—Silage is fed in this herd three

times daily, ½ bushel at a feed. Clover hay is fed twice a day, as is also chop, about 4 quarts at a feed.

Not considering the fact that silage and clover hay are the most common feeds used, perhaps the most noticeable feature is the amount of bran and oats being fed. In every herd visited either one of these, and in most cases both of them, are found holding the prominent place in the concentrate ration. Bran is a most excellent feed for the dairy cow, being slightly laxative, giving bulk to the ration and providing the crude protein and phosphorus so vital to the formation of milk. For dairy cows there is no better single grain than oats. They give better returns where fed alone than does bran, and the dairymen who are feeding these two grains are not far astray in their concentrate ration for the production of milk.

Another feature of the feeding of these herds in winter is the absence of cut straw and hay with the silage. It is generally conceded that cattle will do better if fed on a mixture of cut roughage than if it is fed whole. Very few of these dairymen are practicing it, but those who do are of the opinion that their cows will eat more of the feed, and that it is more easily digested thus, giving them larger returns at the pail. Some very good rations are to be found amongst the foregoing list. True, some of the rations are better than others; some are a trifle light, while others may seem a little too heavy. There is quite a variation in the amount of silage fed, some feeding as high as two bushels a day, while others feed as low as three-quarters of a bushel. As a general rule, where the silage ration is light other roughage is fed more abundantly.

Roots do not seem to hold a very prominent place in dairy farming, but the few who grow mangels claim that they are very valuable to feed in conjunction with the silage, clover and concentrate ration. Their worst drawback seems to be the expense of production. Corn can be worked faster and much more easily, and when cut and in the silo is ready prepared for feeding.

CURRYING CATTLE.

Nearly all these dairymen practice cleaning their cattle in the winter. The scarcity of labor is all that keeps those who do not from giving the cattle a regular and thorough cleaning every day. There are few better means of employing spare time in winter than following this practice. One of the men called on stated that his cows fell off five quarts each per week when currying was neglected. In a large herd this loss would amount to considerable, and, as labor is generally more plentiful in winter than in summer, it can very profitably be used for this purpose.

SPECIAL CARE GIVEN MILK.

All the dairies visited which were producing milk for city trade had a separate dairy house or building in which the utensils were cleaned and kept, and in which the milk was kept. None of these buildings were very expensive, but many of them were handy, and all were in a clean and sanitary condition. Many were cooled by ice, while in many others the milk was cooled by water, either in cans, or by water running over coolers. These coolers seem to have solved this difficulty, and ice does not appear to be so essential as was once believed. Of course, where certified milk is produced, the use of ice is imperative. In order to scald the utensils and properly sterilize them, an engine is necessary. Only two or three of these dairies were fitted with this appliance. There is no other method of dairy sterilization as effective as steam, and, to keep the bacterial content down to the necessary limit of certified milk, steam is just as important as ice.

The washing of cows' udders before milking is a very good practice. This was done in only one herd seen, and the milk from each cow was taken and cooled immediately upon being milked, the milkers also washing their hands after each cow, and using special milking stools, which are scrubbed twice a day when the dairy rooms are washed out.

Where the milk was being sold wholesale, many cooled it in cans, and this was the method followed by those sending the milk to the powder factory. No special milk houses or dairy buildings were in use on these latter farms, the milk cans being kept in large covered troughs through which cold water was running. The retailers and a few of the wholesalers had very commendable special dairy buildings, and, on the whole, the milk was being handled in a very sanitary way.

The dairy business is one of the progressive branches of our agriculture, and, judging from the information gained through this investigation, it is a very profitable business, worthy of the best brains of those engaged in agricultural work, and, to get the most out of it requires attention to the small details, as well as a wide knowledge of methods of feeding, stabling, and general care of cows, as well as the methods of handling and disposing of the dairy products.

[Note.—A further discussion of dairy methods by readers of "The Farmer's Advocate" is invited.—Editor.]

GARDEN & ORCHARD

Grape Culture in Brief.

Editor "The Farmer's Advocate":

Grapes will grow on almost any kind of soil, but will do better on high, sandy, gravelly and black loam. The ground should be pulverized very finely. The rows should go north and south. Set in in April or first of May, about 10 feet apart each way; that is sufficient room to drive between the rows. When ready, set stakes at each end—one further on to guide you straight. Plow two shallow furrows, throwing apart. Now lay in grapes, putting the long roots lengthwise, spreading a little, covering about four inches with the finest of dirt, pressing firmly around the roots. A little straw manure applied would help to hold moisture. You can harrow the weeds as soon as they appear. The second year they will be ready for posts and wire; posts 8 feet, 2½ in the ground, 20 to 25 feet apart; two wires, equal distance apart, the top 4 inches from top of the post; end posts braced. Cedar posts split in four pieces make lasters. Do not drive the staples up tight; wire put through end posts, with a little twist, will hold.

Next comes the most important point. You can begin trimming in most localities from October, after the leaves fall, until April. It is much better to have grapes from the ground to the top wire. When trimming, be careful; leave the new or last year's vines near the ground as possible: from four to six only to reach the top wire. Spread when tying; tie on the west side of the wires. The old vines are recognized by the loose, dark bark. If you can attend them through the summer, lift the loose vines, tie the curls around the wires; cut off the ends three joints from the fruit; break off suckers (they grow in front of the leaf) and other worthless vines; spread the vines to let the sun shine in.

I have had neighbors say, "Good gracious, how sweet your grapes are." I have taken the red ticket on grapes in four townships. You may have noticed all fruit sweetest and largest on the south side of the tree. We are in Welland County, and eight miles from Lake Erie. I think grapes can be successfully grown sixty miles north. They average 1½c. per pound in vineyard; at the wine-press, \$20.00 per ton. There is money in grapes if you live near a winery. Concord is the main crop; they are the best bearers; Rodgers red make nicest catsup, jelly and jam. No family ought to be without grapes; they are the most wholesome of all fruit.

They should be manured, not too heavily, for they would grow too much vines.
Welland Co., Ont. ALBERT MORRIS.

Soldier-Bugs Controlling the Potato-Beetle.

Specimens of two species of Soldier-bug have been received from W. B. Ecclestone, of Brant Township, in the County of Brant, and subsequently from several correspondents of "The Farmer's Advocate." Mr. Ecclestone's accompanying letter describes how completely these predatory foes of the potato beetle are controlling the latter in his neighborhood. He states that, as a result of a good deal of searching, he found only a single larva of the potato beetle, although there are many adult ones to be seen, and these have been plentiful enough right along since the beginning of the season. It is easy to find potato leaves bearing patches of eggs that have been emptied of their contents, but very difficult to find a young potato beetle. He also states that his neighbor, who has five acres of potatoes, is practically free from beetles, although he has not used his spray at all.

Entomological journals have now and again, for years, been reporting observations of ground beetles and soldier bugs preying upon the eggs and larvae of the potato beetle. In the Southern United States, this pest of the potato would seem to be held in check by such predatory insects, but in our latitude, so far as the writer of this note knows, there has not hitherto appeared so encouraging a report as the one quoted above, namely, that an area of five acres is practically free from beetles, without having been sprayed at all. It is to be earnestly hoped that the soldier bug will become as widespread as the potato beetle. Of course, the multiplication of the former is dependent on the food supply, and were the soldier bug to confine itself to the eggs and larva of the beetle, as the latter became reduced in numbers, the supply of the other would also fall off. The result in such a case is not complete extermination, but a successive rising and falling of the numbers of both classes. In districts where the soldier bug is fairly effective, it might be a good plan to spray the potatoes once in the early part

of the season, and leave the subsequent care of the beetle to the soldier bug. It should not be overlooked, however, that the Colorado beetle is not the only enemy of the potato. Blister beetles and flea beetles are sometimes so numerous and injurious to the potato that it would pay to spray for them.

Readers generally should follow Mr. Ecclestone's example. Let them take a few minutes to examine the potato field for evidence of the presence of predatory insects under notice, and report to "The Farmer's Advocate" what they observe in their own or neighbors' plantations. The publication of such a stock-taking of insect assistance is in the public interest.

As was said before, two kinds of soldier bug were sent in by Mr. Ecclestone. The more numerous one is a dark-colored, flat insect, with yellowish, black-dotted shoulder piece and a shield-like marking on the back. The abdomen is yellowish, and black-dotted. The adult insect is nearly a half-inch long, and in outline resembles the well-known bitter-bug, or stink-bug, that the raspberry-picker learns to know by experiences, that suggest its names. The soldier bugs have strong sucking beaks, about one-third the length of the body, which, when not in use, are turned underneath between the legs. It is interesting to observe their use of the beak. The living ones received from Mr. Ecclestone were offered, on the opening of the box, a couple of larvae of codling moth. The movements of the larva attracted the notice of the hungry bugs, one of which ran up to a "worm," raised its head to get room to work its dagger-like beak, which it sunk into its wriggling victim, and was not long in emptying the liquid contents of about one-half of its skin. The others regaled themselves on eggs of potato beetles that were secured for them. The soldier bug seems to have an insatiable appetite for these eggs. One of them can dispose of all the eggs that several potato beetles can produce. The bugs do not attack the latter in the adult stage. The larva, or nymphs, as they are technically called, of the soldier bug are brightly-colored and spotted; otherwise, they strikingly resemble bed bugs. They have the same feeding habits as the adult.
J. D.

Reservation of Cold Storage Chambers for Fruit Only.

Arrangements have again been made by the Department of Agriculture with the steamship lines for the operation of cold storage chambers for fruit only on the following steamers:—

TO LONDON.		
Date.	Steamer.	Agents.
August 20	"Sicilian"	H. & A. Allan
August 26	"Ausonia"	R. Reford & Co.
September 3	"Corinthian"	H. & A. Allan
September 9	"Ascania"	R. Reford & Co.
September 16	"Devona"	R. Reford & Co.
September 23	"Albania"	R. Reford & Co.

TO GLASGOW.		
Date.	Steamer.	Agents.
August 19	"Hesperian"	H. & A. Allan
August 26	"Cassandra"	R. Reford & Co.
September 2	(Donaldson)	H. & A. Allan
September 9	"Grampian"	R. Reford & Co.
September 16	(Donaldson)	H. & A. Allan
September 23	"Hesperian"	H. & A. Allan
	"Ionian"	H. & A. Allan

TO LIVERPOOL.		
Date.	Steamer.	Agents.
September 2	"Megantic"	White Star-Dom. Line
September 8	"Tunisian"	H. & A. Allan
September 16	"Laurentic"	White Star-Dom. Line
September 22	"Corsican"	H. & A. Allan
September 30	"Megantic"	White Star-Dom. Line

TO BRISTOL.		
Date.	Steamer.	Agents.
September 6	"Royal Edward"	Can. Nor. S.S. Co.
September 20	"Royal George"	Can. Nor. S.S. Co.

The arrangement is the same as has been made during the past three years. Intending shippers must apply for space to the steamship agents in the usual way. They will be charged the regular cold-storage rates. The Department simply gives a guarantee of earnings to the Steamship Company to insure the operation of a chamber on each of the steamers mentioned in this list.

Shippers are reminded of the arrangement between the Department and the railway companies for supplying iced cars for the carriage of fruit for export. The cars are supplied by the railway companies on request of shippers made to the nearest agent, and the Department pays icing charges up to \$5 per car.

The cargo inspectors employed by the Department will watch the handling of these shipments as usual, and careful temperature records will be obtained at all points.
J. A. RUDDICK,
Dairy and Cold-Storage Commissioner.

POULTRY

Induce Early Moulting.

This month and September mark the beginning of the moulting season in most flocks of poultry. The period of moulting usually lasts from two to three months, and during this time the hens lay very irregularly and infrequently. All the hen's reserve vitality is being utilized for the production of new plumage, so that the egg production will fall off, and thus, if winter eggs are desired, it is important that the hens moult early. Those which moult early have not only completed the process and become covered with a good protection of feathers, but they will have also regained their full strength and vitality before the very cold weather.

Hens that commence to shed their feathers in August should begin laying again in November or December, while hens that do not moult until October seldom recuperate in time to lay many eggs during the winter months, when the price of eggs is highest, and they are also quite likely to suffer from the cold, which also retards moulting.

Where the flock consists of early-hatched pullets, little difficulty will be experienced in getting them to moult early, but in the ordinary flock the hens and pullets are often not very early hatched, and thus it is necessary to practice some means of forcing early moulting. This can often be done by feeding the fowls a very light ration for a week or ten days, followed immediately by heavy feeding with a nutritious food. The time to do this is as early in August as possible. All hens should be fully feathered before the weather turns very cold in the fall, because they need the feathers for protection.

Moulting is a natural process, and no drugs or tonics other than suitable feed, should be required. A good laying ration, provided it does not tend to fatten the fowl excessively, is quite suitable during this season. Some advise adding a little ground oil meal or linseed meal to the ration, and, of course, it is necessary that the flock receive sufficient animal food or meat in some form, because nitrogenous material is essential to the growth of feathers. Whole grain can be fed in litter, or well scattered amid the grass every afternoon, while green food is suitable for the morning meal. Grain alone will not make the best plumage; many poultry breeders do not feed enough meat and vegetable foods during this period. Pure water in abundance is also necessary. Where high-class show stock is kept, some advise keeping the hens out of the hot sun during the time the new feathers are coming in, claiming that the sun fades the color of the tips of the small, growing feathers, and that the result is a plumage that is faded or mottled, and too light in color. To remedy this latter condition necessitates keeping the hens inside on bright days and not exposing them to the sun. Where the hens have the run of a full-grown orchard, they will not suffer much from this, as the trees will furnish enough shade.

The moulting season is also a good time to select the stock for breeding and laying purposes. If the breeder watches his flock closely, he will notice that the strong, vigorous fowls pass through the moulting period much more quickly than those of sickly, weak constitution. The robust hen, with reserve vitality, will pass through the moulting period very quickly, and will hardly cease laying for a short time, while the poor layer, with the narrow head and body, and the long, thin beak and dull eye—all of which indicate weakness—will be several weeks producing her new coat of feathers, and will not lay again for some time, probably not until spring is approaching. This, then, affords one of the best reasons to weed out the undesirable birds and select the profitable individuals. Do not neglect the fowls during this season. Keep them well fed, thriving and free from vermin, and do everything possible to keep up their vitality and encourage early moulting.

Remove the Males from the Flock.

Now that the breeding season is over, it is a good plan to remove the male birds from the flock. They should be placed far enough away from the hens that the latter will not be able to hear them. The males can be penned together, provided a strong, vigorous male is selected to be master of the bunch. If this is not done, much fighting will ensue, but where there is a "boss" the birds are not inclined to fight very much. It is sometimes advisable to tie the legs of the birds loosely for a very short time when first placed in the pen with the "boss" rooster, who should have free use of his limbs, and be introduced into the pen a few days previous to the others.

THE FARM BULLETIN.

Dominion Exhibition at Regina.

The 1911 Dominion Exhibition, featured at Regina, Sask., proved a decided success in respect of the number and quality of exhibits in the livestock classes, the horse and cattle sections being especially strong. The most unsatisfactory feature in these divisions is reported to have been the adoption of the antiquated three-judge system in a few of the strongest classes, occasioning intolerable waste of time and trial of patience, with results, in some instances, far from satisfactory to onlookers, as well as exhibitors. The lesson to fair directors is the sanity of the appointment of one competent judge for each class.

Clydesdales were a very strong class in most of its sections. The judges were Bryce Wright, of De Winton, Alta.; John A. Boag, Queensville, Ont., and Albert Ness, Howick, Que. In the class for stallions five years and over, the awards stood: 1, Paul M. Bredt & Sons, Edenwold, Sask., on Trojan, by Durbar; 2 and 3, John Graham, Carberry, Man., on Grecian, by Marcellus, and Dumure Nugget, by Baron o' Buchlyvie. Stallions, four years old—1, Colony Stock Farm, Coquitlam, B. C., on Bowhill Baron, by Baron's Pride; 2, R. H. Taber, Condie, Sask., on The Bruce, by Revelanta; 3, McKirdy Bros., Napinka, Man., on Garty Ruby, by Ruby Pride. Stallions three years old—1, R. Sinton, on Royal Swell, by Royal Edward; 2, Bredt & Sons, on Royal Robin, by Robin O'Dee; 3, B. F. Bray, Foam Lake, Sask., on Choice of Edenwold, by Choice Descent. Stallion two years old—1, Taber, on Royal Jubilee, by Royal Favorite; 2, Peter Horn, Regina, on Lord Currie, by Royal Edward; 3, McCallum Bros, Brampton, Ont., on Loudoun Duke, by Revelanta. Champion stallion, any age—Bredt's Trojan; reserve, Bowhill Baron.

In the class for brood mares, the winner was Colony Stock Farm's Nellie Carrick, by Royal Carrick. In yeld mares, four years or over, Bredt's Estelle, by Up-to-Time. Filly, three years—Hon. W. C. Sutherland, Saskatoon, on Rose Allen, by Allendale. Filly, two years—Sutherland's Bonnie Doune, by Royal Favorite. Filly, yearling—Thos. Jack, Sintaluta. Champion female, Sutherland's three-year-old, Rose Allen.

Percherons were a very strong class, and were judged by Prof. W. H. Peters, of Manitoba Agricultural College. A striking feature of the class was the new importation of Hodgkinson & Tisdale, of Beaverton, who, in a class of eleven two-year-old stallions, the strongest of the breed, won first, third, fourth and fifth prizes. In three-year-old fillies they were second, in two-year-olds first, and were also first for three the get of one sire (Superior), and third on a trio by Robosse. In aged stallions, Upper Bros., North Portal, Sask., won with Bijou. The same exhibitors were first for three-year-old stallion, brood mare and three-year-old filly.

Shorthorns made the strongest class in the cattle division, six important herds being represented in the herd competitions, besides a considerable number of entries of single animals and small groups. The judges in the class were W. A. Dryden, Brooklin, Ont.; H. Smith, Hay, Ont., and A. E. Meyer, Guelph. Principal exhibitors were: Carpenter & Ross, Mansfield, Ohio; P. M. Bredt & Sons, Edenwold, Sask.; Sir Wm. C. Van Horne, East Selkirk, Man.; Geo. H. Sayer, McHenry, Ill.; R. W. Caswell, Saskatoon, Sask.; F. W. Harding, Waukesha, Wis., and Hon. W. C. Sutherland, Saskatoon. In a class of six aged bulls, after nearly an hour's discussion, the first three awards were placed on white animals, in the following order: 1, Carpenter & Ross, on Shenstone Albina; 2, Sayer, on White Star; 3, Van Horne, on His Majesty. Two-year-old bulls were placed: 1 and 2, Van Horne's Boquhan Hero and Shenstone Adonis; 3, Caswell's Keir Emblem. Senior yearlings—1, Harding's Sultan Stamp; 2, Van Horne's Roan Gloster; 3, Bredt & Son's Snowflake 3rd. Junior yearlings—1, Caswell's Marshall's Heir; 2, Sutherland's Village Guard; 3, Carpenter & Ross' Glorious Dale 2nd. Senior bull calves—1, Harding's Gloster Fashion; 2, Carpenter & Ross' Pride of Albion; 3, Van Horne's Missie's Prince. Junior calves—1, Van Horne's Gold Mint; 2, Harding's Sultan Regular; 3, Bredt's Royal Favorite. Senior champion bull—Carpenter & Ross' Shenstone Albina; reserve, Van Horne's Boquhan Hero. Junior champion—Caswell's white yearling, Marshall's Heir; reserve, Harding's Gloster Fashion. Grand champion, Shenstone Albina; reserve, Marshall's Heir.

In aged cows, Van Horne's Sunbeam Queen was placed first, Bredt's Ury 12th second, and Sayer's Mina Princess 4th was third. Three-year-old cows were placed: 1, Carpenter & Ross' Dale's Gift; 2, Van Horne's Spicy's Rose; 3, Carpenter & Ross' Maxwalton Gloster. In a class of eleven two-year-old heifers, Carpenter & Ross' Dale's Gift 2nd was given first place, Sayer's Her Ladyship second, and Van Horne's Lady Avondale third. Senior yearlings were placed: 1, Van Horne's Roan Queen; 2, Sayer's Mary Ann

of Oakland 2nd; 3, Sutherland's Sultan's Fancy. Junior yearlings—1, Carpenter & Ross' Maxwalton Gloster; 2, Van Horne's Missie of Oak Bluff; 3, Harding's Sultan's Aconite. Van Horne won in senior heifer calves, and Harding in juniors. Senior champion female was Carpenter & Ross' two-year-old, Dale's Gift 2nd, reserve being Van Horne's Sunbeam's Queen. Junior champion was Van Horne's Roan Queen, and grand champion was Carpenter & Ross' Dale's Gift 2nd, reserve being Van Horne's Roan Queen. Senior herds were placed: 1, Van Horne; 2, Carpenter & Ross; 3, Sayer. Junior herds—1, Van Horne; 2, Harding; 3, Carpenter & Ross.

Herefords were well shown by L. O. Clifford, Oshawa, Ont.; Geo. H. Gray, Austin, Man., and J. A. Chapman, Hayfield, Man. Clifford won first in aged bulls with his Refiner, first in yearlings with Bonnie Brae 31st, and first in senior bull calves. Gray was first in aged cows, Clifford first and second in two-year-old heifers, first, second and third in yearling heifers, and first in heifer calves. He had also the female champion in his two-year-old Rosette, and first for senior and junior herd, and for three animals the get of one sire.

Aberdeen-Angus made an excellent showing in the hands of J. D. McGregor, Brandon, James Bowman, Guelph, and D. W. McGregor, Grenfell. In aged bulls, J. D. McGregor won first with Leroy 3rd, Bowman's Magnificent taking second place. Bowman won in senior and junior yearling bulls and bull calves. In aged cows, Bowman's four-year-old Elm Park Beauty 4th was first. McGregor was first in two-year-old heifers, and Bowman first in senior yearlings and senior heifer calves. The champion bull was McGregor's Leroy 3rd, and the champion female, Bowman's cow, Elm Park Beauty 4th.

Galloways were shown by Col. D. McCrae, of Guelph, who was awarded all prizes entered for.

Holsteins were shown by A. B. Potter, Langbank, Sask., and Colony Stock Farm, B. C., the latter winning the majority of first prizes.

Ayrshires made the strongest showing among the dairy breeds, four good herds being represented in the competition, owned by P. D. McArthur, North Georgetown, Que.; Roland Ness, De Winton, Alta.; W. T. Shuttleworth, Gaetz Valley, Alta., and F. H. O. Harrison, Pense, Sask. McArthur had quite the best of it in the prize awards, winning first in aged bulls with Netherhall Milkman, first for senior and junior yearling bulls and bull calves, senior and grand champion for bull, with Milkman, and junior champion with Diamond of Lakeside. In aged cows, McArthur was first with Floss Morton, later given the grand championship. He was also first for senior and junior herds. In two-year-old bulls, Ness was first with Hobbsland Flyer, first and second for two-year-old heifers, first for junior yearling heifer and senior heifer calf, and second for herd.

Jerseys were well shown by B. H. Bull & Son, Brampton, Ont.; Jos. Harper, Kinlev, Sask.; P. Blacken and F. J. Robinson, Regina. The Brampton herd had all the first awards in the class, making an exceedingly creditable showing.

P. E. Island Notes.

Haying at this date (Aug. 5th) is pretty well completed. The crop is less than last year, but not by any means a failure. With the large quantity of old hay from last year, there will be abundance of winter feed. The grain crop is ripening up fast. Already some early fields of barley are cut. The weather is still hot and dry—rather too much so for the oats, which may ripen up too fast to fill properly. During the last three months we have had only half the average rainfall of the last few years. Still, the grain crops will be fairly strong in the straw. Wheat is good, well filled, with little or no injury from the joint-worm. The potato and root crop is very promising, except in some localities where the cut-worm has taken the earlier sowing of turnips. Fodder corn is doing finely, and is likely to come to a good state of maturity. Pastures are not nearly so good as last year, and after-grass is not making a good showing. The milk supply at the dairy stations is falling off very much, and will not come up to last year. The horn-fly and the exceedingly hot weather are also cutting down the milk yield. Harvest will be on by the middle of the month, and will be mostly cut before September. Young stock is not in such good condition, on account of the continued heat and the terrible plague of flies. This is the hottest season known here for a great number of years—many say the hottest we ever had.

Cheese has touched the highest point ever reached here at this time of the season: 123-16 is a record for July cheese at our Cheese Board. Such prices as these will encourage the dairymen to put more intelligent effort into the profitable production of milk.

AN AYRSHIRE RECORD.

Prince Edward Island occupies the proud position to-day of holding the world's record for an

Ayrshire two-year-old in milk production. I have Ayrshire two-year-old in milk production. Milkmaid 7th is the heifer's name, and she is owned by McRae & Son, of East Royalty. At the beginning of the test, on August 3rd, 1910, she was 2 years and 325 days old. Her total milk production for the year in Record of Performance test was 11,696 pounds of milk, with an average fat test of over 4.4 per cent. She is said to be not at all remarkable for her flow of milk in one day, but for her persistence as a milker. Prof. Klinck, of Ste. Anne de Bellevue, and Mr. McRae, of the Live-stock Department, at Ottawa, have held quite a number of very helpful agricultural meetings in the Island this summer.

During a recent visit to the Experimental Farm at Charlottetown we noticed great improvement along all lines. A much extended number of experiments are being carried on this year in grains, vegetables, clovers and grasses. Superintendent Clark is getting things in shape this season. Quite a large piece of alfalfa was cut and cured for hay over four weeks ago. It was a good yield, and is now showing a splendid growth of second crop. Possibly farmers may learn, from the success with this great forage plant on this farm that it will succeed anywhere on the Island. This farm is beginning to attract attention, and the number of farmers visiting it is increasing rapidly.

And now we are just at the opening of a political campaign that should be of exceeding great interest to our farmers, as reciprocity with the United States is the square issue placed before the electors. We trust that our agricultural electors will throw their old party prejudices to the winds, and vote for what they believe will be in the interest of this great agricultural country, and not listen to those who, from unpatriotic and sinister motives, would induce to vote against their own interests, in order that certain cliques should still retain the power to manipulate prices to their own profit and the producer's injury.

W. S.

Inconsiderate Employers.

Editor "The Farmer's Advocate":

It seems to me that the farmers themselves are responsible for the scarcity of hired help. Is it not better to have a tolerably good man to work ten or twelve hours a day than no man at all? Yet, although this is the case, many farmers have no regular hours, and often keep a man on the jump from five in the morning to eight at night, and even later. If you will agree that a man is entitled to at least eight hours' sleep, this leaves him with but one hour a day when he is neither working nor eating. Is that reasonable? Is it any wonder that hundreds of men in every county, disgusted with the job, go to the town or railroads for work, where they get good pay, and where they work but ten hours a day. Then, again, speaking from my own experience, having worked for some twenty-five men during the last twelve years, there is not one in twenty that will give a man an hour for dinner, or anything like it. The remaining nineteen, even though there is no particular rush of work, whether in summer or winter, expect a man to swallow a meal in about ten minutes, and then jump up at once, feed the hogs and horses, and then rush out to work again. It is true that the boss does almost as much himself, but in no case does he take the heavy end of the work, and if there is a "snap," such as going to the mill or riding a plow or a mower, he does it himself. Moreover, he can always stay and talk an hour with anyone who comes along the road or to the house, if he wishes to do so. In the city, no employer of labor supposes for a minute that he has a right to dictate the hours of labor to his men. He invariably has to adopt, not his own standard, but the customary standard of the trade to which he belongs. The hours of work are absolutely beyond his control. And yet the farmer cherishes the singular delusion that he has a right to fix his own hours of work in any arbitrary fashion, governed by his own peculiar fancy or notion. There is nothing that will make a farmer more indignant, and which will get a man the sack quicker, than for the hired man to kick at the hours. If he was to suggest that, as he worked till eight at night, he would not work before six in the morning, he would be considered a monster of impudence and laziness, and his dismissal, on the very first opportunity, would surely follow.

Well, Mr. Editor, I don't want to be unreasonable, so I will ask you and any of your readers who may chance to read this letter, what they think of it. I know lots of men that have been driven off the farm (and whom their employers considered very good men) for no other earthly reason. In fact, it is only the poor men, who haven't enough brains to look after their own interest at all, who never kick. I assure you that, as a rule, I have not the least objection to working from, say, 6 a. m. to 8 p. m. myself, but I do hate to do it for a man who considers that he has a right to dictate any hour that may suit

his pocket, and the most of the farmers seem to have no other criterion or source of judgment on such matters, except their pockets, and it is an open question whether their pockets do really benefit by such unreasonable demands. I, for one, say they don't, either individually or as a community.

Oxford Co., Ont.

[Note.—The inevitable conclusion is that either our correspondent has been very unfortunate in his employers, or so slow that it takes him four hours to do two hours' work, or else he has not fairly stated his experience.—Editor.]

Prosperity in South Ontario.

Editor "The Farmer's Advocate":

By the time this appears in print, grain harvest for 1911 will be a thing of the past.

A much larger acreage than usual was in fall wheat, and, so far as threshed, the returns have been quite satisfactory, turning out from twenty to thirty bushels per acre, and of very fair quality.

The oats were seriously affected by the extreme heat, and will be a light yield, of doubtful quality. Barley will be fair, while peas, on the whole, were a failure, in some cases not returning the seed.

The new seeds have come through fair, but in many cases are pretty slim. Alsike was poor in yield, as well as in quality, while timothy seems well filled. The seedsmen are anxious for the timothy, as they say practically no old seed was carried over. They are offering \$6.00 and over for nice clean seed, as they are expecting a heavy demand for it this fall.

Hay, unlike most cases, was very fair, and was saved in excellent condition. The second growth of clover is coming on fair, but is thin, and all that can will probably be saved for seed.

The apple crop is fair. It is estimated five or ten per cent. was injured, so far as shipping is concerned, by the hot sun, a large spot on the one side being literally cooked; but we are not looking for a shortage.

Mangels are good, and so are the turnips that were sown early, but the potatoes are slim, many neglecting the bugs until too late; but this (Pickering) is no potato district, though our northern neighbors can make up in quantity what we lack.

Corn is excellent. Large, even fields, ranging from eight to fifteen acres, are no rare sight now. Compton's Early and Leaming are favorite varieties, sown separately or together. The writer prefers mixing, but many, with excellent reasons, prefer separate planting.

Silos are going up all around. The favorite seems to be the solid wall concrete. These are mostly mixed 1 to 10, and 10 inches wide at bottom, tapering to 7 inches at top. Small stones are not spared, and walls are reinforced with No. 6 wire. A favorite size is 14 feet diameter, and 30 to 35 feet high. Before passing, we will speak of the openings. These are one space from top to bottom, with the exception of 5 feet top and bottom; $\frac{3}{4}$ -inch round iron rods are used across opening 2½ feet apart, the reinforcing wires joining at each end. These rods are used as a ladder. This style has given the best of satisfaction, none having been known to crack. Some will have roofs, some will not. One disadvantage of the roof is in filling, as, without a roof, silo may be filled 6 or 7 feet higher than top by sticking boards around edge and fastening with a wire band. With a roof, this is impracticable. But open and closed silos have their own disadvantages.

The call to the "West" is again loud. Ontario County must send her share of able-bodied swains to assist our brother farmers West, but the shortage of men may not be seriously felt, as the home harvest will be near completion.

No Standing Field-crop Competition was held this year, as enough entries could not be secured, but it is hoped enough will see fit to enter another year, as it is quite an encouragement to the production of clean grain.

Ontario Co., Ont.

F. H. WESTNEY.

The Ontario Department of Agriculture will occupy a tent in the same locality on the Canadian National Exhibition grounds as for several years past. Representatives of the various branches will be in attendance, throughout the exhibition, ready to consult with farmers and others who are interested in the work of the Department.

Dominion Crop Bulletin for July.

The condition of field crops in Canada is presented in a bulletin of the Dominion Census and Statistics Office, issued August 11th for July 31st, and shows good averages for all Provinces, as well as for all crops. Fall wheat was hurt by the hard winter in Ontario, but fared better in Alberta. The estimated yield is 23.24 bushels for the former Province, and 27.89 bushels for the latter. The total estimated yield is 17,706,000 bushels. The condition of spring wheat at the end of July was 90 for the whole of Canada, being 85 to 95 in the Maritime Provinces, 80 to 89 in Ontario and Quebec, 90 to 96 in the Northwest Provinces, and 85 in British Columbia. Oats and barley have an average condition of 88 for Canada, 85 to 95 in the Maritime Provinces, 80 to 90 in Ontario and Quebec, 88 to 100 in the Northwest Provinces, and 87 to 89 in British Columbia. Rye, peas and beans range from 78 to 84 in Canada, and buckwheat 81 to 85. Mixed grains have a condition of 86, which is 14 per cent. less than last year, and flax is 91, which is nearly 20 better. The average of corn for husking is 86, and of potatoes 85.64, being in each case a little higher than last year. Potatoes, turnips and mangels range from 81 to 85, or about the same as a year ago. Hay and clover and alfalfa are 80 to 83, which is a little lower in each case than last year. Corn for fodder has an average condition of 87, sugar beets of 78, and pasture of 79. The Eastern Provinces are lower than the figures quoted for the whole of Canada, and the Western Provinces are higher. The highest averages are given for Manitoba, Saskatchewan and Alberta. Sugar beets have a condition of 81 in Ontario and Alberta, where they are grown to supply the sugar factories.

Compared with last year's crops in the Northwest Provinces, the condition of spring wheat in Manitoba, south of the Grand Trunk Pacific Railway, is 88 to 39; of oats, 88.72 to 38.85, and of barley 85.16 to 34.92. And north of the same railway the condition is 92.21 to 77.42 for wheat, 90.71 to 72.90 for oats, and 88.95 to 50.84 for barley. In Saskatchewan, south of townships 25, the condition of wheat is 90.19 to 69.33, of oats 88.27 to 61.64, and of barley 89.03 to 65.89; and north of townships 24 the condition of wheat is 98.22 to 67.69, of oats it is 95.35 to 63.88, and of barley 94.58 to 71.30. In Alberta, south of townships 31, the condition of wheat is 93.89 to 24.93, of oats 95.28 to 20.43, and of barley 93.70 to 26.36; and north of townships 30 the condition of wheat is 97.84 to 71.55, of oats 97.95 to 65.68, and of barley 105.95 to 73.60.

The area of spring wheat in the Northwest Provinces this year is 1,500,000 acres more than last year, and of oats 341,000 acres, but no increase is shown for barley.

The yield of hay and clover is estimated at 12,189,000 tons for Canada, being 1.43 tons per acre; and the largest yields for Provinces are 4,736,000 tons in Ontario, 5,028,000 tons in Quebec, 254,000 tons in Prince Edward Island, 941,000 tons in Nova Scotia, and 885,000 tons in New Brunswick.

Dairy Division to Operate a Creamery.

The officers of the Dominion Dairy Division have for some time felt the urgent need of having control of a regular working creamery to enable them to conduct experiments and to make investigations into creamery problems under actual every-day conditions. With that end in view, the Minister of Agriculture made provision in the appropriation for the current fiscal year for the purchase of such a creamery. After careful inquiry, the creamery at Bromes, P. Q., has been selected as the most suitable for the purpose among those available. This creamery receives both whole milk and hand-separator cream, and a skimming station is operated in connection with it, thus combining the three plans of creamery operation in this country. A new building will be erected as a model creamery. It will be constructed along modern lines, with due regard to sanitation, durability and suitability, but not unnecessarily expensive. The establishment will, therefore, serve two purposes: first, as a model creamery and object-lesson for the dairymen of the district, and, second, as a dairy station where investigations may be carried out for the benefit of the whole buttermaking industry.

More Fruit Inspectors.

The Dominion Fruit Inspection Service is now organized for the present season. Two additional inspectors have been appointed, one to be located at Saskatoon, Sask., and the other in Western Ontario. W. W. Brown has been made Senior Inspector, and will give special attention to the work at Montreal and the Lake Ontario section. P. J. Carey, in addition to his duties as fruit

inspector, will devote a part of his time to demonstrations and instruction in box-packing. Arrangements are being made for him to visit Nova Scotia in that connection.

Sundry Suggestions.

Editor "The Farmer's Advocate":

It is not often that one can find an error in the editorials of "The Farmer's Advocate" (except on political matters—reciprocity, for example). I must, however, take exception to the statement as to sunflower blossoms looking upward and turning always to the sun. I have grown the Mammoth Russian for a number of years, and have never observed them do either. Out of 100 blossoms I have just looked over, only one turns upward, the ninety-nine survey the earth from which they sprang, and always in the same direction; not one has turned the least bit since 8 a. m., and it is now 5.30 p. m. These are in all stages, from just opening till almost ripe. I suggest that they get their name from the fact that they resemble the conventional symbol for the sun, and not because they turn toward it from the east in the morning, to west in the afternoon.

Would also suggest that "Donald Ban" read "Melissa—The Story of a Honeybee," by Rudyard Kipling, published in Collier's Weekly about four years ago, for further pointers on bees and socialism, as per his sayings in June 8th issue of "The Farmer's Advocate."

Richmond Co., Que.

J. W. DUNFIELD.

[Note.—The foregoing note re the mammoth Helianthus illustrates again that one swallow does not make a summer. The reference in the article in question was the result of actually observing for a couple of weeks the sun-following habit of several hundred plants in north-and-south rows, unaffected by buildings, etc. As the article indicated, it was chiefly noticeable in the earlier stage, before the flowers opened and the maturing seeds weighed down the heads, when, as our correspondent correctly notes, they survey the earth, at least the heavier ones do.—Editor.]

The Crop-reporting Board of the Bureau of Statistics of the United States Department of Agriculture estimates, from the reports of the correspondents and agents of the Bureau, as follows:

Preliminary returns indicate a winter wheat yield of about 14.5 bushels per acre, or a total of 455,149,000 bushels, as compared with 464,044,000 finally estimated last year, and 450,180,000, the average annual production in the past five years. Quality is 92.0, against 92.6 last year.

The preliminary estimate of the production of rye is 30,677,000 bushels, as compared with 33,039,000 bushels last year, and 32,414,000, the average annual production in the past five years. Quality is 91.5, against 92.7 last year.

Crop conditions are unusually low, owing to severe drouth over a wide area of the country. The combined condition of all crops on August 1st was 14.6 per cent. below average, whereas, on July 1st they were 10.7 per cent. below, and on June 1st only 2.8 per cent. below the average condition.

A comparison of the condition of various crops on August 1st, with their average growing condition on that date for the past ten years, is shown as follows (100 representing average condition): Apples, 101.7; peaches, 78.6; grapes, 98.0; pears, 95.9; raspberries, 91.0; alfalfa, 94.6; beans (dry), 92.8; buckwheat, 91.0; oats, 79.7; hay, 78.6; barley, 77.8; cabbage, 77.6; timothy, 74.4; potatoes, 73.5; spring wheat, 72.7; millet, 72.4; corn, 85.7; clover hay, 68.1; winter wheat yield, 93.5; rye yield, 95.1.

These figures do not take into account the influence of changed areas. Taking this into account, indications are that the wheat yield will be 4.1 per cent. less than the average production of the past five years, corn 7.0 per cent. less, oats 12.3 per cent. less, barley 16.2 per cent. less, buckwheat 8.8 per cent. less, potatoes 21.9 per cent. less, tobacco 25.5 per cent. less, and hay 22.8 per cent. less than the average production of the past five years.

The article, "Filling the Silo," by Prof. W. J. Kennedy, reproduced on pages 1348-9 of this issue, from press bulletin No. 26 of the Iowa Experiment Station, embodies the experience of many Iowa farmers and U. S. Experiment Station workers, and confirms in the main the letters also appearing in "The Farmer's Advocate" from Canadian farmers well versed in silage-making.

GOSSIP.

CHANGE OF SALE DATE.

The date for the Combination Sale of Shorthorns, at Woodstock, Ont., by H. J. Davis and others has, owing to the Dominion election, been changed from Sept. 20th to Oct. 11th, further notice of which may be looked for in these columns.

James Begg, St. Thomas, Ont., breeder of Ayrshire cattle, enclosing check for advertising, writes: "The bull ten months old has been sold, and the two-year-old heifer giving 1,074.4 lbs. milk in June, gave 1,084 lbs. in July. Some recent sales have been: Yearling bulls to A. T. Brown, Corinth; Albert Saunders, Petrolia; D. A. Ashworth, Maple Grove; full brother to above-mentioned heifer, to John McLeod, Ridgeway. Under one year, Thos. Dennis, Straffordville; Gordon Gillet, Aylmer; Eugene Gunn, Sparta. One cow to R. R. Ness, Howick, Que. Have a nice lot of 1911 calves with from one to three crosses of R. O. P. blood. Owing to lack of help, I am offering in my advertisement some of my cows and heifers. Address R. R. No. 1, St. Thomas, Ont."

CLYDESDALES AT INVERNESS.

Aged stallions at the Highland and Agricultural Show of 1911 were a specially fine class, never excelled at a Highland Show. Robert Brydon, of Seaham Harbour, was first, with Bonnie Buchlyvie, in his five-year-old form, a bay son of Baron of Buchlyvie, by Baron's Pride, dam by Macgregor, by Darnley, grandam by Prince of Wales (673). A. & W. Montgomery had second and third, with Garty Bonus and British Time. In the three-year-old section, Wm. Dunlop had first award for Dunure Footprint, by Baron of Buchlyvie, James Kilpatrick had second with Craigie Dorando, by Oyama; third was Baron Dollar, bred by J. Ernest Kerr, got by Baron's Pride, and shown by A. & W. Montgomery. In the two-year-old class, first was Wm. Dunlop's Dunure Index, full brother to Dunure Footprint. Messrs. Montgomery had second, with Premier Baron, by Baron's Pride, and Andrew Dewar third, with Fullibardine, by Marmion. Yearling colts were a dozen, and the four tops were simply toppers. Wm. Dunlop had the winner in The Dunure, by Baron of Buchlyvie, dam by Hiawatha; T. Purdie Somerville's Scotland's Favorite was second; Messrs. Montgomery had third, with a son of Everlasting.

The male championship went to the yearling, The Dunure, with Dunure Footprint as reserve. The female championship and Cawdor Cup winner was J. Ernest Kerr's first-prize brood mare, Cicely, by Baron's Pride.

AYRSHIRES AT THE HIGHLAND.

In the class for bulls three years old or over, at the Highland Society's Show at Inverness, the premier award went easily to James Howie's white three-year-old, Sir William, by Howie's Gay Scott, second and third going to Robert Osborne, Morton Mains, for Auchrain Pluto, and Valmont. In the two-year-old class, Mr. Howie had first and second, with Ayr Review and Brae Rising Star in the order named, being a reverse of the placing at Ayr and Glasgow this year. In the yearling class, Thos. Barr's Hobsland Masterpiece, by Gillies, was an easy winner, second being Jas. Howie's Aristocrat, the first-prize Ayr winner. Mr. Barr's Aviator was third. The male championship was the first-prize yearling, Hobsland Masterpiece. In the class for aged cows in milk, Mrs. Howie's five-year-old Heather Bell, by Titwood General Hunter, was first. She is described as one of the most typical representatives of the breed alive. Second honors went to Alex. Cross, of Knockdon, for Bridesmaid, and third to W. & J. Kerr's Yellow Bess. Two-year-old heifers were led by Robert Osborne's Morton Mains Memonas, by Butter Scotch. Thos. Barr was second with Hobsland Bell. In yearling heifers, Robert Osborne's home-bred Lanugem was first, and Thos. Barr's entries, Nancy III. and Pretty Poll second and third. The two-year-old heifer, Morton Mains Memonas, was champion female, and grand champion for best Ayrshire.

Lincoln and Cotswold rams, one and two years old, weighing up to 160 lbs., are wanted, as stated in an advertisement in this issue, by J. H. Patrick, Ilderton P. O., Ont., a G. T. R. station twelve miles north of London.

SALE DATES CLAIMED.

Sept. 7th.—At Union Stock-yards, West Toronto, Thompson Porter, 1520 St. Clair avenue, Toronto; Jerseys.

Oct. 11th.—Combination Sale of Shorthorns, at Woodstock, Ont., by H. J. Davis and others.

Hackneys sold for high prices at an auction on August 1st, when the famous stud of R. P. Evans, of Surrey, England, was dispersed, the five-year-old mare, Beckingham Lady Grace, selling for 800 guineas (over \$4,000), while several other mares sold for 300 to 540 guineas. The stallion Evanthus was withdrawn after 950 guineas had been bid for him, the reserve being 1,000 guineas.

CLYDESDALES FOR CANADA.

Exports of Clydesdales for Canada from Glasgow the last week in July and first of August numbered about 80 head, selected and consigned to the following importers: Smith & Richardson, Columbus, Ont.; J. D. Larkin, Queenston, Ont.; James Torrance, Markham; James H. Armstrong, Marathon, Ont.; W. H. Wallace, Viking, Ont.; Geo. Gordon, Oak Lake, Man.; A. A. Cameron, Oak Lake, Man.

Official records of 164 Holstein-Friesian cows have been accepted by the American Association, from June 2nd to June 21st, 1911. This herd of 164 animals, of which over one-half were heifers with first or second calves, produced in seven consecutive days, 67,918.1 lbs. of milk containing 2,352.625 lbs. of butter-fat, thus showing an average of 3.46 per cent. fat. The average production for each animal was 414.1 lbs. of milk containing 14.345 lbs. of butter-fat; equivalent to 57.16 lbs. or 27.2 quarts of milk per day, and nearly 16½ lbs. of the best commercial butter per week.

To hogs, alfalfa hay is usually fed dry. The leaves are more readily eaten than the stems, as they contain more of the nutritive value of the plant. For this reason some farmers save the last cutting of hay for the hogs, because it is more relished. It is eaten up cleaner, as the stems are not so woody, and more food value is found in the leaves. Sometimes the hay is cut up fine, wet, and mixed with other feed, and sometimes it is fed ground, as there are now alfalfa mills scattered throughout the alfalfa regions.—From Coburn's "Swine in America."

TRADE TOPICS.

In another column in this issue there is advertised for sale an excellent stock farm, in the County of Halton. This farm contains 200 acres, and is very conveniently situated, being only one-quarter mile from the County town, Milton, and on the main line of the C. P. R., just thirty-three miles west of Toronto, and on the G. T. R. line only twenty-five miles north of Hamilton. What better situation could be desired for an ideal stock farm? The buildings are commodious, attractive, convenient, and in the best of repair. The dwelling is a substantial, large, stone structure with a slate roof, and is surrounded by beautiful lawns and shade trees. The main barn is 60 feet by 120 feet, with a steel roof. There are numerous other outbuildings, all of which are in excellent condition. The farm is well fenced, and in a first-class state of cultivation. Another feature is thirty acres of bush, which is a very valuable asset to a farm at the present time. Intending purchasers of farm property would do well to inquire about this place, as it usually is more economical to purchase a farm with good buildings, as this one has, than to buy one with buildings which require pulling down and remodeling, which is expensive. Write for particulars to G. R. Cottrelle, 201 Temple Building, Toronto.

SOMETHING TO KNOW.—This is an age in which every woman should pay more or less attention to her appearance. Neatness and simplicity in dress, care in the manner of dressing the hair, so that it is arranged to suit the owner, and attention to her complexion, all tend to improve the appearance of every woman.

The primary move should be in improving the complexion, as a nice gown only accentuates a face trouble. The principals of the Hiscott Dermatological Institute, Hiscott Building, 61 College St., Toronto, are specialists, well known for their successful treatment of all skin, scalp, hair and complexion troubles. To ladies interested, a handsome booklet entitled, "For Appearance Sake," will be mailed on request. A specialty in their work is the permanent removal of superfluous hair and moles.

CANADA BREAD COMPANY, LTD.—

Following on the successful organization in Toronto of Canada Bread Company, Limited, the new big company, which will have its modern plants in all the larger cities of Canada, Cawthra Mulock & Co., members Toronto Stock Exchange, announce an offering of \$1,250,000 of the 6-per-cent. first mortgage sinking fund thirty year gold bonds of the company at 98½, the same to carry with them a bonus of 25 per cent. of common stock. Canada Bread Company, Limited, starts out with plants in Montreal, Toronto and Winnipeg, and these will be added to forthwith, so as to bring the total output of the different plants up to one million loaves of bread per week before the end of the company's fiscal year. The \$1,000,000 being placed in the treasury will be sufficient, according to Mark Bredin, the vice-president and general manager, to gradually increase the company's output to two million loaves a week, which would make an annual production of one hundred million loaves. On the present plants and additional ones that will be erected forthwith, Mr. Bredin estimates that the earnings of the company by the end of the fiscal year should amount to \$260,000, equal to over three and one-half times the interest requirements on the entire bond issue, and with its present capital should steadily expand until its earnings reach over \$530,000 a year, which is equal to over seven times the bond interest. With a view of making the bonds more particularly popular with small investors, the company has arranged to issue them in denominations of \$100, as well as of \$500 and \$1,000.

The Ideal Concrete Machinery Company, of South Bend, Indiana, and London, Ont., have recently published their July illustrated bulletin, "Ideal Ideas." A neat cut of the Model "A" cement block machine appears on the front page. This machine is equipped with scraper and finisher attachments, core actuator and automatic power tamper, which allows of greatly increasing the output, and thus reduces the cost of manufacturing, it is claimed, practically fifty per cent. Hand labor is thus eliminated in making cement blocks, and uniformity and perfection are insured. Tycrete blocks made with these machines possess all the advantages of well-made concrete, and in addition are absolutely waterproof, and may be produced in any face design or in colors. Some new molds are illustrated for silo blocks, and for porch spindles. A cement block mantle, the blocks of which were made in an "Ideal" machine, is a feature of the pamphlet. This mantle, judging from the cut, is just as neat and attractive as a mantle could be. The importance of having a few extra face plates, such as horizontally tooled, vertically tooled, panel, lattice, bush hammered and Ashler, with various margins, and also stucco sets, is emphasized. These lend such a variety to the facings that many extra sales can be made, because there can be made from these a selection of a facing that would suit the most fastidious. It is wonderful the number of uses that the blocks have, and it is more wonderful that so many really very fine building details can be made complete by machinery alone. The "Ideal" people will be glad to mail their catalogue, No. 20, to anyone interested in cement block machines.

QUESTIONS AND ANSWERS.

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

Veterinary.

SWELLING ON FETLOCK—
INJURY TO LEG.

1. Colt three months old has a hard swelling on his fetlock joint, and he is slightly lame.
2. Horse got hind leg hurt, and the limb is swollen between fetlock and hock.
J. R.

Ans.—1. Get a liniment composed of 4 drams each of iodine and iodide of potassium and 4 ounces each of alcohol and glycerine. Rub a little of this well into the swelling once daily. Have patience, as such enlargements are hard to reduce.
2. Get a liniment made of 1 ounce each of tincture of arnica and tincture of iodine, 2 drams gum camphor, 4 ounces extract of witchhazel, and water to make a pint. Rub well with this three times daily, and keep a bandage on when not working.
V.

Miscellaneous.

CUTTING NOXIOUS WEEDS.

A and B are neighbors. On B's farm a great number of thistles grow, the seed of which blow over on A's farm. Can A compel B to cut the thistles; and, if so, how should he proceed?
Ontario.
J. M.

Ans.—Yes. The Council of the municipality may appoint an inspector or inspectors, and it is the inspector's duty to notify the owner or occupant of the land on which the weeds are growing, in writing, requiring that the weeds be cut down and destroyed within ten days from the service of the notice. In case the weeds are not cut, the inspector may enter upon the land and cause such weeds to be destroyed with as little damage as possible to the growing crop, or the inspector may lay information before a justice of the peace as to the neglect, and the owner or occupant shall, upon conviction, be liable to a penalty of a fine of not less than \$5 nor more than \$20 for each offence, but no inspector has the power to cut down or destroy noxious weeds on any land sown with grain. The occupant or owner of the land must bear the expense in case the inspector causes the weeds to be cut.

COWS HAVE SORE EYES.

Could you tell me what is wrong with my herd of cows, and give a remedy for same? The trouble seems to be going through the herd, five of them having it now. A scum seems to come over the eye, which runs a matterly liquid. Some have one eye affected; others both eyes. I understand my neighbor's cattle have been troubled with the same thing.
A. L. S.

Ans.—It is likely that the cattle have infectious ophthalmia. Separate the sound animals from diseased, and do not expose the healthy animals to the disease by allowing them to run on pastures or in buildings where cattle suffering from the malady have been or are kept. Keep the diseased animals in comfortable, well-ventilated stables, and do not allow the sun's rays to strike their eyes. Purge each with one pound Epsom salts and one ounce ginger. Bathe the eyes well with warm water twice daily, and after bathing put a few drops of the following lotion into each eye, viz.: Sulphate of atropia, 10 grains; sulphate of zinc, 10 grains; distilled water, 2 ounces. The stables should be disinfected with a coat of hot lime wash, with five-per-cent. carbolic acid.

WISE JOHNNY.

Teacher—"Now, Johnny, suppose I should borrow \$100 from your father and should pay him \$10 a month for ten months, how much would I then owe him?"
Johnny—"About \$3 interest."

THE CANADIAN BANK OF COMMERCE

ESTABLISHED 1867

Capital paid-up, \$10,000,000. Rest, \$8,000,000.

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. LIVE STOCK.

At West Toronto, on Monday, August 14th, receipts numbered 98 carloads, 1,996 cattle, 229 hogs, 273 sheep, 67 calves; quality of cattle good; trade brisk; prices firmer; 10c. to 15c. per cwt. higher for both butchers' and export cattle. Exporters, \$5.70 to \$6.25, and one load \$6.40; prime picked butchers', \$5.90 to \$6; good, \$5.65 to \$5.85; medium, \$5.35 to \$5.60; common, \$5 to \$5.25; milkers, \$4 to \$6.5; calves, \$4 to \$7.50. Sheep, \$3 to \$4.25; lambs, \$6 to \$7.50 per cwt. Hogs \$7.85, fed and watered; \$7.50 f. o. b. cars.

REVIEW OF LAST WEEK'S MARKETS

Table with 3 columns: City, Union, Total. Rows for Cars, Cattle, Hogs, Sheep, Calves, Horses.

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

Table with 3 columns: City, Union, Total. Rows for Cars, Cattle, Hogs, Sheep, Calves, Horses.

The combined receipts of live stock at the City and Union Stock-yards for the past week, show an increase of 43 carloads, 3,828 hogs; but a decrease of 724 cattle, 492 sheep and lambs, 144 calves, and 19 horses, compared with the corresponding week of 1910.

It will be seen by the above figures that receipts were again liberal, and in the common to medium classes greater than the demand, and, in fact, in the best grades the supply was large enough almost to cause a break in prices, as cattle were held from Monday's market until Wednesday before a clearance was made. Contrary to expectations, there have been larger numbers of cattle marketed than the most sanguine anticipated.

Exporters.—Export steers for Liverpool, sold at \$5.70 to \$6; steers for London market, sold at \$6 to \$6.25; bulls, \$5 to \$5.25.

Butchers.—Prime picked lots sold at \$5.90 to \$6, and one lot of 12 fancy-finished cattle sold at \$6.30, and another lot of the same at \$6.25; loads of good, \$5.60 to \$5.85; medium, \$5.25 to \$5.55; common, \$4.50 to \$5.25; cows, \$3.50 to \$5; bulls, \$4 to \$5.

Milkers and Springers.—Towards the end of the week trade in milkers and springers brightened up, and prices advanced about \$7 per head, all on account of an increased demand from Montreal. Prices ranged from \$40 to \$70 each.

Veal Calves.—Receipts of veal calves were moderate, and prices continued steady, at \$4 to \$7.50 per cwt.

Sheep and Lambs.—At the close of the market on Thursday, the following prices prevailed: Heavy fat ewes and rams,

\$3 to \$3.50, light ewes, \$3.75 to \$4.25, lambs, \$6 to \$7.40 per cwt., or an average of about \$7.25 per cwt.

Hogs.—On Thursday, selects fed and watered at the market, sold at \$7.85, and \$7.50 to \$7.55 at country points.

Horses.—Trade, as far as the Northwest is concerned, is at a standstill, but there is a fair local demand and city trade. Horses are scarce, and high in price in the country; that is, with quality looked for. A good fall trade is anticipated, many inquiries from lumber districts, from Nova Scotia in the East, to British Columbia in the West, are being made as to prices. Manager Smith, of the Union Horse Exchange, at the Union Stock-yards, quotes prices as follows: Drafters, 1,600 lbs. and over, \$550 to \$600 per pair; expressers, \$175 to \$250; drivers, \$100 to \$225; serviceably-sound, \$40 to \$125 each.

BREADSTUFFS.

Wheat.—No. 2 red, white or mixed, 81c. to 82c., outside points; new wheat, 78c. to 80c.; Manitoba No. 1 northern, \$1.03; No. 3 northern, \$1.01 1/2, track, lake ports. Oats.—No. 2 Canadian Western, 41 1/2c.; No. 3, 40c., lake ports; Ontario No. 2, 39c. to 40c.; No. 3, 39c., outside. Rye.—No. 2, 68c. to 70c., outside. Barley.—For malting, 67c. to 68c.; for feed, 50c. to 56c., outside. Corn.—No. 2 American yellow, 67c., on track, bay ports. Peas.—No. 2, 78c. to 80c., outside. Flour.—Ontario ninety-per-cent. winter-wheat flour, \$3.35, seaboard. Manitoba flour.—Prices at Toronto are: First patents, \$5.10; second patents, \$4.60; strong bakers', \$4.40.

HAY AND MILLFEED.

Hay.—Baled, car lots, on track, Toronto, \$12.50 to \$13 for No. 1. Straw.—Baled, car lots, on track, Toronto, \$6 to \$6.50. Bran.—Manitoba bran, \$21 per ton; shorts, \$23; Ontario bran, \$22 in bags; shorts, \$24, car lots, track, Toronto.

COUNTRY PRODUCE.

Butter.—The butter market continues firm for the best grades, and some are 1c. per lb. higher. Creamery pound rolls, 26c. to 27c.; creamery solids, 24c.; separator dairy, 23c. to 24c.; store lots, 17c. to 18c.

Eggs.—Strictly new-laid, in case lots, 24c.

Honey.—The new crop of honey is being offered at 9 1/2c. to 12c. per lb. for Canadian production. Car lots of American honey offered at 7c. to 7 1/2c.

Cheese.—Twins, 14c. per lb.

Potatoes.—American sold at \$4.75 per barrel, and Canadian, from farmers' wagons, at \$1.50 per bushel.

Poultry.—Receipts were liberal; prices about steady, as follows: Alive—Turkeys, 14c.; ducks, 14c.; chickens, 18c.; fowl, 12c. Dressed—Turkeys, 16c. to 18c.; ducks, 18c.; chickens, 21c. to 23c.

HIDES AND SKINS.

E. T. Carter & Co., 85 East Front street, have been paying the following prices: No. 1 inspected steers and cows, 12 1/2c.; No. 2 inspected steers and cows, 11 1/2c.; No. 3 inspected steers, cows and bulls, 10 1/2c.; country hides, cured, 11c.; green, 10c.; calf skins, 12c. to 15c.; lamb skins, 35c. to 50c. each; horse hides, No. 1, \$3; horse hair, per lb., 33c.; tallow, No. 1, per lb., 5 1/2c. to 6 1/2c.; wool, unwashed, per lb., 11c. to 14c.; washed, 18c. to 20c.; rejects, 14c. to 15c.

FRUITS AND VEGETABLES.

The Dawson-Elliott Company, wholesale fruit, produce and commission merchants, corner West Market and Colborne streets, Toronto, report Canadian vegetables and fruits as follows: Raspberries, 14c. to 15c.; thimbleberries, 10c. to 11c.; gooseberries, basket, \$1.50; red currants, \$1.25 to \$1.50; black currants, basket, \$2; apples, basket, 30c. to 50c.; tomatoes, 60c. to 75c. per basket; watermelons, 40c. to 50c. each; cabbage, in crates, \$2.25.

Buffalo.

Cattle.—Prime steers, \$6.75 to \$6.90; butcher grades, \$3.25 to \$6.50. Calves.—Cull to choice, \$5 to \$9. Sheep and Lambs.—Choice lambs, \$7 to \$7.15; cull to fair, \$5 to \$6.90; yearlings, \$4.75 to \$5.25; sheep, 32 to \$4.25. Hogs.—Yorkers, \$8 to \$8.05; stags, \$5 to \$5.75; pigs, \$8 to \$8.05; mixed, \$8 to \$8.10; heavy, \$7.90 to \$8; roughs, \$6.25 to \$6.90.

Montreal.

Live Stock.—On the local cattle market prices were on the easy side, both on account of the increased supplies, and the effect the warm weather is having on buyers. The best prices appear to be 6c., and the average for best stock was more like 5 1/2c. to 5 1/4c. per lb. Medium stock ranged from about 4 1/2c. to 5c., and common down to 3 1/2c. per lb. The supply of small meats was rather larger, and prices were rather lower. Lambs sold at 6c. per lb., sheep at 3 1/2c. to 4c. per lb., and calves at \$2 to \$7 each. Even in the matter of hogs, prices were lower, although supplies were no smaller. Select lots sold as low as 7c. per lb., the range being up to 7 1/2c. for selects, weighed off cars. Some hogs were delivered on contract, at about 7 1/2c. per lb. Cooler weather would undoubtedly have a good effect on the live-stock market.

Horses.—Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$300 to \$350; light draft, 1,400 to 1,500 lbs., \$225 to \$300; light horses, 1,000 to 1,100 lbs., \$100 to \$200; inferior, broken-down animals, \$50 to \$100; choicest saddle and carriage animals, \$350 to \$500 each.

Dressed Hogs.—Dressed hogs sold at 10c. to 10 1/2c. per lb., for select, abattoir, fresh-killed.

Eggs.—Good stock scarce, and firmly held, and there is no end to the quantity of poor eggs obtainable. Where it is known that the quality is fairly good, 17c. is being paid. In other places, not more than 14c. per dozen is paid. In the city, dealers sold No. 1 candled, in single cases, at 20c. to 21c. per dozen, and 18 1/2c. was quoted for large lots. Selects sold at 24c. per dozen, in single cases.

Butter.—In the country, 24c. was paid for finest, and this sold at 24 1/2c., and sometimes 24 1/2c., wholesale, for export. The English market is high, and so is the American. In addition to this, there has been a great deal of drought in the Township creamery-producing sections, and the grass is all dried up in places, and farmers are hauling water four and six miles for their cattle. Grocers cannot make purchasers at less than 25c. Shipments last week were 6,400 packages, bringing the total for the season to 50,000, or four times as much as last year.

Cheese.—Exports last week were 58,000 packages, making the total for this season 821,000, or 6,000 more than a year ago. Finest Westerns quoted at 12 1/2c., and Easterns at 11c. to 12c. less. The belief is that reciprocity would strengthen this market.

Grain.—No. 2 Canadian Western oats are 42 1/2c. to 43c.; No. 3, 41 1/2c. to 41 1/4c.; Ontario No. 2 white, 41c., and No. 3, 40c.; No. 4, 39c., car lots, ex store.

Flour.—Market unchanged, at \$5.30 for Manitoba spring wheat, first patents; \$4.80 for seconds; \$4.60 for strong bakers'; Ontario winter-wheat patents, \$4.50 to \$4.75 per barrel; straight rollers, \$4 to \$4.10.

Millfeed.—Prices unchanged, at \$22 to \$23 per ton for Ontario middlings; \$30 to \$31 for pure grain mouille; \$25 to \$28 for mixed mouille; Manitoba bran, \$20 to \$21, and shorts, \$23.

Hay.—Prices: \$14 to \$14.50 per ton for No. 1 hay; \$12 to \$13 for No. 3 extra; \$9.50 to \$10 for No. 2 ordinary; \$8 to \$8.50 for No. 3, and \$7.50 for clover mixed.

Hides.—Lamb skins were up 10c. each, and sold at 40c. each. The remainder of the hide market was steady and unchanged.

Cheese Markets.

Watertown, N. Y., 11 1/2c. to 12c. Farnham, Que., butter, 23 1/2c. Madoc, Ont., 12 5-16c. to 12 1/2c. Campbellford, Ont., 12 1-5c. to 12 1/2c. 12 5-16c. Vankleek Hill, Ont., 12 7-16c. Brockville, Ont., 12 1/2c. to 12 7-16c. Ottawa, Ont., 12 1/2c. to 12 7-16c. Napanee, Ont., 12 1/2c. to 12 7-16c. Iroquois, Ont., 12 1/2c. Kemptville, Ont., 63c. Picton, Ont., 12 7-16c. to 12 1/2c. Cowansville, Que., 12 5-16c.; butter, 24 1/2c. to 24 1/4c. London, Ont., 12 7-16c. to 12 7-12c. St. Hyacinthe, Que., 11 1/2c.; butter, 23 1/2c. Belleville, Ont., 12 1/2c. to 12 7-16c. Canton, N. Y., 12 1/2c.; butter, 26 1/2c.

Chicago.

Cattle.—Beeves, \$5 to \$7.65; Texas steers, \$4.50 to \$6.25; Western steers, \$4.10 to \$6.40; stockers and feeders, \$3 to \$5.50; cows and heifers, \$2.20 to \$6.10; calves, \$5.75 to \$8.25.

Hogs.—Light, \$7.25 to \$7.85; mixed, \$7.50 to \$7.80; heavy, \$6.90 to \$7.75; rough, \$6.95 to \$7.15; good to choice hogs, \$7.15 to \$7.70; pigs, \$6.10 to \$6.75; bulk of sales, \$7.25 to \$7.70.

Sheep and Lambs.—Native, \$2.40 to \$3.85; Western, \$2.75 to \$3.85; yearlings, \$3.75 to \$4.85. Lambs—Native, \$4 to \$7; Western, \$4.75 to \$7.

QUESTIONS AND ANSWERS. Miscellaneous.

ABOUT STRAWBERRIES.

Would you advise me to grow strawberries? It would be necessary for me to hire the help to care for them. What varieties would do best, and where could I get a book on strawberry culture?

N. McV.

Ans.—There is money in growing strawberries where the soil and climate is suitable and the plants are kept well attended to. There are many good varieties among which some of the best are: Williams, Splendid, Warfield, Sample, Senator Dunlap, etc. Bulletin No. 62, of the Central Experimental Farm, Ottawa, entitled "Strawberry Culture," by W. T. Macoun, contains all the necessary information concerning the growing of this fruit, and may be had by applying to the Dominion Department of Agriculture at Ottawa.

PAINT FOR OLD BUILDINGS.

I have a few old buildings I wish to paint. Is there any cheap oil or paint to fill up the pores of the wood before I use linseed oil. They would absorb a great deal of oil. I have seen advertisements of paint mixed with water. Can you recommend any?

J. C.

Ans.—The real object of painting buildings, besides giving them a more attractive appearance, is to preserve them from the actions of the elements which promote decay. The best paint is often the cheapest in the long run. Venetian red, lead and oil is the mixture commonly used for outbuildings. A mixture of common salt, one-half bushel to one bushel of lime, after slaking, with ten pounds of finely-cut tallow added to every bushel, and plenty of coloring material added, is recommended for this purpose. Dealers claim that a good ready-prepared barn paint can be obtained cheaper. For information on this point, write some of them.

NOTE OVERDUE—LAME MARE.

1. A borrowed fifty dollars from B, giving a promissory note for one year, dated October 5th, 1904. There has never been anything paid on the note, although it has been asked for several times. Can this note be collected yet?

2. Young mare has gone lame on right hind leg. There is a small lump on outside of hip. After she makes a few steps she seems to be all right. H. A. D.

Ans.—1. A note holds good after due until paid, subject to the effect of the statute of limitations, by which the debt may become barred in six years from the date of maturity of the note, or the date of the last payment in respect of it, or the last written acknowledgment of indebtedness, whichever may be the latest.

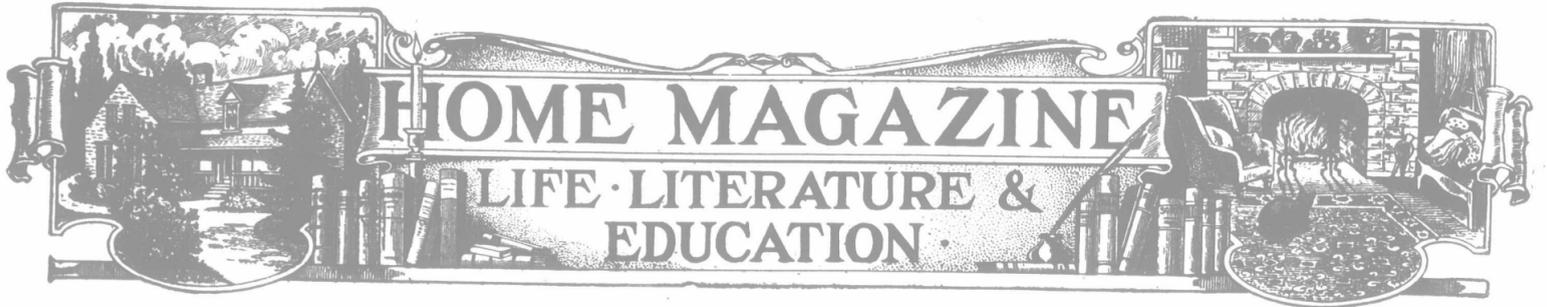
2. From the meagre description given, this is difficult to answer. The lameness is probably caused by partial luxation of the patella. Blister the front and inside of the stifle joint with 2 drams each of biniodide of mercury and cantharides, and mix with 2 ounces vaseline. Clip the hair off the parts, and tie so that she cannot bite them. Rub well with the blister on two consecutive days, and on the third day wash off and apply sweet oil. Keep in a box stall. If necessary, repeat the blister in a month.

BIDDY'S MEASURER.

Bobby had never been in the country before, so, naturally, the very first thing he wanted to do was hunt eggs. So he took a basket and started out.

"See what I got!" he cried, as he came running from a chicken-coop, holding in his hand a china egg.

"Oh, go put it back!" exclaimed Mabel, his six-year-old sister. "That's the egg the hen measures by."



The Rainfully New Place.

The "painfully new" place, how bare, and barren-looking, and far from home-like it stands! Naked brick walls, hot in the summer sun, staring windows; unshaded of vine or shadow of tree; bald foundations rising, hard and forbidding-looking from the red earth, as though the new house had nothing in common whatever with this soft, green old world in which it has, with unwilling enough face, found itself situated! And how many people there are who seem contented enough to let things stand thus, year after year, year after year, until pigmy trees grow large enough to cast a respectable shade, and old Time has had opportunity to mellow the raw, crude color of the brick, and throw soft silver over the roof.

When you think of it, however, you realize that there is no reason for waiting so long. Really, people can work wonders, often, in a very short time, if they set about it in the right way.

If the earth close to the house is hard and dry and gravelly, made up of the under stratum thrown out in excavating the cellar, have some of it removed, and in its stead make a bed of good rich earth, with some well-rotted manure at the bottom of it. In this plant Japanese hops, Japanese Kudzu vine, or Dutchman's Pipe (*Aristolochia sypho*), all quickly-growing vines that will wear off the hard, new edge in no time, and give you the sensation of having a home, instead of merely living in a house. On the eastern side of the house, in fairly rich earth, purple morning glories, and even the old scarlet-runner bean, will prove a daily joy. Still better, get some roots of wild clematis, removing them very carefully with plenty of earth. This is one of the most beautiful vines one can have, beautiful at all times of the year, and especially so in fall when covered with its silky seed tufts. It will grow in any situation where the soil is fairly rich and moist. Clematis paniculata, which may be obtained from any dealer in seeds and plants, is also exceedingly beautiful. By getting strong, three-year-roots, a fairly good showing is soon obtained.

Vines are, of course, the very best means of softening down the new look and bringing the new house into harmony; but they are not enough. One must have either shrubbery, or something simulating shrubbery, to conceal foundations, and make a soft joining line with the ground. Shrubby itself is rather slow of growth, and roots of it should be set as soon as possible, in corners, in irregular clumps, etc., wherever the best effect can be obtained. White lilacs, purple lilacs, the honeysuckle bush, the snowball, Siberian currant, barberry, with lower-growing spirea, flowering almond, and japonica—all of these are beautiful, and so are some of our native bushes, red elder, dogberry, viburnums, etc., which may be very well incorporated among our shrubbery. While these are growing, however, one wants more luxurious masses of greenery and bloom, and so some of the herbaceous perennials find an immediate and especial value. Plant masses of golden glow, tall larkspur, hollyhocks and perennial phlox this year—fall planting will do—and next year you will wonder at the fine showing you will have against your rapidly-growing vines;

but you must be careful to plant so that the blending of color will be harmonious, if you would have the best effects.

Among annuals, dahlias—with the tubers planted in the house in good time to secure early results—and clumps of castor bean against a background of tall nasturtiums, are useful.

At all events, do something. Life is too short to spend any of it in fruitless waiting for any bit of beauty that may be hurried along by a little energy. "Doing Now" is the best way to achieve results.

In fall is the best time to begin the work. Dig out the hard gravel and dead earth thrown out from the cellar-digging to a depth of at least three feet; see that the drainage is good, then fill up the excavation with rich soil. Plant shrubs, hardy vines, and perennials, and so gain time on next spring's work, and have a fine mass of greenery all ready to sprout. A day spent thus before snowfall may produce results that will give life-long satisfaction.

The Tricky Man.

There are some crookedly constituted individuals who seem to think it smart to be tricky. Such men are, as a rule, much given to bargaining and "dickering," and in each case go into the fray with the settled determination to fleece the "other fellow."

When the tricky man has palmed off something worth ten dollars for twenty dollars, he comes home chuckling. He considers that he has done something very sharp and meritorious, and if a doubt as to the honor, or common honesty, even, of his pro-

cedure ever crosses his mind, he is likely to solve his conscience with the reflection, "If the other fellow isn't sharp enough to look out for his own interests, let him take what he gets."

But there is a question to be asked, "What does the tricky man really gain?" A few dollars, perhaps, ill-gotten gain that may give him an uneasy pillow when he comes to his dying bed—then what? He has lost the respect of the community. He has not a real friend worth

of the state are largely drawn. True, too, that "Ill fares the land, to hastening ills a prey, Where wealth accumulates and men decay." Intimacy with nature, fondness for outdoor life, cannot well be too highly commended, for it is the natural way of living. And we are glad to know that, on every hand to-day, the indications are manifest and convincing that the tendency of people is growing stronger and stronger to re-

sort to the country, to reinhabit the abandoned farms and find health, strength and lasting good in the peaceful pursuits and pleasures of country life. In the words of another writer, this sentiment is thus expressed:

"Strong is the growing passion for a rest, the hunger for a simpler life. The tide is turned from the tragedy and comedy of city mansions and city slums to the quietude of the country home. The man with the hoe, to-day, has also chemistry, botany, entomology, ornithology, and all the rest of the sciences of the age, the thought and the uplift, as a part of his life. The great inventions no longer subserve merely the trader, but they bind together the farm-houses, and make life among the trees rich with thought and sentiment.—(Boston Cooking School Magazine.)

selections from eminent writers.

Selections from Eminent Writers.

"Riding Together."

By William Morris.

For many, many days together
The wind blew steady from the East;
For many days hot grew the weather,
About the time of our Lady's feast.

For many days we rode together,
Yet met we neither friend nor foe;
Hotter and clearer grew the weather,
Steadily did the East wind blow.

We saw the trees in the hot, bright weather,
Clear-cut, with shadows very black,
As freely we rode on together
With helms unlaced and bridles slack.

And often, as we rode together,
We, looking down the green-banked stream,
Saw flowers in the sunny weather,
And saw the bubble-making beam.

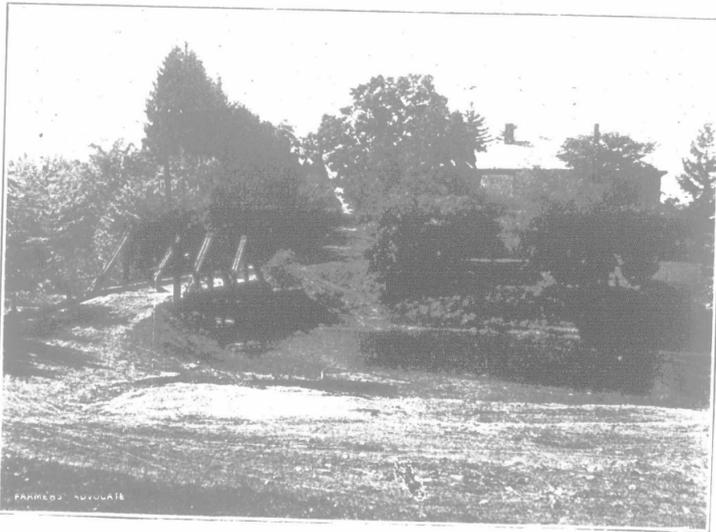
And in the night lay down together,
And hung above our heads the rood,
Or watched night-long in the dewy weather,
The while the moon did watch the wood.

Our spears stood bright and thick together,
As thick we saw the pagans ride;
His eager face in the clear fresh weather,
Shone out that last time by my side.

Up the sweep of the bridge we dash'd together,
It rocked to the crash of the meeting spears,
Down rain'd the buds of the dear spring weather,
The elm-tree flowers fell like tears!

There, as we rolled and writhed together,
I threw my arms above my head,
For close by my side, in the lovely weather,
I saw him reel and fall back dead.

I and the slayer met together,
He waited the death-stroke there in his place,
With thoughts of death, in the lovely weather,
Gapingly mazed at my maddened face.



On the Road to the Mill.

Madly I fought as we fought together,
In vain: the little Christian band
The pagans drown'd, as in stormy weather
The river drowns low-lying land.

They bound my blood-stain'd hands together,
They bound his corpse to nod by my side:
Then on we rode, in the bright March weather,
With clash of cymbals did we ride.

We ride no more, no more together;
My prison-bars are thick and strong,
I take no heed of any weather,
The sweet saints grant I live no long.

The Peel County Flower-garden Competition.

Readers of "The Farmer's Advocate" will remember that, last spring, an announcement of a rather unusual nature was made in these columns. That announcement, although it concerned only Peel County, Ontario, was, we hope, of interest to our subscribers in all parts of the world. What is heralded for one small speck on the map of this continent might be the inspiration for a similar movement in any part of Canada, the United States, even in far-away Australia or New Zealand. To come to the point, in May of this year a lawyer of Toronto, Mr. James Pearson, who, by reason of owning six hundred acres of land in the beautiful Caledon Mountain district, has become interested in farming affairs, and especially in the farming affairs of Peel County, instituted a flower-garden competition, to be announced through the columns of this journal. The conditions were that all competitors must own at least fifty acres of land, and be subscribers of "The Farmer's Advocate." The greatest liberty was allowed with regard to the size and planning of the gardens, taste in arrangement to be considered more than extent or cost, the prizes offered being thirty, twenty and ten dollars, respectively, for the three best gardens.

Seven competitors responded to Mr. Pearson's very generous offer, viz.: (1) Mrs. D. N. Potter, Lot 19, 6th Concession, East Caledon, Mono Mills, P. O.; (2) Miss Mona Kay, 1st Concession, north of Dundas St., Toronto Tp., Erindale P. O.; (3) Miss A. L. Wharram, Lot 5, 1st Concession, Albion Tp., Sand Hill P. O.; (4) Miss Ethel Dolson, Lot 16, 4th Concession west, Chinguacousy Tp., Norval Station P. O.; (5) Mrs. A. McLean, Lot 20, 2nd Line, west, Chinguacousy Tp., Snelgrove P. O.; (6) Mrs. Hiram Caslor, Lot 32, 2nd Concession, west, Chinguacousy Tp., Boston Mills P. O.; (7) Miss Cassie MacDonald, Lot 2, Concession 5, West Caledon, Rockside P. O.

The gardens resulting from the efforts of these competitors were judged during the first week of August by Mr. Pearson himself, Mrs. Wm. Dawson, Parkhill, Ont., and "Dame Durden," of "The Farmer's Advocate" staff, and the prizes were awarded as follows:

First Prize.—Mrs. D. N. Potter, Mono Mills.

Second Prize.—Miss Cassie MacDonald, Rockside.

Third Prize.—Miss A. L. Wharram, Sand Hill.

"The Farmer's Advocate" heartily congratulates these prizewinners on their success; also Mr. Pearson on his success in having been the originator of a movement that may eventually result not only in more beautiful homes and the addition of the refinement that the presence of flowers always gives, throughout Peel County, but in many other parts of Canada, also. The spirit of gardening spreads; one fine flower plot on a line often results in similar plots all along that line, and we anticipate

that this will be the natural course of events in Peel County.

We may say that those who failed in winning a prize have no cause for discouragement. They have made a good beginning, and, as Mr. Pearson's offer is continuous, they will have a chance to try another year. At all events, we have no doubt that these competitors feel quite repaid in having the flowers about, and in always being provided with cut flowers for the table.

A detailed account of the judging trip through Peel County, with photos accompanying, will be given by "Dame Durden" at an early date.

Hope's Quiet Hour.

Ye Shall Know.

At that day ye shall know that I am in My Father, and ye in Me, and I in you.—S. John xiv. : 20.

If any man willeth to do His will, he shall know of the teaching, whether it be of God, or whether I speak from Myself.—S. John vii. : 17 (R.V.).

Did you ever realize the tremendous nature of the promise contained in these texts? "Ye shall know that I am in My father." "He shall know of the teaching whether it be of God."

So many people are doubtfully asking—asking with their lips or in their hearts—"Is the Gospel story true? Can we be sure that JESUS is Divine?"

And, with calm certainty, the Master proclaims His great promise to His faithful disciples, "Ye shall know." Does He fulfil that promise? Ask the great multitude which no man can number! Old and young, ignorant and learned, rich and poor, black and white echo the triumphant words of the Apostle, "I know Whom I have believed!"

Strong in their certainty that the Lord Himself stood with them to strengthen them, they have quietly faced lions in the amphitheatre, endured tortures which we hardly dare to describe, joyously embraced the cross of pain, or have sung hymns of victory as they burned to death at the stake. Nor is that all. Thousands of souls are living quietly for Christ every day. Many of them know nothing about the latest discoveries in Bible lands, and are absolutely ignorant of the arguments of the higher or lower critics. Some of them are up-to-date in all these matters. But the important

fact for each is the certainty that JESUS is indeed "Emmanuel"—God with us.

How do they know? How can you know, if you feel doubtful? Is there any sure way of claiming the great promise: "Ye shall know?"

Why, of course there is. The way is plainly marked out. That very question was asked our Lord the night before He died, and was fully answered. One of the disciples asked Him how He would make Himself known to them and yet leave the world in ignorance. The answer was that one who loved Him, proving his love by obedience, should be the beloved of the Father; and, He said, "We will come unto him, and make our abode with him."

This manifestation may be the result of many years of obedience—obedience in thought and word as well as act—or it may come suddenly. "If any man willeth to do His will, he shall know." We have an instance of this in the case of the penitent thief. He suddenly made up his mind to have done with the evil of the past, but there was no time to prove his love by years of obedience. Christ took the will for the deed, and manifested Himself to him swiftly but surely. At once that man who "willed to do His will" recognized his King—recognized Him through all the shame and helplessness which were His disguise.

But with most of us the certainty is a gradual growth. Sometimes we live a "life of doubt diversified by faith;" sometimes our faith grows stronger and we live a life "of faith diversified by doubt," as Browning expresses it in "Bishop Blougram's Apology." But, as he goes on to explain:

"I say, faith is my waking life: One sleeps, indeed, and dreams at intervals.

We know, but waking's the main point with us, And my provision's for life's waking part."

In Guy Thorne's remarkable book, "When it was Dark," the fact that belief in the present Christ is a matter of the spirit and heart, rather than of the intellect, is very ably brought out.

The story is this, in brief: A wicked millionaire is determined to crush Christianity, so he strikes at its root—the historical authenticity of the Resurrection of its Founder. He causes a Greek inscription to be engraved on a stone in an old tomb in Jerusalem, an inscription professing to be a confession of Joseph of Arimathea that he had hidden the body of Jesus and told the disciples

that the Master had risen. This is discovered by a man of science, and the news is telegraphed all over the world. Wickedness and crime break out when the restraint of Christianity is suddenly removed. War breaks out in all directions, and many despairing people commit suicide.

But—though they cannot prove that this "new discovery" is a sham and a fraud—the faith of many is unshaken. They know the Living Christ, their communion with Him is the great Fact of everyday life, it is a matter of personal experience and not affected by anything outside. One of them voices the feeling of many when he says:

"Christ is within; I have found Him myself without possibility of mistake; day and night I am in communion with Him."

Another declares that the people who are "called" Christians may be swayed by infidel writings, but it is "because they have never found Christ. Unreal words, shallow emotions, unbalanced sentiment, leave such as these without armour in a time of tumult and conflicting cries. But if we know Him, if we can look back over a life richer and fuller because we have known Him, if we know, every man, the plague of his own heart, then your explorers may discover anything and we shall not believe."

One young girl, who had loved and served Christ all her life, went quietly on with her work and prayers, though "the church she loved seemed tottering, a horrid confusion and anarchy was everywhere." She could not understand, but she was always sure of the Master who was all the world to her.

Of course this forged "proof" was a very serious matter, and peace was not restored until it was proved to be false, but it could not weaken the faith of those who knew that Christ was their Great Companion.

Consider the case of a good man who is accused of having committed a great crime. Perhaps circumstantial evidence seems to establish his guilt, but he resolutely declares his innocence. The world may lose trust in him because of apparent proofs which witness against him, but his tortured heart draws comfort from the trustful loyalty of those who really know him. His mother and the woman whose hand is clasped close in his—women who have seen the whiteness of his soul—are not shaken in their loyalty and faith by any so-called "proofs."

How it would hurt him if one who had claimed friendship with him before this time of testing should say: "Show me proof of your innocence and I will glad-



Beauty Spots of Canada. Sunrise on Lake Joseph, Ontario.

ly believe in you." Such forced belief would not be faith at all, and a forced belief in God would be valueless too. If He were to speak from heaven, so that no one could doubt, the opportunity for faith would be over. Those who did not "will to do His will," but were anxious to be let alone in their evil ways, could not deny the evidence of their own senses; but that would not make them any better: "The devils also believe and tremble," as St. James reminds us. To do wrong when we know it is wrong can only make our guilt blacker.

If you are not sure of the love of God as revealed in Christ, and if you want to be sure, the road to belief is plain. Make up your mind to bring every thought into line with righteousness—"will to do His will"—and the promise, "ye shall know!" will certainly be fulfilled. It may not be this year or next year, but no one has loyally followed in the steps of the Holy JESUS without finding Him to be the Friend whose friendship is worth more—ininitely more—than everything the world can offer. Real love must be proved by studying His will and doing it. The manifestation of Christ is a gift to the soul that is loyally devoted to Him and actively serving Him. The outside world may be incredulous, perhaps even contemptuous, and yet how forlorn the faithless are. We know how true it is that the Peace of God can be like wings to the soul, lifting it above the jar and strife of earthly troubles. And Peace is the sweet gift of our King to those who love to serve Him as their dearest Friend. Let us claim the full power of His Benediction—the words are fresh and living as ever, after two thousand years—

"Peace I leave with you,
My peace I give unto you:
Not as the world giveth, give I unto
you.
Let not your heart be troubled,
Neither let it be afraid."

If you are not sure of Christ yet, follow eagerly after Him and you shall know the peace of God, which passeth all understanding—a priceless possession. Is it possible to have "Peace, perfect peace, our future all unknown?" the world may question. Let us answer triumphantly, "JESUS we know, and He is on the Throne."

DORA FARNCOMB.

The Beaver Circle.

OUR SENIOR BEAVERS.

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

A Story of a Turtle.

When the young spotted turtle first broke through the hard shell of his egg and began to scramble up to the air and sunlight through the loose earth which covered him, his upper shell was about the size of a five-cent piece, and almost as round and flat. Fortunately for him, he was not the first to make his way from the earthy nest, several of his brothers and sisters had preceded him and loosened the dirt; also his mother had had the foresight to bury her eggs in a spot not too far from the water, so there was little danger of his sharing the fate of many little turtles who are smothered in the earth before they ever see the light of day, or, if they do succeed in reaching the outer air, perish in the hot rays of the sun before they get near the water.

It did not take the little turtle long to discover where the nearest water lay. After digging his way clear of the soil, he paused a moment, moving his little black and tan head from side to side as though taking his bearings, and then, in as straight a line as though guided by a compass, he crawled to a ditch, fifty feet away, the existence of which instinct revealed to him. This journey took some time, but he accomplished it in safety, and, sliding rather than crawling, down the precipitous banks of the ditch, the infant turtle landed safely in the water. Then, after hastening to conceal himself in the soft mud of the bottom, he began to take note of his new surroundings.

Finding that he remained unmolested,

he presently ventured into clear water; and then for the first time one might have seen what his appearance and markings really were. On leaving the egg he had been damp and sticky as newly-hatched chickens are, and the dirt which he had touched had clung to him until it was washed away. But now his upper shell was black, ornamented with numerous little round, yellow (almost orange) spots, while his head, legs, tail and undershell were black-and-tan. Altogether he was a handsome little fellow, much prettier than he would ever be again, since the older a turtle grows the duller his markings become.

After resting a while and finding that no other creature seemed to notice his presence, while the tiny minnows which had been disturbed by his hasty entrance of the ditch, had resumed their play, the baby turtle began to swim lazily with the current, and his progress, though not rapid, soon brought him to the pond of which the ditch was a tributary.

Hitherto, he had seen none of his kind, the minnows, several species of water-bugs, and a crawfish or two, being the only creatures he had encountered thus far; but he found the pond much more populous than the ditch. Indeed, after entering the larger body of water, and catching sight of a large snapping turtle, his first act was to conceal himself in a patch of duckweed, an instinctive precaution which was far from being unnecessary since turtles like nothing better than a meal composed of the young of their own kind.

After nosing around the duckweed for

warm mud, and slept until spring awakened them.

It was late in March when the little spotted turtle was aroused to consciousness. In spite of the spring sunshine which had warmed the water enough to awaken him, it was a bleak world upon which he looked; the trees were still leafless, and the vegetation on the banks which had not been entirely destroyed by the fierce winter winds, was brown and sere. Still, something told him that this state of affairs would not last long, and, in no way disturbed by his unattractive surroundings, he set about satisfying the ravenous hunger with which his sleep of four or five months had left him. That was no easy task, for worms were few and insects were still more rare. Indeed, had he not come upon the body of an eel which had died during the winter, it would have gone hard with him, for he was weak and thin, and in no condition to withstand either living enemies or the cold of the spring nights.

However, when he had gorged himself to his utmost capacity, he felt so refreshed and invigorated that he made a short tour of the pond. The pond itself looked very natural, but it was not long before the turtle discovered that he himself had undergone some alterations, for he was now more than twice as large as he had been when he was hatched out in the previous summer. In one way, the increase in size was a disadvantage, since it made him more conspicuous to the eyes of an enemy; but on the other hand, he found that many of the crawfish and other creatures, of which he had been in

turtle made a hasty rush, and an instant later his jaws closed upon a dry, tasteless creature, whose gaudy coloring concealed a sharp hook which stuck momentarily deeper and deeper into the roof of his mouth, while, to add to his terror, he found himself being drawn quickly to shore by means of a line which was attached to the insect. Worst of all, a man, a variety of creature which the turtle instinctively shunned, was standing on the shore and winding this line in. In a moment or two at the utmost, the turtle would fall into his power!

Frightened and alarmed, the unfortunate creature made a frantic dive to the bottom of the pond, but still, slowly, surely, irresistibly, the line drew him toward the shore. Against sticks, stones, and whatever else came in his way during that dreadful progress along the bottom of the pond, the turtle braced himself, digging his claws into everything he could reach; but all seemed in vain, and he was just on the point of resigning himself to his fate when the hook, partly dislodged by some sudden movement on his part, broke through the flesh in which it had caught and left him free, though so frightened, and with such an aching jaw, that he did not at first realize his escape. For some time after that eating was difficult for him, and although his wound soon healed and left him as well as ever, he always after that shunned brightly-colored insects, often going hungry rather than try to capture one.

When he was a few years older, he once, during a week of rain, made an excursion inland which came near being his last. Led onward by a mistaken expectation that the wet weather would continue, he found himself when it cleared, a couple of miles from the pond, and exposed to the ardent rays of a July sun which beat mercilessly upon him as he turned to retrace his steps. Now, water turtles can live out of water for some time, and they often bask for hours on a log in the blazing sunshine. But they can plunge in and take a refreshing bath at any moment, and that is a very different matter from the case of the poor spotted turtle who felt his skin growing more and more parched every moment, but was obliged to toil wearily along, fearing that each step might be his last. Besides the intense heat, he was exposed to attack by other enemies; and once, a great black snake with widely gaping jaws would probably have swallowed him shell and all had not a wandering cow happened along just then and frightened the hungry reptile away from what might have proved a rather indigestible meal.

This peril which he had so barely escaped, moved the turtle to renewed efforts; but his strength soon came to an end and he lay with closed eyes, open mouth and protruding tongue, careless of what might befall him. Fortunately, the evening was by this time close at hand, and there was a heavy dew that night which had the effect of reviving him so that he was able to continue his journey. Some hours later he regained the pond, and plunged into its waters with the utmost joy; but it was some time before he really recovered from the effects of this expedition.

This happened only a year or so ago, and he has never left his native pond again. As for the future, since he has acquired so much experience, it is probable that he will live a long, happy and peaceful life.—Selected.

The Letter Box.

Dear Puck and Beavers,—This is the first time I have had pluck enough to write a letter to the Circle; but I thought I would write and tell the Beavers of a hawk's nest I found last spring. I found it as I was gathering wild-flowers in the bush; it was in a tall beech tree. The nest was about thirty-five feet from the ground. I climbed up to it, and there were two pure white eggs in it about the size of a banty's egg. The nest was made of sticks and twigs, and looked very much like a little heap of sticks. The next Saturday I went up to it, and it had six eggs in it then. I went up to it about every Saturday. The next three Saturdays that I went up, it had the six eggs yet, but the fourth time it had six. I waited till the birds got about big enough to fly, then I put them in a box about two and a half feet wide,



Hard on the Turtle. A Big One.

some time without being able to locate the little creature whose presence had attracted him, the snapping turtle departed in search of easier prey; the spotted turtle finding that all was quiet, ventured forth once more, and, presently coming to the warm shallow water on the south side of the pond, he soon made himself quite at home. Many other little turtles of various kinds had also selected this favored spot, and seldom left it, either because they had not sufficient confidence in their skill as swimmers, or on account of the enemies which lurked in the deeper waters. They lived together in utmost peace and harmony, sharing the food which came their way. The little spotted turtle learned from the example of his comrades, to recognize things that were good to eat, and to use his claws to tear his food, when a fragment proved too large to be swallowed at one gulp. He also learned that the splash made by a frog jumping from the bank into the water was a signal that some danger threatened, and that he and all his little neighbors must hastily conceal themselves in the mud or among the aquatic plants. Thus, happy and contented, eating all he could get, and growing constantly, he passed the first summer of his life, until the approach of cold weather drove him to the middle of the pond where he and the other inhabitants, partly benumbed by the low temperature, burrowed in the

terror the year before, now gave him a wide berth. Altogether, this second summer of his life was much more comfortable than the first had been, since he was now obliged to avoid only the largest of his own kind.

When cold weather drew near once more, the turtle again buried himself safely from the cold, and, in due course of time, awoke from his second long nap. He was, of course, larger, but not so much as the first year; indeed, as he became older, his rate of growth became slower. He noticed, too, by stretching out his long, pliable neck, that his upper shell was changing its shape, and that instead of being almost perfectly round and flat, it was now becoming oval, with a well-defined arch in the middle. His colors, as time went by, grew much dimmer, but the yellow spots on his back, though comparatively dull, always remained his distinguishing feature.

When he was about four or five years old, he had an experience which came near being fatal. He was just rising to the surface of the water to get a breath of fresh air—without which a turtle, when awake, cannot live comfortably for more than an hour or so—when a brightly-colored insect, quite the most beautiful he had ever seen, alighted on the water directly over his head. Fearing lest the prize should be seen and captured by some other inhabitant of the pond, the

three feet long, and about two feet high. When I was taking them out of the nest, the old hawks kept sailing around the tree and lighting in it. I feared they would light on me, but they did not. I managed to get the young hawks in the box. They were white on the breast and a dark gray on their backs and wings. I fed them everything I could get, such as mice, sparrows, etc., and they ate it, but one died. At last I could not get enough to feed them, so I put them in a row on the wire fence and papa shot them. As my letter is getting too long now, I will close, hoping to see this in print. I am thirteen years old, and tried the Entrance this summer:

ETHELBERT RIVIE,

Kingsville, Ont.

Can you tell, Ethelbert, which of the hawks are harmful and which are not?

This will be something for you to find out. You know most of these birds do more good than harm.

Dear Beavers,—I am just going to send some riddles:

What has hands and can't feel? Ans.—A clock.

What has eyes and can't see? Ans.—A potato.

What has ears and can't hear? Ans.—Corn.

Father, mother, sister, brother, run all day and can't catch one another? Ans.—Wagon wheels.

What is it you can put down a chimney down, and you can't put up a chimney up? Ans.—An umbrella.

What goes up when rain comes down? Ans.—An umbrella.

NORMA ANDERSON (Sr. III. Class),
Glanworth, Ont.

Dear Puck and Beavers,—Here goes a little letter that I have been thinking of writing for a long time. I notice in most of the letters they tell of their pets. Now, wait till I tell you of my pets. First of all I have the dearest and prettiest pony in the world. I will send her picture, and then you can see for yourselves how pretty she is. Her name is Queenie. She is a bay, with a white patch on her back. Our little Queenie will not eat bananas, and when we give her anything she always kisses us or shakes hands with us.

I have a little dog named Tim. He is a little black dog. He will follow me, and I can carry him around, and I have lots of fun with him.

Well, I think this is long enough letter for the first time.

MARJORIE LOWTHIAN
(Sr. III., age 9).

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.]

Handicraft Rugs.

"I think one can carry notions too far," said a girl to me the other day in speaking of a mutual friend now in California, the wife of an architect; "They are building a new house, in Los Angeles, and they say it is going to be very artistic, but she isn't going to have a bit of carpet in it except rag carpet. I think that's crazy, don't you?"

"Oh, an arts-and-crafts house!" I said, for I had heard and seen a little of the arts-and-crafts houses now becoming so popular for summer and suburban residences and country houses in some parts of Canada and the United States.

"I don't know,—likely," returned she, indefinitely.

"Then it will not be the old-fashioned, ordinary carpet," I went on, "but the new, pretty arts-and-crafts rugs."

"Oh!—" somewhat enlightened, "I thought of just the old striped or hit-or-miss kind."

On coming back to the office, almost the first thing I picked up was an article on "A Rug-making Community" in Maine. Needless to say, I read it with a sharp interest,—because of the "mutual friend."

The community referred to is in Center

Lovell, a "more than prosperous village" surrounded by hills over which flocks of sheep roam at will. Among the people of the village itself and the farms about, there is, it is said, "a weaving tradition" to the third and fourth generation, and many of the old looms are still in the homes, although, in later days, since the putting in rugs has grown to an industry, some machinery has been installed also.

Nearly ten years ago, a Mrs. Volk, whose summer home is there, determined to turn the weaving propensities of the people to more artistic uses, and gradually she worked out what is now known

may not be amiss. He was not at all fond of aniline dyes, considering them crude, and sure to fade to any degree of ugliness. "Anyone wanting to produce dyed textures with any artistic quality in them, must," he says, "entirely forego the modern and commercial methods in favor of those which are at least as old as Pliny,"—and then he goes on to give a few hints.

"Now, in order to dye textiles, we need four colors to start with,—to wit, blue, red, yellow and brown; green, purple, black, and all intermediate shades can be made from a mixture of these colors.

"Blue is given us by indigo and woad.

mixed with weld gives us orange, and with 'saddening' all imaginable shades between yellow and red, including the ambers, maize color, etc."

The great man—for Morris was a great man, poet, artist, originator,—then goes on to some discussion of the necessity of frequent dippings to deepen the intensity of some colors, and of the use of mordants, or fixers, familiar to everyone who has done much home-dyeing, at any time not an easy piece of work.

"As to the artistic value of these dye-stuffs," he concludes, "I must tell you that they can be modified and toned without dirtying, as the foul blotches of the capitalist dyer cannot be. Like all dyes, they are not eternal; the sun in lighting and beautifying them consumes them; yet gradually, and for the most part, kindly, these colors in fading still remain beautiful, and never, even after long wear, pass into nothingness, through that stage of livid ugliness which distinguishes the commercial dyes as nuisances, even more than their short, and by no means merry, life."

This is not an attempt to urge anyone into trying handicrafts things. Some people can never like them. Personally, I do. I admired very much the specimens of rugs, portieres, table-covers, etc., made by the French-Canadian habitants, and exposed for sale at the "Little Shop" down in old Quebec, also, in smaller quantity, at the Toronto and London Exhibitions.

Neither does it purport to be an exhaustive treatise on dyeing. The reference to the new Lovell venture is simply thrown out as a suggestion which may be taken up by someone in Canada already versed in the subject, for home adornment, or as a means of making pin-money where the neighborhood may happen to be appreciative.

Some day I intend to go out into Quebec Province and watch the habitant women at work, just to see, at first hand, how they make those pretty portieres and bed-spreads and rugs,—old blue, old rose, and olive green, sometimes with the tufted "Egyptian" borders; then I shall be able to tell you something a little more definite about it all.

In the meantime, I do not see why any woman who knows how to weave—for there are many still in the Provinces—and with artistic tastes, should not work up a nice little business by just trying rag-rug weaving in soft, quiet, artistic colorings.

D. D.

Autumn Cookery.

Baked Apple Jelly.—Fill a two-quart granite dish with alternate layers of sliced tart apples and sugar. Bake slowly for three hours, closely covered. This is delicious, and should turn out in a solid pink jelly. This dish will cook splendidly in the fireless cooker.

Pearl Barley.—Cook for four hours in a fireless cooker the day before you wish to use pudding, 1 cup of pearl barley with 1 quart water and $\frac{1}{2}$ teaspoon salt. In the morning, add 1 cup boiling water, stir thoroughly, reheat, and serve with good cream and sugar.

Cherry Blanc-mange.—Two cups canned cherries; add $\frac{1}{2}$ cup cold water and heat. Sweeten to taste, and add a teaspoon of butter and one tablespoon cornstarch blended with 2 $\frac{1}{2}$ teaspoons cold water. Stir from 5 to 8 minutes until the cornstarch is thoroughly cooked. Pour into a mould to cool. Eat with cream.

Corn Beef Salad.—Boil the beef the day before. Put it in cold water enough to cover it, and cook very gently (it must simmer, but not boil) until quite tender. Take out the bones, place the meat in a dish, cover, and put on a weight to press the meat down. Next day cut as much of the meat as you require into very small bits, put in little heaps on lettuce leaves on individual plates, and put a little cream dressing over.

Cream Dressing.—Two eggs, 3 table-spoons vinegar, 1 of rich cream, $\frac{1}{2}$ teaspoon salt, $\frac{1}{2}$ teaspoon mustard, dash of cayenne. Beat eggs well, add the salt and mustard, then the vinegar and cream. Set all in a dish in boiling water, and stir until as thick as rich cream. Cool before putting on the meat.

Sweet Pickled Apples.—Make a syrup of 1 cup vinegar and 2 of sugar. Add a few small pieces of whole cinnamon and some cloves. Pare and core sweet apples; drop them in the syrup, and cook

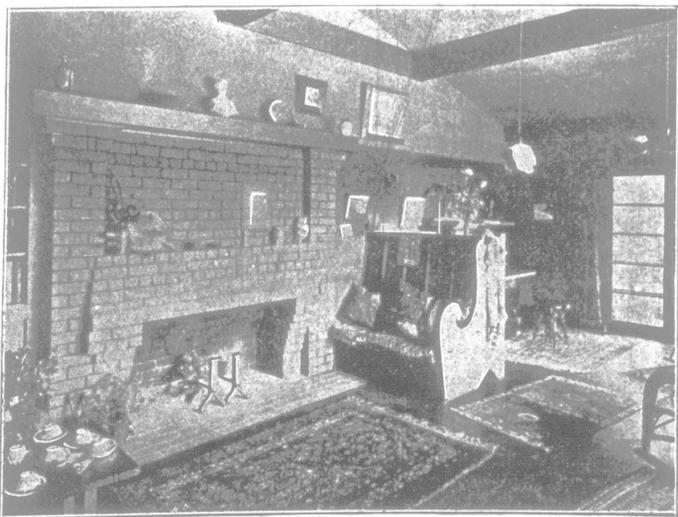


Habitant Woman Spinning.

as the Sebastos rug, with a knotted wool background, and a border design (the center being plain), taken from certain Indian pottery. The coloring is of rich indigo blue and green, vegetable dyes only being used for the different hues.

It will be seen, then, that the Sebastos rug is a wool rug, not a rag one, yet, in other places, and in private homes possessed of looms, rag rugs, equally effective, are being made along similar lines—fast vegetable dyes, simple, effective patterns; but in coloring to suit any color-scheme that may be desired. There is no rag-rug making community, at least to my knowledge, the work is wholly

Red is yielded by the insect dyes, Kermes, lac-dye and cochineal, and by the vegetable dye, madder. Yellow dyes are chiefly given us by wild, quercitron bark, and old fustic, an American dye-wood. But yellow dyes are the commonest to be met with in nature, and our fields and hedgerows bear plenty of "greening-weeds," as our forefathers called them, since they used them chiefly for greening blue woollen cloth. . . . Brown is best got from the roots of the walnut tree, or in their default, from the green husks of the nuts."—Morris knew nothing of the butternut, you see, or probably he would have mentioned it.



The kind of room in which rag rugs look well.

private, and yet there is no knowing when or where it may not develop into an organized industry.

Of course, the rugs must be evenly and beautifully woven, but above all things the coloring must be artistic, in soft olives, tans, grays, buffs, delft or Copenhagen blues, etc., or in artistic mixtures of these, whether "hit-or-miss" or as borders.

The matter of dyeing is, indeed, so important, that a few words from William Morris, who did so much for handicrafts,

"Green is obtained by dyeing a blue of the required shade in the indigo-vat, and then greening it with a good yellow dye, adding what else may be necessary (e. g., madder) to modify the color according to taste. . . . Black is best made by dyeing dark blue wool with brown. All intermediate shades can be got by the blending of these prime colors, or by using weak baths of them. For instance, all shades of flesh color can be got by means of weak baths of madder and walnut; saddening madder, or cochineal

until tender. Put in a jar and pour syrup over. Serve with cold meat. Will keep well.

Cucumber Catsup.—Grate 12 cucumbers, add 2 chopped onions, $\frac{1}{4}$ pint salt; let stand a while, then drain on a sieve over night. Next add one-third cup mustard seed, 1 teaspoon pepper, and cover with good cider vinegar. Will keep well in glass mugs or sealers.

Fried Beets.—Wash tender beets without breaking the skin. Boil until soft, slice, and fry in butter.

Apple Pie.—Sift 1 large cup flour with $\frac{1}{4}$ teaspoonful each of salt and baking powder. Quickly rub in a scant half-cup of lard. Mix with ice water, cutting it into the dough with a knife. Roll out and put on the pie-pan. Pare Astrachan apples, quarter, and cut in bits,—do not slice. To the apples, add 5 or 6 table-spoons sugar, 1 level teaspoon sifted flour, 1 of water, and bits of butter. Stir all together, season with cinnamon or nutmeg, fill the pie, put on top, and bake for 40 minutes.

Vegetable Salad.—Take an even quantity of cold, cooked vegetables, peas, beans, beets, and potatoes, or any similar mixture. Add some finely-minced onion, mix in salad dressing, and serve very cold on lettuce leaves. Garnish with hard-boiled egg.

Apple Preserve.—Six large apples, peeled, quartered, and each quarter cut a second time; 1 pint boiling water, two-thirds cup sugar. Make a syrup of this, drop in the apples, and cook until tender. Add nutmeg, cinnamon or lemon peel if you choose.

Stewed Plums.—Pour boiling water on 1 dozen large blue plums, take off skin, halve them, and take out stones. Put $\frac{1}{2}$ cup sugar and $\frac{1}{2}$ cup water in a stew-pan; when this boils put in the plums and stew for 10 minutes.

Apple Salad.—Peel, core and slice 4 or 5 tart apples. Mix with them half a lemon thinly sliced. Place in a salad dish and serve very cold, with a French dressing made as follows:

French Dressing.—One saltspoon salt, $\frac{1}{2}$ saltspoon pepper, 3 table-spoons salad oil or melted butter, 1 teaspoonful onion juice, 1 table-spoon vinegar, dash of cayenne pepper.

Cucumber Jelly.—Pare 4 large cucumbers, cut up and stew in 1 quart water with a small onion, teaspoon salt, $\frac{1}{2}$ teaspoon white pepper. Soak $\frac{1}{2}$ box gelatine in 1 cup cold water. When cucumbers are soft, stir in the gelatine. When it is dissolved, strain to remove seeds. When almost cold, peel and slice thin one cucumber. Wet the mould and line with the slices. Pour in the jelly, put in a cold place, and let "set" firmly. Serve

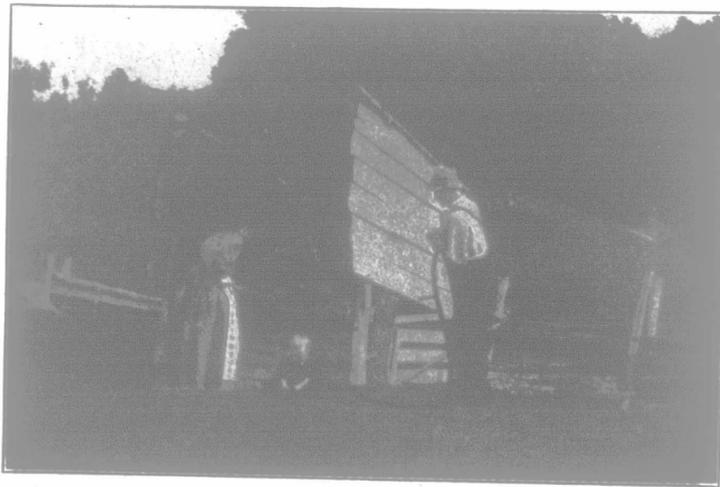
with cold meat, on lettuce leaves, with salad dressing.

Cuddle Doon.

By A. W. Kneeland.

Cuddle doon, my darling,
The night is drawing nigh;
The silver moon the hills abune
And stars sing, "Cuddle doon."

Cuddle doon, my darling,
I hear the bitter cry
From sleeping lake and sedgy brake,
Aye saying, "Cuddle doon."



Outdoor Bake Oven.

Used by some of the habitants, Quebec.

Cuddle doon, my darling,
The tasks have all been done;
On noiseless wing, the fairies sing:
So, dearie, cuddle doon.

Cuddle doon, my darling,
The sun has gone to rest
On ocean's breast, in gleaming west;
Now, darling, cuddle doon.

Cuddle doon, my darling,
With sleepy, tired eyes;
Let angels bright, in robes of white,
Watch while you cuddle doon.

Cuddle doon, my darling,
God's hand is over all;
Or great or small, He hears their call;
So, fearless, cuddle doon.

Cuddle doon, my darling,
The night will soon be o'er;
When moon and star in realms afar,
Themselves will cuddle doon.

Our Scrap Bag.

RANCID BUTTER.

To Sweeten.—To 1 lb. butter use 1 pint new milk. Cut the butter in pieces and put in the milk. Heat gently until butter is melted, then set in a cool place. When butter is firm, take it off and work as if it were a fresh churning, using plenty of ice water until all signs of milk have been worked out. Salt to taste, and leave a few hours before using.

rinse well, and hang out. No boiling is required.

BOILING OVER.

To prevent a kettle from boiling over, grease the rim with butter.

RED COLORING.

A safe red coloring for cake and candies can be made from beets. Heat them until soft in the oven, mash with an equal quantity of vinegar, press out, evaporate the liquid to half its volume, then add pure alcohol (not wood alcohol, which is poison) to make up the quantity.—Druggists' Calendar.

CORN VINEGAR.

An excellent vinegar can be made from corn. Put a pint of shelled corn (green) and a pint of molasses in a gallon jar, fill with water, tie a cloth over, and set in the sun. In three weeks the vinegar should be made. You may use peach or apple parings instead of corn, half-filling the jar with them.

MILDEW AND FRUIT STAINS.

To remove mildew, peach and plum stains, use chloride of lime solution made as follows: Dissolve 2 table-spoons chloride of lime very thoroughly in 1 pint hot water. Strain, then add 1 gallon water. Soak the stains until they disappear, then boil the goods.

COCOA STAINS.

Sprinkle spots with borax and soak in cold water, then wash out (without soap) and pour on boiling water.

DEATH TO FLIES.

Two teaspoons formaldehyde in a pint of water. Pour into saucers and set about out of the reach of children.

SUBSTITUTE FOR ICE.

Have a box three feet square filled four or five inches deep with coarse salt. Keep the salt damp, and put butter, etc., in the box. Keep covered. This will be all the better if the box is sunk in the ground.

Remitting Money.

Dear Dame Durden,—I am wanting to know if you could tell me the best way to send money from Canada to England?

MRS. H. S.

Money can be sent quite safely to England, or to any country in the world, by bank money order, or by express order.

Cereal Breakfast Foods.

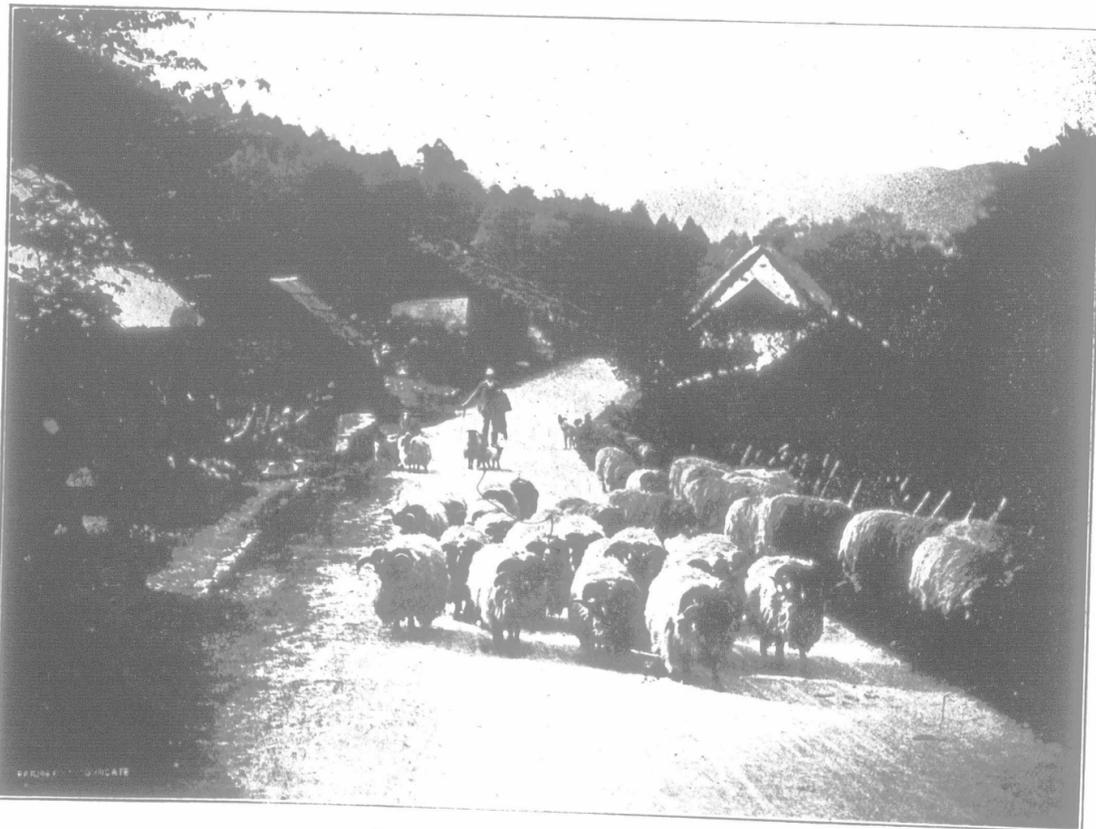
From Farmers' Bulletin, No. 249, U. S. Department of Agriculture.

The grains ordinarily used for breakfast foods are corn, oats, wheat, and occasionally rice, wild rice, and barley. Besides these are the prepared cereal breakfast foods for which, often, astonishing claims, not always substantiated, are made.

By a comparative table, we find that steam-cooked oatmeal contains 12.5 per cent. of digestible protein and 64.5 digestible carbohydrates, also 6.7 of fat; cooked rolled wheat, 8.5 per cent. protein, 1.6 fat, and 70.7 carbohydrates, shredded wheat, 7.7 protein, 1.3 fat, 71.1 carbohydrates; pearly barley, 6.6 protein, 1.0 fat, 73.0 carbohydrates; and cornmeal (unbolted) 6.2 protein, 4.2 fat, 73.2 carbohydrates. As protein is indispensable for its muscle-producing capacity, fat as a heating and energy-producing agent, and the carbohydrates as energy-producers—also as flesh builders, it will be seen that these are all good foods.

Comparing again, according to what is called "fuel value" per pound, we find cooked rolled oats with a value of 1,759 calories; flaked oats, to be eaten raw, 1,742; rolled wheat, 1,541; flaked wheat ready to eat, 1,526; shredded wheat, 1,521; farina, 1,609; pearly barley, 1,514; corn meal unbolted, 1,728; bolted, 1,662; rice, 1,546; wild rice, parched, 1,565. It may be interesting to add that the fuel value per pound of some other foods is as follows: Entire wheat bread, 1,079 calories; Graham bread, 1,081 calories; white bread, 1,203; crackers, 1,905; macaroni, 1,669; dried beans, 1,434; dried peas, 1,487; potatoes, 369; beefsteak, 950.

If any of these foods are compared with meats, it will be seen that they contain considerably less digestible protein and fat than the flesh foods, but furnish large



Scene Near Strathyre, Scotland.

proportions of digestible carbohydrates, which are practically lacking in meat and meat products. The high fat content of most meats would, however, furnish more than enough energy to offset that of the carbohydrates in the cereals, so that as they appear on the table meats supply, on an average, pound for pound, more digestible protein, and have a higher energy value, than the cereal breakfast foods. The latter are, however, an excellent source of digestible carbohydrates, and furnish at the same time considerable amounts of digestible protein, but they do not furnish the same amounts or proportions of nutrients as flesh foods. Beefsteak, it may be here noted, contains 19.9 per cent. digestible protein and 12.9 per cent. digestible fat.

Both flesh foods and cereals are, therefore, necessary in the day's food, the use of good cream or rich milk and sugar, of course, increasing the food value of the breakfast cereals.

In regard to the "predigested" breakfast food, the authors of the bulletin question whether, for people with good digestive organs, it is advisable to have food predigested. "If the digestive organs are out of order, it may be well to save them work, but troubles of digestion are often very complicated affairs, and the average person rarely has the knowledge needed to prescribe for himself. In general, those who are well should do their own work of digestion, and those who are ill should consult a competent physician."

The time required for the cooking of cereals varies according to the grain used. Rice, for instance, can be thoroughly cooked in a comparatively short time. Oatmeal, on the other hand, requires long, slow cooking, four hours or longer—better longer—in order that it may be as digestible, and therefore as nourishing as possible.

Taking the amount of nutrients furnished by the different cereals into consideration, the real cheapness of the various foods runs in the following order: Oats, corn, wheat, barley, rice. The ready-to-eat preparations of any of the grains have about the same proportion of digestible nutrients as the grains from which they are made, but they are, in general, more expensive.

Hygiene in the Home.

We do not often talk about dairy matters in this department, but possibly our readers may be interested in the following, clipped from a copy of Winnipeg Town Topics, which shows the importance which is now placed upon cleanliness in regard to food supplies, and upon complete sterilization of utensils as a preventive of pernicious bacteria action. The extract describes a well-known Hygienic Dairy of Winnipeg:

"As I passed up and down through this palace of glistening white and silver, I was reminded of a saying of one of our dairy commissioners, made years ago in the city hall. Someone had made use of the trite phrase, "Cleanliness is next to Godliness," when the commissioner jumped to his feet and exclaimed, "Next to Godliness; indeed, I tell you in the milk business cleanliness is Godliness!"

"Everything in the building, from basement floor to top ceiling, is not only spotless now, but is designed with the special idea of always being kept spotless.

"Entering from Maryland street through a double vestibule, you look down into the milk room. The floor is of vitrified white tile, the walls of enamelled white tile, and the steam heating pipes are all painted with aluminum, every bit of machinery that is not white enamel is highly-polished nickel, and every pipe through which milk flows is nickel plated inside and out.

"On the main floor stand the bottling and capping machines, and on the west side of the room on a dais are the great milk tanks, the separator, and the clarifiers. The milk is received at a little room on this floor, is weighed, and enters the great tank through a large nickel pipe with special straining arrangements. It is separated, clarified, remixed, bringing the standard of butter-fat up to 4 per cent. (the city regulations only require 3 per cent.), and is then passed up to the Potts pasteurizer on the next floor. This is the only machine of its kind in Canada, and in it the milk is held for

nearly an hour at a comparatively low temperature. The great object in pasteurizing milk is to heat it sufficiently to kill germ life, and at the same time not to injure the composition or the flavor, and this can only be accomplished by holding for a length of time. After the milk has been sufficiently pasteurized, it is cooled down in the same tank until it is almost ice cold, when it passes back to the main or ground floor to the bottling machine. The bottles are fed to this machine from a room that is cooled with ammonia cold storage, the system in vogue throughout the building, so that when the milk is bottled the milk and the bottle are of the same temperature. The machine for putting the pasteboard caps on the bottles is one of the most interesting in the building. After the milk is bottled, it goes into the cold rooms and is held at a low temperature until it goes on the wagons for delivery.

"The south half of the rear portion of the main floor contains the room for washing bottles and the oven for baking them. Every bottle is washed individually with a revolving rubber brush, Prof. Carson believing that by this means greater cleanliness is insured, though, of course, it takes a great deal more time. From the washing vat the bottles are run on trucks into a huge oven, where they are baked at a temperature of 212 degrees for an hour. No self-respecting germ would be found in them after that."

After describing the process of butter-making on a wholesale scale, all with an equal observation of absolute cleanliness, the extract continues:

"Where does the milk come from that is bottled so carefully. It comes from farms out of Winnipeg, and before a man is allowed to deliver milk to this dairy, he must sign a contract from which I have taken the following clauses:

"The said party of the first part agrees to milk in only clean stables or places where the atmosphere is pure, that no feeding or bedding shall be done in the said place of milking within at least one hour before the time of milking, that milking shall be done in only tin pails having seams well flushed with solder, and which have been well washed and scalded immediately after each time of using; that the cows' sides and udders shall be brushed and moistened immediately before the commencement of milking; that the milker shall milk with dry hands; that the milk shall be removed from the stable immediately after it has been drawn from the cow, when it shall be strained through a fine wire strainer in addition to four ply of cheesecloth or linen which has been washed and scalded each time of using; that the milk shall be cooled immediately after straining as rapidly as possible by means of cold water or ice, to a temperature of 50 degrees Fahrenheit, or below, and that all cans shall be thoroughly scalded immediately before milk has been placed in them.

"The said party of the first part agrees that the said party of the second part, his assistant, veterinarian or physician, or both, shall have the power to enter upon the premises of the said party of the first part at any time during the said period set forth in this contract (provided the same shall be done between the hours of sunrise and sunset), for the purpose of testing or inspecting the herd, the water and food supply, the stables, utensils and place where milking is done or milk contained, or the health of those coming in contact with the said herd or milk, the same being the employees, property or holdings of the said party of the first part."

The Wounded Cupid.

(Herrick.)

Cupid, as he lay among
Roses, by a bee was stung;
Whereupon, in anger flying
To his mother, said thus, crying:
"Help! oh, help! your boy's a-dying."
"And why, my pretty lad?" said she.
Then, blubbing, replied he:
"A winged snake has bitten me."
Which country people call a bee."
At which she smiled; then, with her hairs
And kisses drying up his tears:
"Alas!" said she, "my wag, if this
Such a pernicious torment is,
Come, tell me then, how great's the smart
Of those thou woundest with thy dart!"

"The Farmer's Advocate" Fashions.



7068 Corset Cover for Misses and Small Women, 14, 16 and 18 years.

7080 Square Yoke Night-Gown for Misses and Small Women, 14, 16 and 18 years.



7079 Child's Petticoat, 2, 4 and 6 years.

7066 Girl's Closed Drawers, 6 to 12 years.

Please order by number, giving age, and allowing at least ten days to receive pattern. Price, ten cents per pattern. Address, Fashion Dept., "Farmer's Advocate," London, Ont.

Commons Versus Lords.

What is popularly known as the Veto Bill passed the British House of Lords by a vote of 131 to 114 on August 10th. This terminates a constitutional struggle between the Lords and the Commons that began two years ago, when the former House rejected the Lloyd-George Budget, which widened and made more equitable the British system of taxation, in order to provide funds for national expenditures, including old-age pensions and other social reforms. Other measures, such as the Education and Licensing Bills, sent up by the present administration, under Premier Asquith, had also been thrown out by the Lords. The Government evidently had the people with them, as they were sustained at two general elections. Theoretically, the Lords had no power over money bills, but were assuming it, and the new Parliamentary Bill practically limits altogether the prerogative of the hereditary chamber to a two years' suspensory veto, and vastly increases the prerogatives of the House of Commons. The reform was resisted in every conceivable way, but the knowledge that the Premier had assurances from the King that enough new peers would be created to guarantee passage of the legislation finally brought the Lords to the point of surrender. The historic Reform Bill of 1832 was carried through in a similar way. Lord Roseberry, the Archbishop of Canterbury, several leading Bishops and Unionists voted with the Government. Another measure of importance which marks a fresh departure in conservative Britain is the resolution of Chancellor Lloyd-George to pay the members of the House of Commons \$2,000 per year for their services, which heretofore were gratuitous.

A WINNER.

Young Lady (coming in with partner from room where progressive whist is being played)—"Oh, mummy, I've captured the 'booby.'"
Mother—"Well, my dear daughter, come and kiss me, both of you."—Scraps.

Schoolroom Humor.

The schoolboy "howler" is always popular. The following selection from a large number which were sent in for a prize competition arranged by the "University Correspondent" are excellent examples of the mistakes which pupils perpetrate:

Women's suffrage is the state of suffering to which they were born.
The earth is an obsolete spheroid.

Lord Raleigh was the first man to see the Invisible Armada.

Shakespeare founded "As You Like It" on a book previously written by Sir Oliver Lodge.

Tennyson write "In Memorandum." King Edward IV. had no claim by geological right to the English throne.

George Eliot left a wife and children to mourn his geni.
The capital of Russia is St. Petersburg on the Duma.

The Test Act of 1673 was passed to keep Roman Catholics out of public houses.

Louis XVI. was gelatined during the French Revolution.

The Rhine is boarded by wooden mountains.

An angle is a triangle with only two sides.

Gender shows whether a man is masculine, feminine or neuter.

Algebraical symbols are used when you don't know what you are talking about. James I. died from argue.

Geometry teaches us how to bisex angels.

Parallel lines are the same distance all the way, and do not meet unless you bend them.

The whale is an amphibious animal, because it lives on land and dies in the water.

A parallelogram is a figure made of four parallel straight lines.

Horse power is the distance one horse can carry a pound of water in an hour.

The magnesium salt in the sea creates the effervescence when the tide comes in.

If the air contains more than 100 per cent. of carbolic acid it is very injurious to health.

Gravitation is that which if there were none we should all fly away.

The press-to-day is the mouth organ of the people.

A vacuum is a large empty space where the Pope lives.

Martin Harvey invented the circulation of the blood.

A deacon is the lowest kind of Christian.

The isles of Greece were always quarrelling as to which was the birthplace of Homer; Chaos has the most right to claim him.

At the annual Christmas examination at Elm House School, Surbiton, one of the questions set was: Should women have votes for Parliament? Give your reasons for and against.

One boy replied: No, because if they did they would want to get into Parliament, and then they would pass a lot of silly laws, such as that a man was not to smoke before his wife, or that wives were to have Wednesdays and Thursdays off, and then the men would have to stay at home and mind the children.

A logical answer to the question, Why does a kettle sing? was furnished by a boy who wrote: Because if it did not you could not tell when the kettle was boiling.

Asked to explain the initials C.O.D., the replies received included "Collector of debts," and "cod-liver oil drink."

Another enterprising youth described a sleeping partner as "a man who goes to sleep when playing bridge."

Asked how he would mend a puncture in a bicycle tire, a boy's answer was to the point: I would get a box of stuff that you do it with, and stick it on.

THE FIRST GARDEN.

"And how are the tomatoes coming on?" asked Mr. Younghusband of his little wife.

"Well, dear," began the lady, nervously, "I'm rather afraid we shall have to buy them after all."

Mr. Younghusband frowned.

"But, my dear Maria," he expostulated, "I distinctly understood from you a couple of months or so ago that you had planted a whole row!"

"That's quite right, dear," explained Maria, "but I've just remembered that I forgot to open the tins!"



Let's make a Jelly Roll—
With FIVE ROSES flour.
Its *Strength and Fineness* hold your
batter together in the long well-greased
pan.
Bakes *evenly*.
Smooth Texture—soft, golden Crumb, spongy,
porous, yielding.
No holes, nor lumps to *vex* you.
And when you turn it out on the damp
napkin hot and *savory*, and you spread the
under side with "jell"—
It doesn't get *soggy* nor *crumbly*.
Roll it gently, carefully.
Not a *crack*—not a *break*.
Perfect Smoothness—a Perfect Roll—*Yeaaa*.
Bake anything, make anything.
Use FIVE ROSES—*bread and pastry*.
Melting puff paste—flaky pie crust—*crinkly fritters*—
tooth some rolls.
FIVE ROSES for anything—*everything*.
Be flourwise.

Five Roses Flour

Not Bleached



Not Blended

LAKE OF THE WOODS MILLING COMPANY, LIMITED, MONTREAL

The Girl Who Made an Impression.

Mrs. Williams read the letter and handed it back to her daughter. "I'm very glad, Martha," she said. "If there is one place that would be delightful to visit it is the Halliday home. It has been ten years since I was there. Your father and I—" Mrs. Williams paused. She could never mention her dead husband's name without an overwhelming sense of her loss. Five years of widowhood and a struggle to care for herself and her daughter had been strenuous. Now Martha had finished business college and was looking out for a position. She was barely nineteen. Her mother had insisted that she finish a high school course before she entered the business college. Mrs. Williams, by economizing along all lines, by fine sewing, and as a paid singer in the town choir, had contrived to fit the girl for a position. Martha had been out of school but a few days. She had been a faithful student, and had prepared the meals and kept the house in order while her mother sewed.

The letter had come from Mrs. Halliday, an old school friend of Mrs. Williams', asking that Martha might spend a week with them in their city home. Mr. Halliday, the head of the house, was a manufacturer of some standing. His works, where a thousand men were employed, lay outside of the city limits; his office employed a number of stenographers and clerks. The Halliday home was elegant. There were matched horses, motors, and servants in livery. To visit such a place had long been a dream of Martha's. Now the invitation had come. She was excited. After a moment she calmed down to serious thought.

"It's no use considering it," she said. "I cannot accept. I suppose Mrs. Halliday will think it odd if I do not."

"I think you can go, Martha. I see no reason for your declining. The letters

Saving Cents And Wasting Dollars

There is no economy in buying cheap granulated sugar for preserving. You may save a few cents on the actual cost of the sugar you use—but you may also waste several dollars by spoiling the preserves.

To be genuinely economical, use

St. Lawrence Sugar

IT MAKES DELICIOUS PRESERVES.

The St. Lawrence Sugar Refining Co. Limited
MONTREAL 37

between my old friend and me have been very few during these last few years. It was very kind of her to remember me and to ask you to visit her. I see no reason why you cannot accept."

"I have no clothes which would be suitable. I would not enjoy going shabby."

"I think I can manage. Your Aunt Mellie sent me a box last week. I can work over much that is there."

Martha was satisfied. Her mother did

exquisite work with the needle. She was able to copy the design from a fashion plate and to give that touch which proclaims the artist. Martha, confident in her mother's ability to transform old garments into strictly new and up-to-date ones, wrote to Mrs. Halliday a note of acceptance and fixed the date of her arrival.

Mrs. Williams not only went through the box of last year's garments, sent to her by an old friend; she also went

through those in her own storehouse. A white net dress, which she had not worn since her husband's death, was packed away; an old-fashioned brown silk, with wide, full skirt, which had been among her wedding finery, was with it. She came down from the attic to her bedroom with her arms laden.

"It will take a great deal of work, but you'll be suitably dressed for all occasions," she said.

Martha ripped and her mother sewed late into the night. There was washing and bleaching. Before the day in which Martha was to set forth, the clothes were finished. The white net had been made over the soft silk of her commencement dress. It was dainty and quite elegant. The brown silk had been changed into a beruffled petticoat. Linen sheets, which had been part of Mrs. Williams' linen chest, became shirtwaists and linen skirts.

Gloves and shoes were the only new articles which were needed to complete a suitable outfit.

While Martha and her mother were busy with making over clothes, Mr. Halliday spent many minutes talking of them and discussing their circumstances. The very day that Martha packed her trunk, Mr. Halliday talked with John Redfern, one of his travelling salesmen.

"When you go to Hanover do you ever hear anything of a Mrs. Williams and her daughter?" The salesman had heard of them. At Mr. Halliday's request he told of their financial circumstances, at least, that which was known to the world. He told what he had heard of Mrs. Williams' struggle to keep her daughter in school.

Mr. Halliday's questions had not been asked from mere curiosity. Once or twice he had heard that Mrs. Williams was not living a life of ease and luxury. The thought came with him now that he might be able to help the widow

The Only Process That Will Permanently Remove

Superfluous Hair

This trouble, whether on the face, neck, or arms, can only be permanently removed by Electrolysis. Our method is safe, sure and practically painless; 20 years constant practice has made us experts in our work. We employ only the most capable operators and assure satisfaction in each case. Cutting, pulling, burning or using depilatories, greatly strengthen the growth of hairs. Moles, warts (on face, hands or soles of feet), scars, ruptured veins, etc., also successfully treated. If you desire full information regarding treatment for the above, or any other skin, scalp, hair or complexion trouble, write or phone for Booklet "F," and explain your case. We do manicuring, chiropody, face and scalp treatments, etc. No fee for consultation. Come during the Exposition (Aug. 26-Sept. 11) for treatment or advice.

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A Residential School for Girls. Beautiful and healthy location. General course of study from primary to 2nd year Collegiate. Special departments of Music, Art, Physical Culture and Expression, Domestic Science, Dress Design and Commercial Subjects.

School re-opens Sept. 12, 1911
MRS. A. C. COURTICE, Directress
Beech Ave. E., TORONTO

Wanted—Lincoln and Cotswold Rams

One and two years old, to weigh not less than one hundred sixty pounds. Price must be in accordance with Western conditions. Immediate delivery.

J. H. PATRICK, Ilderton, Ont.

A Bright Twentieth-Century Man for new and fascinating work, as ambitious representative for the marvellous **OXYGENOR**. Entirely new. High-class proposition. Wonderful money-maker for progressive man if found. Experience unnecessary. Such men apply:

OXYGENOR COMPANY, Chatham, Ont.

Notice to Reeve and Councillors

New Patent Snow Plough, can do the work of 50 men; Stone and Stump Puller; Silo for green corn. Come and see me at Sherbrooke, Toronto, Ottawa, and Quebec Pairs.

A. LEMIRE, Proprietor, Wotten, Que.

Registered Seed Wheat for Sale

Dawson Golden Chaff Variety, grown according to the rules of the Canadian Seed Growers' Association for the last 11 years. Scored 97.34 out of the possible 100.

C. R. GIES, Heidelberg, Ont.



PURE-BRED Pekin and Rouen Ducks; Wyandotte Rocks; Leghorns, trios, not related, \$2.40. Satisfaction guaranteed. Wade & Son, Sarnia, Ontario.

S.-C. White Leghorns Great layers and prize-winners. Eggs: \$1.00 per 15; a hatch guaranteed. Geo. D. Fletcher, Binkham Ont.

CULTIVATING TROUBLE.

Did you ever think how many of your troubles would die a natural death if you had not so much time to attend to them? Most of the worries and troubles that so darken our hours are like delicate house plants; if we grow too busy to nurse and water them for a few days, they shrivel and die.

and her daughter, some way which would not savor too strongly of charity. He really needed another billing clerk. A bright girl could learn the routine in a few days. Miss Willis, his own stenographer, was to be married soon. If Martha understands stenography, he—It was useless to think of it.

His mind was busy with thoughts of ways and means to help his wife's friend.

When he went home at the dinner hour, Martha had arrived and was sitting with Mrs. Halliday.

The silken petticoat, the brown voile travelling gown, with its cuffs and collar of real lace, did not suggest poverty. Neither host nor hostess knew of the boxes which came regularly from Aunt Mellie, and the wedding garments—rich and old-fashioned—which were stored in the attic.

Martha had no intention that they should know. She was proud, as a girl should be, for she did not wish to parade her family affairs before the public. But she erred in carrying her pride to extremes, instead of ignoring the fact that she was poor, she made a pretence that she was well-to-do. She spoke of the delightful drives which she and her mother took in such a matter-of-fact way as if livery bills were a small matter of expense. The fact of the case was that one of the wealthy women of the town had always come to Mrs. Williams in her carriage to take her to the mission house, which was at a distance, and where Mrs. Williams sang once a week for nothing, and Martha played the organ in the mission school.

She spoke also of Nancy, the little maid who had been with them. Nancy had come the year previous and remained a week while Mrs. Williams was sick from la grippe.

It is all in the way a thing is told. Martha did not make a statement which was false. In spite of that, she left a false impression in the minds of both host and hostess. A word here and a word there, and somehow everyone about felt that the Williams family was in circumstances far removed from want.

Yet the words of his agent remained with Mr. Halliday. The man had seemed so sure of his statement in regard to the Williams family and the straits to which Mrs. Williams had been placed. Opposed to the statement of the agent was Martha herself, exceedingly well dressed and prosperous looking, and who spoke of drives, concerts, fine table decorations in silver and linen, and the latest modes in goods—of nothing but the luxuries of life.

Mr. Halliday knew not what to think. He did not care to create a place in his office for a girl who had no need of it. He was direct and straightforward to the point now.

"You've finished school?" he asked one day at the dinner table.

"Yes, I just finished this year." She did not vouchsafe the information that it was a business course which she had completed. By some intangible course of reasoning, she had decided that to declare herself a graduate of a business school implied that she must work to provide for herself.

"Doing anything particular since you left school?" he asked.

"I have been busy about the house. There is always a great deal to do in a home, and I really had no time for much else. Mother was only too glad to have me at home."

"You'll be at home all winter?" asked her host. He was in an interrogative mood and intended finding out all he could on this subject.

"I expect to be with mother all winter. I am all she has, you know, and I could not be away from her long."

That settled the matter as far as Mr. Halliday was concerned. They had no need of help, and he had been using his sympathy and time in planning to give Martha a place in his office and to secure the position of soloist in the church choir for Mrs. Williams.

He gained a false impression of conditions, yet Martha had not said a word which was not literally true. She had only left her statements unfinished.

"I expect to be home unless I secure a position," would have put matters in their true light.

No more was said on the subject. Two weeks later Martha went home. Mrs. Williams, although she had said nothing

to Martha on the subject, had counted much from the visit. She had hoped that a way might be opened up through Mr. Halliday's efforts that Martha would secure a position.

She was disappointed, but said nothing of it to Martha. Several weeks later, when the town paper gave a notice of the marriage of Miss Willis, private secretary for Mr. Halliday, and of the appointment of Miss Trans, a classmate of Martha Williams, Mrs. Williams wondered and lost faith in those friends who had given to a stranger this opportunity for work.

Martha also read. It may have come to her then that she had lost the coveted thing by giving Mr. Halliday a wrong impression.—Jean K. Baird, in "Pleasant Hours."

Home Sweet Home.

When the boundary line between Georgia and Tennessee was being fixed, it crossed an Indian trail which became a place of some importance. There had sprung up between Georgia and Tennessee a spirit of rivalry, and the boundary line fixing the limits of the respective territories increased it. To try and harmonize the contending factions, the Government established a trading post there. John Howard Payne appeared upon the scene, and was accused of inciting the Indians to insubordination. He was placed under arrest as an incendiary and carried to the council house. During Payne's incarceration a band of Indians arrived, among whom was one known as Oochee or Rattling Gourd. His wife and papoose were buried in the neighborhood, and he visited their graves, where he mourned. It was seen that he was a broken-hearted man. One morning he was missed, and the patrol in searching, found him wailing in his own blood between the graves of his loved dead, he having fallen on his bayonet, which pierced his heart. He was buried by the soldiers, and after the service was over, Payne, who had been a silent witness to the pathetic scene, began singing softly to himself that hymn, or song, which since has been sung in every land. General Bishop, who had kept a close scrutiny on Payne, heard the song and called him to him. "Young man," said the stern old fighter, "where did you learn that song?" "I wrote it," said Payne. "Where did you get the tune?" "I composed it," said Payne. "Will you give me a copy?" "Certainly I will."

General Bishop surveyed him for a moment, then said: "Well, a man who can write and sing like that is no incendiary. Appearances may be against you, but I am going to write out your discharge and give you a pass through all the territory."

That was the first time "Home, Sweet Home" was ever sung in public.

The Sensitive Woman.

Everyone knows her. She has two deep lines between her eyes, and a plaintive droop to the corners of her mouth and to her eyebrows.

If anyone speaks harshly he means "her."

If anyone criticises a fault he means "her."

Whatever is said she applies to "self."

Every coat seems to fit her and she puts it on.

She wears all the boots that pinch. She carries a chip on her shoulder from morning until night, and whenever anyone comes near her she expects it to be knocked off. The result is the same—she is offended, grieved, hurt, she is so sensitive.

She is losing all the healthy enjoyment that comes her way.

She is missing half her life, because she is looking for snubs.

She says she can't help it. She can.

It is a very easy matter to let those slights, imagined or real, roll off one like water off a duck's back. It takes a little bravery for the first three or four weeks, but after that it comes natural enough.

The sensitive woman is one of the most miserable in the world. It doesn't pay to be miserable, especially when a healthy effort will bring happiness.—Selected.



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

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

FARM FOR SALE—52 acres, Lot 25, Con. 1, London Tp., opposite Springbank Park. A good investment. Robt. Sissons, Byron, Ont.

FARM FOR SALE—100 acres, Innisfil Township; good grain farm; 1 mile from Cookstown; good buildings. Further particulars apply to Box 31, Cookstown.

FIRST-CLASS FARM FOR SALE—200 acres, suitable for any kind of grain; no stumps or stones; can be divided into 2 farms. Two sets of buildings; one house brick, 8 rooms, and summer kitchen; the other frame, 8 rooms, back kitchen and woodshed; 2 flowing wells; abundance of water. Farm well fenced. One and one-quarter miles from schools, churches, post office and railway station. First-class locality. 160 acres and under bush; 40 acres bush. Apply: 70 Harward Ave., Toronto.

ONTARIO VETERAN GRANTS WANTED—Located or unlocated; state price. Box 35, Brantford.

SEED WHEAT FOR SALE—American Banner, White, Bald, grown on new land; splendid yield; tested 50.8 bushels per acre at Guelph (see last report); strong straw. Send for sample. Price, 90c. per bushel; bags, 25c. each. Prompt shipment. Yorkshire avine. W. T. Davidson & Son, Meadowvale, Ontario.

SITUATION—Wanted by a Scotchman, as herdsman or dairyman, well up to the handling of Ayrshire cattle and preparing them for exhibition; also good buttermaker. Apply by letter to Dairyman, "Farmer's Advocate," London.

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.

WIRE FENCING FOR SALE—Brand new, at 20 to 50% less than regular price. Write for price-list. The Imperial Waste & Metal Co., Queen St., Montreal.

WANTED—In September, position on stock farm by married man. Protestant; age 36; life experience in raising all kinds of pure-bred stock; skilled feeder and fitter; trustworthy and reliable. State remuneration offered. Apply: Box 97, Lucan, Ontario.

A Charmer.

When Cleon weds with Phyllis
His kinsfolk all aver,
"We see no charms in Phyllis;
Why do you marry her?"

"I know she is not pretty,
And Phyllis knows it too;
She's not extremely witty;
Her stocking is not blue.

"She hasn't any money,
Her people are just 'folks,'
But—she thinks I'm very funny,
And she giggles at my jokes.

"Let me impress upon you
The bliss that it invokes,
To have a wife that's willing
To giggle at your jokes."

For the first time in its existence of over 2,000 years, Cleopatra's needle is to be cleaned, and scaffolding has been erected around it for that purpose. For over two thousand years it withstood the burning heat and sand storms of the desert, but thirty years of Old London dampness, fog and soot, have caused the stone to "flake" and show signs of crumbling. When cleaned, it is to be coated with a preservative which will exclude the air and moisture, and experiments are now being made to determine the best preparation for the purpose. This celebrated obelisk was erected before the Temple of the Sun, at Heliopolis, in the year 450 B. C., and was brought to England in 1878.

MAKING GAME OF HIM.

When they'd been married but a year
She always used to call him "Dear";
But as with years the tie grew loose
She often came to call him "Goose"!
Of late, when stormy scenes prevail,
Quite frequently she makes him quail.
—C. E. B.

Subscription List will Open Monday, August 14, and will Close on or before 3 p. m. Monday, August 21

CAWTHA MULLOCK & CO. OWN AND OFFER AT

98 $\frac{1}{2}$

\$1,250,000 of 6 per cent. First Mortgage Sinking Fund Thirty-year Gold Bonds of

CANADA BREAD COMPANY, LIMITED

(Incorporated under the Laws of the Province of Ontario.)

The same to carry with them a bonus of 25 per cent. of Common Stock.

DATED August 1st, 1911.

DUE August 1st, 1941.

Principal and semi-annual interest February 1st and August 1st, payable at any branch of the Union Bank of Canada or Metropolitan Bank.

Demoninations: \$100, \$500 and \$1,000 Bonds issued in coupon form, with privilege of registration of principal.

Trustee: - - - Guardian Trust Co., Limited, Toronto

CAPITAL ISSUED AND FULLY PAID UP

6% FIRST MORTGAGE 30-YEAR SINKING FUND GOLD BONDS. \$1,250,000 7% Non-cumulative Preferred Stock, Issued and Fully Paid Up. \$1,250,000
Common Stock, Issued and Fully Paid Up. \$2,500,000

BOARD OF DIRECTORS:

CAWTHRA MULLOCK, Toronto, President; Director Imperial Bank of Canada, Director Confederation Life Association. H. C. TOMLIN, Toronto; Toronto Bakery.
MARK BREDIN, Toronto, Vice-Pres. and Gen. Manager; President Bredin Bread Co., Limited. W. J. BOYD, Winnipeg; Boyd's Bakery.
GEORGE WESTON, Toronto; Model Bakery, President George Weston, Limited. ALFRED JOHNSTON, Toronto; of W. R. Johnson & Co., Ltd., Wholesale Clothing.
E. H. LASCHINGER, Toronto, Secretary; formerly Assistant Deputy-Post-master-General of Canada.

**Bankers: Union Bank of Canada, The Metropolitan Bank,
Transfer Agents and Registrars: Guardian Trust Co., Limited.**

Auditors: Price, Waterhouse & Co., Montreal and Toronto; Oscar Hudson & Co., Toronto.

HEAD OFFICE: Toronto.

PLANTS: Montreal, Toronto and Winnipeg

PURPOSES OF COMPANY

Canada Bread Company, Limited, has acquired as going concerns the plants and businesses of the Bredin Bread Company, Limited, of Toronto; Geo. Weston (The Model Bakery), of Toronto; H. C. Tomlin (Toronto Bakery), of Toronto; Stuarts, Limited, of Montreal, and W. J. Boyd, of Winnipeg. In the case of Boyd, the real property is excluded, but a parcel of vacant land in the City of Winnipeg, about two acres in extent is substituted. The first three companies have been in operation for almost thirty years, and the last two for close to twenty years. They have all grown from small beginnings till they are now among the largest in their respective fields in Canada. The combined output of the companies at present is, approximately, 600,000 loaves of bread per week. It is intended, by extensions to the present plants and the erection or acquisition of new plants, to forthwith increase the output of the Company to one million loaves per week, with other extensions to follow in the other large cities at a later date.

POSITION OF BONDS

For full particulars, reference may be made to our prospectus, which is accompanied by a letter from Mr. Mark Bredin, the Vice-President and General Manager of the Company. We draw attention to the following points:

1. The present \$1,250,000 of 6 per cent. First Mortgage Sinking Fund Thirty-year Gold Bonds are secured by Trust Deeds to Guardian Trust Company, Limited, Toronto, constituting a first mortgage on all the property, real, personal, or mixed, now owned or hereafter acquired by the Company, as more fully described in said Trust Deeds. In the Trust Deeds it is specially stipulated that of the \$1,000,000 cash being placed in the treasury, the sum of \$500,000 shall be held by the Trustee, to be used only in the redemption of bonds or in investment in additional plants and real estate, thus increasing the fixed assets under the mortgage. A Sinking Fund of 1 per cent. is operative from August 1st, 1911.
2. The assets of the companies already taken over stand in excess of all liabilities and without any allowance for good-will, trade marks, etc., at \$841,428.70. There has also been placed in the treasury \$1,006,221.08 of cash, which, besides furnishing funds for the purchasing or construction of additional plants, will provide ample working capital.
3. The earnings of the present plants, as per certificate of Messrs. Price, Waterhouse & Co., after allowing for depreciation, amounted from April 30th, 1910, to April 30th, 1911, to \$107,016.14, to which may be added \$35,000, being interest at the rate of 3½ per cent. on \$1,000,000 cash in the treasury pending its employment on extensions. It is estimated that, with the economies to be effected, the earnings on these plants will short-

ly amount to \$180,000 a year, or nearly two and one-half times the bond interest.

4. With the extensions that it is proposed to effect forthwith, the Company, by the end of its first fiscal year, should be in a position to show earnings of \$260,000 a year, equal to three and one-half times the interest requirements on the bond issue, and with all the additional plants that will be provided with the cash now in the treasury, the earnings should steadily gain to over \$530,000 a year, or more than seven times the bond interest requirements.

5. The Company, with its plants situated in the larger cities of the different Provinces of Canada, will be in an exceptionally favorable position to benefit by the marked economies that will be possible in manufacturing and, more especially, in distribution, and all the time will be turning out a more uniform product under the most sanitary conditions.

6. The practical men who have made the different companies particularly successful will be identified with the management and direction of the new Company. Mr. Mark Bredin, who is probably one of the most successful bread manufacturers in Canada, will occupy the position of Vice-President and General Manager, while the services of the heads of four of the different companies taken over and of an efficient representative of the fifth have been assured to the Company.

SUBSCRIPTIONS

Subscriptions should be made on the form accompanying the prospectus, and are payable as follows:—

10 per cent. on par value on application, and
88½ per cent. on par value on allotment.

98½ per cent.

OR
In instalments as follows, in which case interest at the rate of 6 per cent. will be charged from the date of allotment:—
10 per cent. on par value on application.
18½ per cent. on par value on allotment.
25 per cent. on par value on 1st Sept. 1911.
25 per cent. on par value on 1st Oct. 1911.
98½ per cent.

Upon final payment by the subscriber for all the bonds allotted, the Guardian Trust Company, Limited, will deliver the bonds, together with fully paid-up shares of the Common Stock of the Company equivalent at par to 25 per cent. of the par value of bonds allotted.

Application will be made to list the bonds and common stock on the Toronto Stock Exchange.

Copy of the trust mortgage and legal opinion of A. M. Stewart, and certificates of Price, Waterhouse & Co., and Canadian-American Appraisal Co., are open to inspection at the offices of the Guardian Trust Company, Limited, Toronto.

Prospectus and application forms may be obtained from and subscriptions should be forwarded to

GUARDIAN TRUST COMPANY, LIMITED, TORONTO

Any branch of **UNION BANK OF CANADA** and **THE METROPOLITAN BANK**, or to

CAWTHRA MULLOCK & COMPANY

Members Toronto Stock Exchange.

12 King St. East, TORONTO.

QUESTIONS AND ANSWERS.
Miscellaneous.

BARN STABLES—GREEN FEED
AND GREEN MANURING.

1. Would you give me a plan for a barn stable 40 x 60 feet, so I can have my pigpen, cows, horses, roots and separator room under one roof?
 2. About how much more would a barn 40 x 60 feet cost than one 36 x 56 feet?
 3. Which is the cheapest barn in the long run to build for a 50-acre farm?
 4. Is it best to have the classes of stock all separate, or together?
 5. Is a board front better than a solid cement wall; and, if so, give me a plan for one?
 6. What could I sow early in spring for feed when pasture is done, about June 15th?
 7. Would it be possible to sow rye in the fall and plow it down the next spring? Would a favorable crop of barley or potatoes, or both, grow next year, or is there something you could suggest that is better for this purpose?
 8. Which is the cheapest, a board front stable, or one of solid cement?
 9. How much rye do you sow to the acre to plow down, and when do you sow it?
 10. Is rye in any way suitable for hay for horses?
- Ans.—1. Would suggest that you see your carpenter or contractor, and discuss the matter with him. He would, in all probability, be able to give you plans and specifications.
2. This cannot be estimated without being familiar with the plans of each. The contractor could also give you this information.
3. All things considered, the larger barn should be the most profitable.
4. It is not advisable to keep all the

stock together. The odor from hogpens is especially objectionable in a stable where horses, cattle or sheep are kept. Horses often do better in a separate stable.

5. Good satisfaction has been obtained from either method, but cement is more durable.

6. There is no better annual pasture mixture than that recommended by Prof. C. A. Zavitz, of the Ontario Agricultural College, which is made up of 51 pounds of oats, 30 pounds Early Amber sugar cane, and 7 pounds of red clover. Peas and oats make a good soiling crop.

7. The rye would not get much top by the time barley should be sown. Potatoes not requiring so early planting, the rye might be left until it would furnish a fair covering for green manuring. A better crop to use for this purpose is clover or some other legume.

8. The initial cost would be less with the board front, though the cement would make a more permanent job. On the ground of dryness, brightness and warmth, we prefer a double thickness of boards with paper between, resting upon a low cement footing.

9. About two bushels per acre. It is necessary to sow rather thick in order that a good stand may result. The time of sowing depends largely on the kind of crop you are preparing the land for. Fall rye may be sown any time, from immediately after harvest until early October, and spring rye any time during the spring season. On fields that were getting a special summer cultivation, the rye might be sown almost any time during the season, so that the crop would be sufficiently well grown to produce an abundance of green manure at the time you wish to plow this down.

10. If harvested in the milk, or soft-dough stage, and well cured, rye will make a dust-free, palatable hay, but will

not give as high a yield as some other cereals.

BUTTER AND BUTTER-FAT.

How many pounds of butter-fat, also how many pounds of butter should be made from 364 pounds at 30-per-cent. test?

J. C.

Ans.—364 pounds of 30-per-cent. cream contains 109.2 pounds of butter-fat, and should make about 127.4 pounds of butter.

WEIGHT OF HAY.

Tell how to measure the tons in a mow of hay. Is there any legal number of cubic feet of hay to the ton?

J. E. P.

Ans.—This is obviously difficult to arrive at, owing to the varying specific gravity of the commodity. A rule is to allow a cube of 7 feet, or 343 cubic feet, for heavy, well-compacted hay, or a cube of 8 feet (512 cubic feet) for lighter hay, not well pressed together. Between these limits, and even outside of them, are all shades of gradation. We are aware of no legal measurement for a ton of hay.

RAPE, RYE AND CLOVER.

I am coming to you for the first time for advice.

1. I want to put in a lot of rye this fall. Would you advise sowing rape along with it as nurse crop, and plow under next fall? (I want the rape to act as fertilizer.)

2. How many pounds should I sow per acre?

3. Would you recommend anything better than rape?

R. R.

Ontario Co.
Ans.—If you sowed rape with your rye this fall, you would probably have about one rape plant per square rod next spring. Better sow Mammoth clover, or else common red clover, the latter to be left for hay in 1913, using the aftermath to plow under.

FEEDING AND SALTING COWS.

The pasture is getting dry, so father has started feeding the cows. He gives nineteen cows about a gallon or more each of oats and bran, with a liberal sprinkling of linseed meal, all fed dry, with salt. The cows get water twice a day. My treatment is entirely different, being salt about three times a week, and fed in a meadow of nice new grass. Please tell me any effects which such feeds may have on the animal?

M. R. V.

Ans.—1. Various methods of giving cows salt are practiced by different owners. It matters very little how this salt is fed, provided the animals get a sufficient quantity and are not forced to eat more than is good for them. Three times per week, provided it is given regularly, is not a bad method. Many keep a lump of rock salt in the pasture where the animals have daily access to it, which is a good practice, though rock salt is expensive. No harm can result from feeding the salt with the grain ration, provided it is given in reasonable quantity, and when this is done one is sure that the animal gets enough salt, and gets it regularly. The cows should receive about one ounce of salt each per day, and under no circumstances should the cows go more than a week without salt.

It is sometimes difficult to get fresh green pasture at this time of year, consequently the cows, to do their best, must receive some other feed, such as soilage crops, silage, or grain ration. The shorts, bran, and linseed meal, fed in the quantity given, should prove a very good grain ration, and if silage or some green feed could be fed in conjunction with this, the ration would be improved. Of course, the amount of green feed given depends largely on the condition of the grass.



WHAT! They Need
Painting Again?
Let's Buy

Amatite
ROOFING
It Needs No Painting

AMATITE has a real mineral surface; it needs no paint to protect it. In rain and sun and snow and hail, Amatite takes care of itself. It needs no coddling; there is no maintenance cost. You lay it and leave it.

The mineral surface is durable, permanent, absolutely weatherproof, unaffected by climate, insoluble in water, not injured by smoke.

Amatite is easy to lay. No skilled labor is required. You simply unroll it on the roof, and nail it down with nails which we supply to you. Cement the laps with the adhesive cement which we also supply free packed in the center of the roll.

Amatite costs no more than the kind of roofings that require constant painting. You get twice as much weight of roofing for your money as you do with other roofings. Sample free on request. Address nearest office.

Everjet Elastic Paint

Save money by using this black paint wherever the color is no objection. Elastic, heat-proof, durable. Use it for roofings and all exposed iron and wood.

Creonoid Lice Destroyer and Cow Spray

Spray the hen house regularly with Creonoid to kill disease germs, repel insects, suppress odors and prevent the spread of contagion. Sprayed on cattle it keeps the flies away, and the cows thus protected produce more milk.

THE PATERSON MANUFACTURING CO., Limited

Montreal Toronto Winnipeg Vancouver
St. John, N. B. Halifax, N. S.

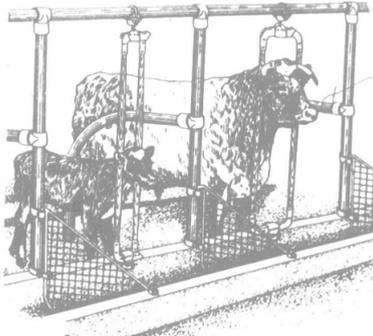
FOR SALE
EXCELLENT OLD
Stock Farm

County of Halton, to close estate; 200 acres, one-quarter mile from county town Milton, 33 miles west of Toronto, main line C. P. R.; 25 miles north of Hamilton, G. T. R. Buildings commodious, convenient, attractive, excellent condition. Stone dwelling, slate roof. Main barn 60 x 120, steel roof. Farm well fenced, in first-class state of cultivation; 30 acres bush.

WRITE FOR PARTICULARS.

G. R. COTTRELLE, 201 Temple Bldg., TORONTO.

Stable Your Cattle the SUPERIOR Way



The SUPERIOR, the only stanchion that will tie from your smallest calf to your largest export steer.

If you are building or remodeling your stable, write for our book on Stable Equipment, which clearly solves all the difficult stable problems and shows you the many advantages contained in the Superior Way. Simply fill in the coupon and mail to day. IT MEANS DOLLARS TO YOU.

The Superior Barn Equipment Co.
FERGUS, CANADA.

Dear Sirs,—Please send me your book on Stable Equipment, which is to be sent free.

Name

Post Office

Province

Are you building or remodeling? When?

How many cattle do you stable?

The Great MAJESTIC

Malleable and Charcoal Iron RANGE

Why It Should Be In Your Kitchen

Before deciding upon a range, the wise woman will examine closely into the superior points of merit of the **Great Majestic**—the range with a reputation, built on honor—of the best materials. Read some of them:

Outwears Three Ordinary Ranges
It is the only range made entirely of malleable iron and charcoal iron. Charcoal iron won't rust like steel—malleable iron can't break, and while the first cost of a **Great Majestic** may be more than others, it outwears 3 ordinary ranges.

Perfect Baker—Fuel Saver
The **Majestic** is put together with rivets (not bolts and stove putty) making it absolutely air tight, like an engine boiler. The joints and seams will remain air tight forever as neither expansion, nor contraction can affect or open them.

The oven is lined with guaranteed pure asbestos board, 1/4 inch thick, covered

with an iron grate—put there to stay—you can see it. No heat escapes, or cold air gets into the oven, thus with but half the fuel used in other ranges, you get an absolutely even, dependable baking heat.

All Copper Movable Reservoir
Heated like a tea kettle through copper pocket (stamped from one piece of copper) setting against left hand lining of fire box. Boils 15 gallons of water in a few moments and, by turning lever, the frame—and reservoir—moves away from fire. This feature is patented—found only on the **Majestic**.

Other Exclusive Features
All doors drop down and form perfect and rigid shelves. No springs anywhere to get out of fix. **Malleable oven racks** slide out automatically, holding anything they contain. **Open end ash pan**—no more shoveling ashes out of ash pit. **Ventilated ash pit** prevents floor from burning. **Ash cup** catches ashes that would otherwise fall on the floor. It's the best range at any price, and should be in YOUR kitchen.

Ask Your Dealer About The Greatest Improvement Ever Put In A Range

Don't buy any range "unsight, unseen"—what ever range you buy get it from a local dealer—and it will pay you to drive many miles to closely examine the **Majestic** before investing your money in any range. The **Majestic** is for sale by the best dealers in nearly every county in 40 states. Write for our booklet, "Range Comparison." Every farmer's wife should read it before buying any other range.

Majestic Mfg. Co., Dept. 37 St. Louis



Made In Four Other Patterns

The Range With A Reputation

THE SIMPLEST CREAM SEPARATOR

Is Easiest to Wash and Lasts Longest

SHARPLES

Dairy Tubular Separators

are the only separators without disks or contraptions—the only simple separators. They have twice the skimming force of others. Skim faster. Skim twice as clean. Repeatedly pay for themselves by saving what others lose.

A Dairy Tubular recently finished work equal to 100 years service in a live to eight cow dairy. The total cost for oil and repairs was only one dollar and fifteen cents. Write for illustrated account telling all about it.

Tubulars are later than and different from all others. Modern. Built on the only known principle which overcomes the faults and parts of others. Patented. Cannot be imitated.

"Finally a Tubular," is the desire of those who have others. That is why The World's Best is so rapidly replacing others. Tubulars wear a lifetime. Guaranteed forever by the oldest separator concern on this continent. Our local representative will be glad to show you a Tubular. If you do not know him, ask us his name. Write for catalog 193.



All There Is To Dairy Tubular Bowls



THE SHARPLES SEPARATOR CO., Toronto, Ont. Winnipeg, Man.

DOUBLE THE MILK

The flow of milk is greatly increased and often doubled by adding

Farmer Brand Cotton Seed Meal

to the ration. It's a remarkable feed just what the animal system needs. Six times more valuable than corn. Costs less. Contains 55% protein and fat. Present price lowest of year—\$32.00 per ton f.o.b. Windsor, Woodstock or Toronto. Book your order now for October shipment and save \$1.00 to \$5.00 per ton. Terms C. O. D., or payment when meal reaches you.

Can you make up a carload among your neighbors? Ask for car-lot prices and booklet, "Feed Facts," free. Mail postal to-day. Ask for protection on to-day's prices.

THE BARTLETT CO., - 410 Hammond Detroit, Michigan.

QUESTIONS AND ANSWERS. Miscellaneous.

REMOVING APPLE-TREE STUMPS.

Would like to know the best way of taking out apple-tree stumps. Would boring and filling cavity with saltpetre cause them to rot? If so, how many holes should be bored in each stump, and how long would it take them to rot, or is there any other better way? J. A.

Ans.—The most effective means of clearing land of apple-tree stumps is to dig them out. Dig down below the plow depth and chop off the roots, and the stump can be pulled out of the hole with the horses. It is doubtful whether the stumps would decay very much more quickly—if as quickly—by reason of the presence of saltpetre, and it would take some time for them to decay sufficiently so as not to interfere with cultivation.

IMPERFECT CHURNING.

Will you please tell me what is wrong with my cream? When I churn, I do not get all the butter, but some of it stays in the buttermilk. When I churn the buttermilk, I will get between two and three pounds more butter. I have tried everything that I can think of, but still it will not churn. My cows are four fresh cows and I use a separator. Also, why is the butter softer with a separator than when one is not used? E. K.

Ans.—The trouble may be caused by the cream being too thin. Change the cream screw of the separator so as to give a cream testing about 30 per cent. fat. When sufficient cream is collected, add about one quart of good-flavored sour skim milk or buttermilk to insure ripening. Churn at from 58 to 60 degrees Fahrenheit. The reason the separator butter is softer than that made without it, is likely due to the thin cream, that which is allowed to rise by itself being thicker. Adjusting the cream screw should remedy this also.

SPRAINED SHOULDER — OATS AND WHEAT FOR BROOD MARES.

1. Colt sprained the point of his shoulder; he does not stride as long with that foot as he does with the right foot; he moves as if it hurt him considerably; he has been in this condition for two weeks. I have been bathing it with hot water, and rubbing a liniment on it. It has blistered a little, but does not seem to help him. I do not drive him. What would you advise me to do with him, so as to be able to drive him soon?

2. Would spring wheat and oats be harmful to mares that are with foal, and if not, state how much to feed? The mares have been with foal for two or three months. C. B.

Ans.—1. To treat sprains, first be certain that you have located the lesion. Give rest and make comfortable in a box stall. Give a slight purgative, as 6 drams aloes and 2 drams ginger, and feed lightly. Bathe the affected parts long and often with hot water, and after bathing apply an anodyne lotion, as 1 ounce laudanum and 4 drams acetate of lead to 8 ounces water until inflammation and soreness has disappeared, and then change to cold water and camphorated liniment. If lameness is persistent, a good blister consists of 2 drams each biniodide of mercury and cantharides, mixed with 2 ounces vaseline, and rubbed in daily for two days; on the third day, wash off and apply sweet oil. The hair should be clipped from the parts, and the horse so tied as not to be able to bite them. It may be necessary to repeat the blistering every month for a few times. If the liniment you are using blisters readily, you might continue its use, but the other would likely be a stronger blister.

2. We presume the grain is meant in this case. No spring wheat and oats are not harmful to in-foal mares, provided they are fed in reasonable quantities. Too large a proportion of wheat would not be advisable, but a small quantity of wheat mixed with the oats should do no harm. The proportion of wheat would be better not to exceed 1/4 to 1/2 of the total grain ration, the remainder being oats. It is not advisable to feed wheat alone. Oats are one of the best grain rations for any horse. If the mares are working, from 3 quarts to 1

gallon of grain should be fed three times a day, according to size. If idle, a smaller quantity is sufficient.

MAPLE TREE DYING.

Could you give us any information in regard to treatment for a maple tree that is showing signs of dying? The leaves are scarce on one side. Some leaves seem to have holes eaten in them, though we see no insects. The bark has many holes in it, some an inch or more across. On one tree that died we saw sometimes masses of insects moving about among each other, but have not seen them on this. M. M.

Ans.—From the information given, it is not possible to state with any degree of accuracy what is killing the tree. It is undoubtedly attacked by some species of insect, but there are so many insects which feed on the maple that without a fuller description of the work and the insect no definite answer can be given. The holes in the bark may be caused by a species of borer known as the Beautiful Maple Borer (*Plagionotus speciosus*). This is a handsome beetle, marked with black and yellow, which lays its eggs in midsummer on the trunks of maples in the wood of which the larvae had bored. The larvae can be dug out with a knife or stiff wire in spring and destroyed.

There is another beetle belonging to the Buprestid family, and known as *Dicerca divaricata*, the larvae of which bore in maple trees.

Of insects attacking the leaves, there are scores, including leaf miners and the larvae of many species of moths, among which the Tussock moth plays an important part in some localities. The Tussock moth larva can be destroyed by a poisonous spray, or the egg clusters can be collected in winter and destroyed. Would suggest that the tree be watered often if it is in a dry place, and a mulch of straw manure or some such material might help to revive it. Digging around trees sometimes is beneficial. Endeavor to ascertain the species of insects which are on the tree and destroy them by spraying or by mechanical means.

SPLINTS ON COLT—POULTRY QUERIES.

1. How can I remove splints from a three-year-old colt that is being driven every day without taking him off the roads and avoid taking off the hair, if possible?

2. I have a flock of chickens of mixed breeding. Last year I used pure-bred Rhode Island Red roosters. How many years will it be before my flock is pure-bred if I keep pure-bred cockerels of the same breed and breed only from yearling birds?

3. What causes chickens to cry on the inside of the shell in an incubator, if temperature is kept properly?

4. At what temperature should an incubator be kept? I. C. D.

Ans.—1. To treat lameness from splints requires blistering and rest. A second or third blistering is sometimes necessary, and in some cases it is necessary to have the horse fired by a veterinarian. When lameness does not exist, it is seldom considered necessary to treat. Lameness is usually present only in the inflammatory stage, and disappears as soon as the exudate becomes ossified. In many cases splints gradually disappear by absorption. Repeated blisterings hasten this. The quickest way of removing them is by an operation, which is often not successful.

2. Strictly speaking, it would be years before the birds would be essentially pure-bred, but as there are no registration requirements for poultry, they are presumed to be pure-bred when they conform to the standard of perfection of the particular breed.

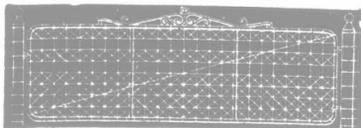
3. There are various causes for chickens dying in the shell. Lack of vitality is perhaps the main reason for this where the incubator has been properly operated. This lack of vitality in the germ is often due to improper feeding and lack of exercise in the flock.

4. Different incubators require slightly different temperatures. It is necessary to study the particular machine carefully. About 102 to 103 degrees on the eggs is a fair temperature in most machines, but during the early stages as low as 98 or 99 degrees does no harm, while later on a slightly higher temperature will give no bad results.

COWAN'S PERFECTION COCOA (MAPLE LEAF LABEL)

hits the right spot for breakfast, lunch and dinner. It is satisfying, easy to digest and delicious enough to tempt every appetite.

DO YOU USE COWAN'S?



The Gate That Lasts

The frame of the Peerless Gate is made of steel tubing, electrically welded into one solid piece. It is strong and rigid and will not sag nor get out of order.

Peerless Farm and Ornamental Gates

are built to stand. They will save you money because they never need repair. We also make lawn, farm and poultry fence that stands the test of time. Agents wanted. Write for full particulars.

THE BANWELL HOXIE WIRE FENCE CO., Ltd., Dept. B, Winnipeg, Man., Hamilton, Ont.

Singer Improved No. 4 Concrete Block Machine



8 x 8 x 16 inches Machine \$44.50

Larger outfit at proportionate prices. Write

Department F for full particulars.

VINING MANUFACTURING COMPANY NIAGARA FALLS, ONT.

O. K. Canadian Two-Horse Elevator Potato Digger



Will assure you of getting all your crop by putting all the potatoes on top so they can be quickly picked up.

Write for our 1911 catalogue and prices. CANADIAN POTATO MACHINERY CO., Ltd. 145 Stone Road, Galt, Ont.

Farm for Sale

There will be offered for sale by tender a farm of eighty-six acres, adjoining the north-western limits of the town of Preston, Waterloo Co. Farm in good state of cultivation; soil clay loam; seven acres hardwood bush; no waste land; two good houses; large bank barn, with good stabling, and all necessary outbuildings.

For marketing any kind of farm produce this locality is unexcelled.

Tenders to be in by October 1st.

For particulars apply to:

Box 105, Preston, Ont.

Highest or any tender not necessarily accepted.

WATCHES LEATHER GOODS
CATALOGUE
DIAMONDS
FREE GIFTS
RINGS

United Watch & Jewelry Co., Toronto.

"What distinguished foreigner assisted the colonies in the American Revolution?" asked an Ohio teacher.

"God," answered Tommy promptly.

GOSSIP.

Entries for the Central Canada Exhibition, Ottawa, September 8 to 16, are crowding in from new sources. A splendid showing of horses from the Canadian National Bureau will be a feature of the horse display. Alex. MacLaren, the lumber and pulp manufacturer of Buckingham, who owns some very fine types of horses, will have an opportunity to exhibit at the coming Fair, though he has usually been unable to do so. Eleven stalls have been engaged by C. E. Hamilton, to show Shorthorns, this being one of the several new exhibits coming from the United States. The Superintendent of the Fair Grounds is putting the horticultural hall in shape to receive an unusually extensive list of entries in vegetables, grain, fruit, flowers, etc. Directors are well pleased with the interest farmers have displayed in the increased prize list.

HIGH-CLASS JERSEYS AT AUCTION.

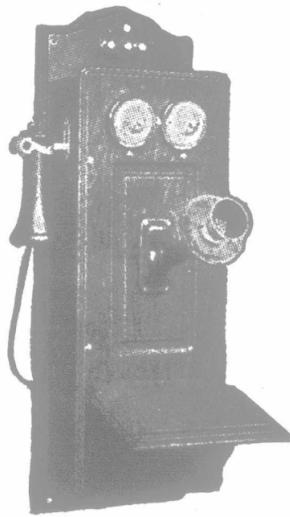
For about the first time in the history of this country one of the leading and highest-producing herds of Jersey cattle in the Province of Ontario will be sold by auction, absolutely without reserve, as the farm has been sold, and the proprietor is going out of business. We refer to the dispersion of the splendid herd of Thompson Porter, of St. Clair avenue, Toronto, comprising 75 head, which will be sold at the Union Stock-yards, West Toronto, on Thursday, September 7th, 1911, as advertised. The offering is strictly a high-class one, twenty of them being heifers rising two years of age, thirteen of them heifers rising one year, a number of heifer calves, nine bulls of serviceable age, and the two splendidly bred stock bulls, Golden Fox of Dentonia, a five-year-old, and Stockwell Lad, a two-year-old. This sale will afford an unprecedented opportunity to the breeders and fanciers of Jersey cattle in Canada to get the best blood of the breed at their own prices. The terms will be cash, or five months on bankable paper, with interest at 5 per cent. per annum. Fuller particulars will appear in following issues. For catalogue, write Thompson Porter, 1520 St. Clair avenue, Toronto.

SHORTHORNS AT THE HIGHLAND SHOW.

In the class for aged bulls, the Duke of Portland's Village Diamond, which was champion at the Royal at Norwich this year, was also first in his class and champion at the Highland Society's Show at Inverness. He is a beautiful roan, four years old, bred by W. T. Garne & Son, sired by the Duthie-bred Village Beau, out of Another Jewel, by Bapton Crown. Geo. Harrison's Prince Olaf II. was given second place.

In the two-year-old class, C. E. Gunther's roan Tongwood Bampton, by Bapton Yeoman, was first, and Proud Baron, a dark roan, bred at Saphock, and owned by Alex. Murray, was second. He was sired by Proud Emblem. Geo. Harrison was third with the white Gainford Pride 2nd, by Pride of Tees. In yearling bulls, Wm. Anderson, Saphock, was the winner, with Royal Stamp, a handsome dark roan, bred by Wm. Duthie, got by Merry Stamp, dam Rosewood XCIV., by Royal Velvet. W. & J. W. Peterkin's entry, a roan son of Diamond Star, was second. In the aged cow class, A. T. Gordon was first with Florrie, of his own breeding, by Collynie Royal Velvet, out of Fanfare VI. Stephen Mitchell was second with Royal Velvet, a six-year-old, bred by Wm. Duthie, and got by Royal Pride. In a strong class of two-year-old heifers, Lord Lovat's Royal Rose IV., a beautiful and bountiful roan, by the Duthie-bred Royal Victor, dam Royal Rose III., by Master Millicent. Geo. Campbell, Hart-hill, had the second place with a big, sappy heifer, bred by J. D. Fletcher, and sired by Strawberry Crown, dam Rose Maud, by Red Emperor. In a great class of yearlings, C. M. Cameron, Balmakyle, had a decided victory with Princess 20th, of his own breeding, by the Collynie bull, Nonpareil Gift. Sweet Crocus, owned and bred by A. G. M. Graham, Perth, was second. Her sire is Augustus and her dam Cluny Crocus, by Royal Pride. Mr. Gordon's cow, Florrie, was the female champion, and Lord Lovat's two-year-old heifer, Royal Rose IV., was reserve.

Choose Good 'Phones



You want telephones that will give continuous service at the minimum expense. You want telephones constructed of the very best materials in the very best way—Canadian Independent Telephones.

Everything we make is guaranteed, and we stand behind every guarantee to the last letter. We hold the confidence of between 400 and 500 independent Canadian telephone lines, and furnish them with their supplies. The proof of the superiority of our equipment lies in the fact that our business doubled in volume last year.

FREE TRIAL

Write to-day for particulars regarding our Free Trial Offer.

Canadian Independent Telephone Company, Limited

20 Duncan St.,

TORONTO, ONT.

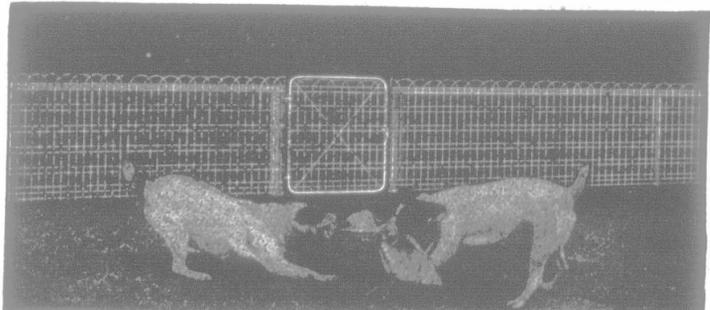
A CANADIAN SCHOOL FOR BOYS.

RIDLEY COLLEGE

St. Catharines, Ontario.

Three separate residences; new, specially built and equipped. 1. Lower School for Boys under fourteen. 2. Dean's House, for Boys of fourteen and fifteen. 3. Upper School, for Advanced Pupils. Gymnasium and Swimming Bath, just erected. Fine Hockey Rink. Athletic Fields and Playgrounds unsurpassed. Eighty acres. Mild climate. University scholarship won in 1909 and 1910. Boys prepared for Agricultural College.

REV. J. O. MILLER, M. A., D. C. L., PRINCIPAL.



A fence of this kind only 16 to 23c. per running foot. Shipped in rolls. Anyone can put it on the posts without special tools. We were the originators of this fence. Have sold hundreds of miles for enclosing parks, lawns, gardens, cemeteries, churches, station grounds, etc., etc. Supplied in any lengths desired, and painted either white or green. Also, Farm Fences and Gates, Netting, Baskets, Mats, Fence Tools, etc., etc. Ask for our 1911 catalog, the most complete fence catalog ever published.

THE PAGE WIRE FENCE CO., LTD., Walkerville, Ont.
Branches—Toronto, Cor. King and Atlantic Ave. Montreal, 606-517 Notre Dame St. W. St. John, 57 Dock St.
The largest fence and gate manufacturers in Canada. 507

Please Mention this Paper.



Regal
Ornamental Wire Fence

**8 C PER
8 FOOT**
RUNNING

We pay the freight on this extra heavy galvanized, guaranteed fence to any part of Canada. **FREIGHT PREPAID**

FROM LOOM TO LAWN Regal fencing is woven on our own looms. We are one of the largest buyers on the Canadian fence wire market, our buying price is 20 per cent. lower than that of any other manufacturer. We employ no agents per jobbers, but sell direct to the consumer, saving you the dealer's commission. Cost of raw material plus the cost of labor plus our one small profit equals our inside price of 8 cents per foot and up.

EXTRA REGAL FEATURES The Regal Oval Top Ornamental Wire Fence marks a new epoch in the Canadian fence industry. Never before has any firm made a fence as good as we make the Regal and sold it at the sacrifice prices we ask. The Regal is beautiful, artistic and durable; it will protect and increase the value of your property; it will enhance the attractiveness of the grounds of any mansion, cottage, farm-house, church, school, public building or park; it won't rust, corrode, sag nor require propping. No matter where you live, it will cost you from 25 to 65 per cent. less than the fence sold through your local dealer. It embodies the following: Uprights, No. 9 wires that are three inches apart and crimped from end to end; line wires, each embrace two No. 12 wires twisted alternately between each stay; special feature, both upright and line wires are doubled at the top. Made in any length desired.

ASTONISHING LOW PRICES By the introduction of new methods, up-to-date machinery and the employment of skilled wire experts, we have cut the cost of manufacture lower than that of any other fence factory. This economy added to our low buying cost enables us to quote the very best inside prices and at the same time offer a much superior fence than you can buy elsewhere for double the money. Prices:

36 inches high—8 cents per running foot
42 " " "—9 " " " " "
48 " " "—10 " " " " "

Notice—These prices are for Old Ontario only. For New Ontario, Maritime Provinces and Quebec, add 1 cent per foot. For Manitoba and Saskatchewan, add 3 cents per foot. For Alberta and British Columbia, add 4 cents per foot. This increase over Old Ontario prices is due to the additional freight rates which we pay.
3 foot Walk Gate \$2.75; 10 foot Drive Gate \$5.00

PROTECTION GUARANTEED We guarantee every foot of Regal fence, including its galvanization for 12 years. We challenge comparison. Simply figure out the price of the quantity of Regal fence you require and fill out the order blank below. Upon receipt, we will ship your order, freight prepaid. If your purchase is not entirely satisfactory, return wire at our expense, and we will refund your money in full. The satisfied customer is our best advertisement and business asset.
"Independent; not connected with any Trust."

ORDER BLANK Pt

Regal Fence & Gate Co.
Sarnia, Canada.
Gentlemen:—
I enclose herewith purchase money to the amount of _____ dollars _____ cents (state whether currency, P. O. order, express order or draft) for which you are to ship to me (freight prepaid) _____ feet of Regal Ornamental Wire Fence _____ inches high. If it is not satisfactory I am to return the fence to, and at the expense of, the Regal Fence & Gate Co., and get my entire purchase money back according to the terms of the Regal Guarantee.
Yours truly

Name _____
Shipping Address _____
Province _____

CHURCH BELLS
CHIMES AND PEALS
MEMORIAL BELLS A SPECIALTY
FULLY WARRANTED
MCSHANE BELL FOUNDRY CO.,
BALTIMORE, Md., U. S. A.
Established 1866

STAMMERERS
The methods employed at the Arnott Institute are the only logical methods for the cure of stammering. They treat the CAUSE, not merely the habit, and insure NATURAL Speech. If you have the slightest impediment in your speech don't hesitate to write us. Careful pupils everywhere. Pamphlet, particulars and references sent on request.
The Arnott Institute, - Berlin, Ont., Can

GOSSIP.

Switzerland has inaugurated a new system for the importation of Canadian cattle for slaughter. The first consignment of 200 animals arrived in that country on August 2nd, 1911, by way of France.

SPRINGBANK OXFORD DOWN SHEEP.

About four miles from Fergus Station, G. T. R. and C. P. R., is the noted stock farm, Springbank, the property of Wm. Barnett & Sons, Living Springs P. O., Ont., whose specialties in pure-bred stock breeding are Oxford Down sheep, Holstein cattle, Yorkshire swine and Brown Leghorn poultry. While all these several breeds are bred to a more or less extent, the principal attention is paid to their large and well-selected flock of Oxford Down sheep, which, despite the dry summer and poor pasturage, are in excellent condition, many of the shearings being in almost show condition. The stock ram in service the past season was Bryan 13th (imp.), bred by John Bryan, Smithfield, Eng., and sired by the noted show ram, Treadwell. This year's crop of lambs show him to be a sire of sterling worth, many of them show a remarkable growth and high-class type, with covering to the toes. All are for sale of both sexes, as well as two shearing rams and a number of shearing ewes. Orders are already being booked for flock headers, selections being made and marked as orders are received. At the head of the Holsteins is the splendidly-backed bull, Sir Faforit Posch, a son of Cornelius Posch, and out of Faforit Butter Girl, with a two-year-old seven-day butter record of 13.14 lbs., and test of 4.09 per cent., and her dam has an R. O. P. record of 17,619 lbs. milk and 821½ lbs. butter in one year. None of the females of the herd have as yet been tested, but all show beautiful udders and are heavy milkers. Later on there will be for sale a young bull sired by the stock bull and out of one of the best producing cows. The Yorkshires are up-to-date in type. For sale are a litter of both sexes, out of Monkland Peggie's Lass 7th, a daughter of Broomhouse Madrake (imp.). This is an extra nice lot of youngsters, very even and smooth. In Brown Leghorns for sale are a number of very choice pullets and a limited number of cockerels. The Messrs. Barnett enjoy a wide trade, in sheep particularly, and are the recipients of many very flattering letters from satisfied customers. The farm is connected with Bell 'phone from Fergus.

QUESTIONS AND ANSWERS.
Miscellaneous.

TO KILL WOODCHUCKS.

What will exterminate muskrats or groundhogs from a field. I have a field that they are ruining, and I would be more than thankful to know of some way of getting rid of them. C. J. T.

Ans.—Place carbon bisulphide in the holes either in a vessel of some kind which will not upset, or soak a piece of cotton rag with the material and ram it in the hole as far as possible, after which pack the entrance full of earth. Where there are two holes, one should be packed before the operation begins. About an ounce of the liquid is supposed to suffice for each hole.

TRADE TOPIC.

The Great Majestic malleable and charcoal iron range is advertised in another column. This range has a charcoal iron body, malleable iron doors and frames, which do not break, crack or rust. All joints are said to be riveted on tight so no heat can escape and no cold air enter. It is also lined with pure asbestos, which allows the oven to heat quickly. The fifteen-gallon reservoir is attached so as to touch the fire, which permits of the quick boiling of water. These ranges have been in use for upwards of 25 years, and are still giving good results. If your dealer doesn't handle them, write The Majestic Manufacturing Company, of St. Louis, Missouri, for their booklet, "The Story of Majestic Ranges."

Make Your
CORN
A Double-
Profit Crop
This Year



YOU can do this by harvesting the whole crop right—at the right time. You will then get 40 per cent more feeding value than if you harvest only the ears—because the ears represent only 60 per cent of the whole feeding value of the crop—the other 40 per cent being in the stalks, leaves, and husks.

If you have been wasting the corn stalks by leaving them in the field until dried by the wind and sun, and leached by the rain, you have been losing 40 per cent of the feeding value of your corn crop. Yet the stalks have taken no extra labor or land to produce. They are there, ready to be turned into roughage worth about \$5.00 a ton or \$15.00 an acre.

Increase the profit from your corn crop by going through the field rapidly, with an

I H C Corn Binder

Choose a Deering or McCormick—each and every one tried on thousands of farms and proved 100 per cent right. One man and a team drives right along through the field, cutting and binding the stalks into bundles and throwing them out into piles ready for shocking, all in one operation, at a great saving of time and labor.

If you harvest the stalks by hand, the profits leak out of your pocket in wages and because of inferior stover. The whole crop must be harvested promptly, rapidly, just when the ears begin to glaze, in order to keep all the protein, starch, and sugar stored in the stalks, leaves, and husks. Why waste this 40 per cent of the corn crop that is represented by the stalks? You plant 100 per cent right—you cultivate 100 per cent right—so don't let old fashioned harvesting rob you of 40 per cent of the feeding value. Get an I H C Corn Binder. Let it harvest the ears and the stalks, quickly and economically. Then put the whole crop through an—

I H C Husker and Shredder

A Deering or McCormick husker and shredder will save half the cost and time of husking, and shred the stalks, leaves, and husks so that the stock will eat all the stover.

Take the matter up with the I H C local agent who handles any of these machines and get the facts from him. If you prefer, write direct for catalogue and any special information you desire.

EASTERN CANADIAN BRANCHES—International Harvester Company of America at Hamilton, London, Montreal, Ottawa, St. John.

International Harvester Company of America
(Incorporated)
Chicago USA

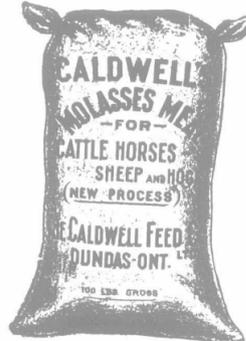


I H C Service Bureau

The Bureau is a clearing house of agricultural data. It aims to learn the best ways of doing things on the farm, and then distribute the information. Your individual experience may help others. Send your problems to the I H C Service Bureau.

Makes Them Sleek and Fat

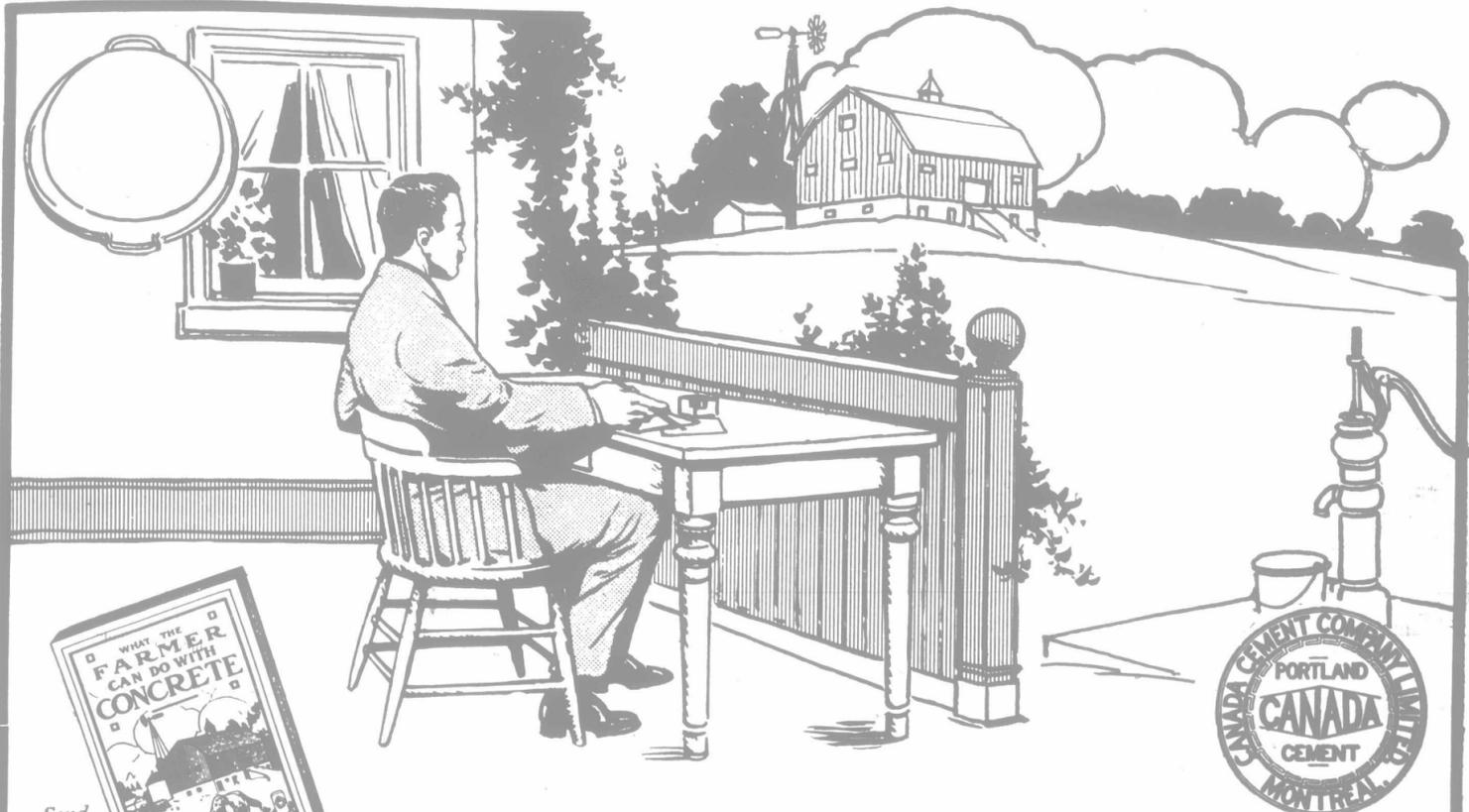
It will do your eyes good to see the smooth, soft, satiny coats of your stock a short time after you've included a few pounds of Caldwell's Molasses Meal in the daily rations.



CALDWELL'S MOLASSES MEAL

has no equal as a digestive feeding meal, as a fatterer, as an all-round health food for cattle. Contains no drugs or medicinal elements, but depends for its results on its rich feeding properties.

The CALDWELL FEED CO., Ltd.
Dundas, Ontario.



Send for this free book

\$3,600 in Cash Prizes for Farmers

Tell Us How You Did It

You may win a prize by doing so

SUPPOSE your friend Bob Wilson, on the next concession, "pulled up" at your front gate on the way back from market and asked about that silo or barn foundation you built, you would be glad to tell him, wouldn't you? And it wouldn't take you long, either, would it? And, as a matter of fact, you'd find as much pleasure telling him as he would in listening—isn't that right?

First you would take him over to view the silo or barn foundation. Then you would start to describe it—its dimensions—the kind of aggregate used—the proportions of cement used—number of men employed—number of hours' working time required—method of mixing—kind of forms used—method of reinforcing, if any—and finally, what the job cost. So that by the time you finished, neighbor Wilson would have a pretty accurate idea of how to go about building the particular piece of work which you described.

Now couldn't you do the same for us, with this difference—that you stand a good chance of getting well paid for your time?

In Prize "D" of our contest, open to the farmers of Canada, we offer \$100.00 to the farmer in each Province who will furnish us with the best and most complete description of how any particular piece of concrete work shown by photograph sent in was done. The size of the work described makes no difference. The only important thing to remember is that the work must be done in 1911 and "CANADA" Cement used.

In writing your description, don't be too particular about grammar or spelling or punctuation. Leave that to literary folk. Tell it to us as you would tell it to your neighbor. What we want are the facts, plainly and clearly told.

Sounds simple, doesn't it? And it is simple. And surely

it is well worth your while when you think of the reward in view.

Now sit right down, take your pen or pencil—fill out the attached coupon—or a post card if it's handier—and write for the circular which fully describes the conditions of this, the first contest of the kind ever held in Canada.

Every dealer who handles "CANADA" Cement will also be given a supply of these circulars—and you can get one from the dealer in your town, if that seems more convenient than writing for it.

Contest will close November 15th, 1911—all photos and descriptions must be sent in by that date, to be eligible for one of these prizes. Awards will be made as soon as possible thereafter. The decisions will be made by a disinterested committee, the following gentlemen having consented to act for us, as the jury of award: Prof. Peter Gillespie, Lecturer in Theory of Construction, University of Toronto; Prof. W. H. Day, Professor of Physics, Ontario Agricultural College, Guelph, and Ivan S. Macdonald, Editor of "Construction."

Having decided to compete for one of the prizes, your first step should be to get all the information you can on the subject of Concrete Construction on the Farm. Fortunately, most of the pointers that anyone can possibly need are contained in our wonderfully complete book, entitled "What the Farmer Can Do With Concrete." A large number of Canadian farmers have already sent for and obtained copies of this FREE book. Have you got your copy yet? If not, you'd better send for one to-day. Whether you are a contestant for one of our prizes or not, you really ought to have this book in your library, for it contains a vast amount of information and hints that are invaluable to the farmer.

Please send full particulars and book.

Name.....

Address.....

Fill in coupon and mail to us.

Canada Cement Company, Ltd., Montreal

HORSE OWNERS! USE

CAUSTIC BALSAM.
 A safe, speedy and positive cure. The safest, most BLISTER free used. Removes all branches from horses. Impossible to produce scar or blemish. Send for circulars. Special advice free.
WILLIAMS CO., Toronto, Canada

Lump Jaw
 The first remedy to cure Lump Jaw was Fleming's Lump Jaw Cure

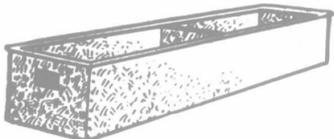
and it remains today the standard treatment, with years of success back of it, known to be a cure and guaranteed to cure. Don't experiment with substitutes or imitations. Use it, no matter how old or bad the case or what else you may have tried—your money back if Fleming's Lump Jaw Cure ever fails. Our fair plan of selling, together with exhaustive information on Lump Jaw and its treatment, is given in Fleming's Vest-Pocket Veterinary Adviser. Most complete veterinary book ever printed to be given away. Durable bound, indexed and illustrated. Write us for a free copy.
FLEMING BROS., Chemists, 75 Church St., Toronto, Ontario

DISPERSAL SALE

Blackhall Clydesdale Stud

at BLACKHALL, PAISLEY, on Thursday, 31st August, 1911

- MESSRS. ROBERT WILSON, SON & LAIRD have received instructions from the Trustees of the late Mr. David Riddell to sell, by Public Auction, viz.—
- 15 PEDIGREED STALLIONS, Four Years and over.
 - 6 PEDIGREED STALLIONS, Three Years and over.
 - 8 PEDIGREED STALLIONS, Two Years and over.
 - 15 PEDIGREED STALLIONS, One Year and over.
 - 7 GELDING COLTS.
 - 9 PEDIGREED BROOD MARES and FOALS at foot.
 - 6 PEDIGREED BROOD MARES, Yeld.
 - 15 PEDIGREED BROOD MARES, Three, Two, and One Year Old.
 - 4 FARM GELDINGS and several DRIVING PONIES.
- Further particulars later. Catalogue in course of preparation.
 91 High Street, Paisley, Scotland.



Steel Water Troughs

Made of heavy galvanized steel, our Troughs and Tanks are strong, compact and durable. So successfully have they stood the test during the past five years that we are willing to ship any size you select to your station on the understanding that you can ship them back at our expense if not first-class in every detail. Write for catalogue H. We will build any size or style to order. Ask for quotations. Agents wanted.

STEEL TANK CO., TWEED, ONTARIO

ABSORBINE

Removes Bursal Enlargements, Thickened, Swollen Tissues, Curbs, Filled Tendons, Soreness from any Bruise or Strain; Cures Spavin Lameness, Allays Pain. Does not blister, remove the hair or lay up the horse. \$2.00 a bottle. Before using bottle, delivered. Book 1 E free. ABSORBINE, J.R., liniment for mankind. For Eynovitis, Strains, Gouty or Rheumatic Deposits, Swollen, Painful Varicose Veins. Allays Pain. Will tell you more if you write. \$1 and \$2 per bottle at dealers of delivered. Manufactured only by W. F. YOUNG, P.D.F., 2581 Evans Blvd., Montreal, Ca.

NOTICE TO HORSE IMPORTERS
Gerald Powell, Commission Agent and Interpreter, No. 101 LeRouge, France, will meet importers at any port in France or Belgium, and assist them to buy Percherons, Belgians, French Coach horses, and many other last ones; for sale cheap. All information about shipping, banking and pedigrees. Many years' experience; best references; correspondence solicited.

KESWICK, No. 10,144, Record: 2.18 1-4 Chestnut stallion, about 1,200 lbs., sound and kind to drive; won gold medal at Toronto Fair 1907, and sire of such good ones as Maud Keswick, 2,034, and many other last ones; for sale cheap.
J. C. ANDERSON, Morganston, Ontario
 Colborne, G. T. R.

PLEASE MENTION THE ADVOCATE.

QUESTIONS AND ANSWERS.
 Veterinary.

OEDEMA AND OPHTHALMIA.

Ten days ago Indian pony took sore eyes. Now there is a scum over both eyes, and he is blind. He is also much swollen on withers, each side of back bone, under belly and sheath.

R. J. T.

Ans.—Give him a purgative of 5 drams aloes and 2 drams ginger; follow up with 3 drams hyposulphite of soda three times daily. Put a few drops of the following lotion into each eye after bathing well with hot water three times daily, viz.: Sulphate of zinc, 10 grains; fluid extract of belladonna, 20 drops; distilled water, 2 ounces. Keep in darkened stall, excluded from draft.

Miscellaneous.

CLOVER FOR SEED-BREEDING COLT.

1. I have five acres of second-growth red clover. I counted from forty to fifty heads in bloom, and about forty green buds on one square yard, on stems about a foot long, on August 3rd. Will it pay me to let it stand for seed. There is also a fine undergrowth of leaves. Will the green buds amount to anything after this date? Some of the heads are only blooming on one side. Are they all right?

2. When is a colt old enough to breed?
 A SUBSCRIBER.

Ans.—1. It is a difficult matter to state definitely whether or not any crop is going to be a paying one, and clover is no exception. In fact, a close idea of the yield cannot be had until the clover is threshed. From the description given, and considering the fact that clover seed is likely to be scarce and high in price, we would advise leaving the field for seed. Whether or not the green heads amount to anything depends on the season. If frost keeps off late enough, they will be all right. The heads that are blooming on one side only are likely affected with midge.

2. This depends on the size and development of the colt. Some are large enough at two years old, but it is generally advisable to leave them until three years of age.

PERENNIAL SOW THISTLE.

I am sending you a sample of a thistle which has sprung up this year among my grain. It appears in patches, and chokes out all other vegetation. Will you kindly tell me whether it is the perennial sow or annual sow thistle?
 R. D. F.

Ans.—The specimen sent in is perennial sow thistle, the worst of the sow thistles. For the benefit of readers, a few points of distinction between the three sow thistles might be helpful.

1. Perennial sow thistle is a taller, coarser-growing plant, than either of the other two thistles.

2. The perennial sow thistle has numerous underground rootstocks, while the annual species have only fibrous roots.

3. The leaves of the common annual sow thistle are deeply cut and lobed, and scarcely spiny. The leaves of the spiny annual sow thistle are almost entire, very prickly, and often decidedly waxy. The leaves of perennial sow thistle are deeply cut, but not lobed, and slightly prickly.

4. The "flowers" of the perennial are bright orange in color, and about 1 1/2 inches across, while the flowers of the annuals are pale yellow, and less than 1/2 inch in diameter.

5. The "flower-cups" (involucres) and "flower stems" (peduncles) of the perennial sow thistle are conspicuously covered with yellow glandular bristles, while those of the annual species are nearly smooth.

6. The seeds of the three species also differ as to shape and markings.

SPRING STEERS.

"Have you any steers, Mrs. Kelly?" asked Mr. C. B. ...
 "No, sir, I have not."
 "Why not, Mrs. Kelly?"
 "I have no money to buy them from," said Mrs. Kelly.
 "I have a few good ones from the rule stables," said Mr. C. B. ...
 "I will buy them from you," said Mrs. Kelly.



American and Canadian Scientists tell us the common house fly is the cause of more disease and death than any other agency.

WILSON'S FLY PADS

kill all the flies and the disease germs too.



Union Horse Exchange

UNION STOCK YARDS, TORONTO, CANADA.

The Great Wholesale and Retail Horse Commission Market.

Auction Sales of Horses, Carriages and Harness every Monday and Wednesday. Horses and Harness always on hand for private sale. The only horse exchange with railway loading chutes, both G. T. R. and C. P. R., at stable doors. Horses for Northwest trade a specialty.
J. HERBERT SMITH, Manager

Imp. Clydesdale Stallions and Fillies for Sale

Second shipment since March. Stallions from \$500 up to \$5,000. Fillies and mares in foal, from \$250 up to \$600. Don't be fooled or misled, but come here and convince yourself. Phone connection.

J. & J. SEMPLE, Milverton, Ont., and Lu Verne, Rock Co., Minn., U. S. A.

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

IMPORTED CLYDE FILLIES

Owing to the rough voyage experienced by my May importation only six were offered for sale, and were sold. The balance, consisting of two three-year-olds, one four-year-old, two two-year-olds and six yearlings have now completely recovered condition. These, with a few home-bred ones, including two yearling stallions of great promise, are now for sale at very low prices, considering their quality and breeding. Don't miss this opportunity of securing heavy-boned, highly-bred young ones cheaper by far than you can import them. Terms liberal.
DUNCAN McEACHRAN.

Bay View Imp. Clydesdales We have got them home, 11 fillies and 7 stallions, show horses bred in the purple, big in size, and quality all over. If you want something above the average come On the Toronto-Sutton Radial Line. **John A. Boag & Son, Queensville, Ont.**

Peachblow Clydesdales and Ayrshires—In Clydesdales I am offering several stallions from 1 to 6 years of age, imp. and Canadian-bred, high-class in type, quality and breeding. Ayrshires of all ages in females, big, well balanced, choice in quality and producers, and one young bull fit for service. Prices very easy.
R. T. BROWNLEE, Hemmingford, Que.

CLYDESDALES AND PERCHERONS

To all lovers of Clydesdale and Percheron horses in Canada, I wish to say that about Aug. 1st I will sail for Scotland and France for another shipment, and intend to bring a high-class lot of show horses. Wait until you see them. Look up my exhibit at Toronto Exhibition.
T. D. ELLIOTT, BOLTON, ONT.

Mount Victoria Stock Farm, Hudson Heights, P. Q.
 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.
T. B. MACAULAY, Prop., ED. WATSON, Manager.

JUST ONE 3-year-old Clydesdale Stallion
 left. A well-bred colt that will make a ton horse. Price right for quick sale.
BARBER BROS., GATINEAU PT., QUEBEC.

IMPORTED CLYDESDALE FILLIES
 My latest importation arrived June 6, 1911, ranging in ages from 1 to 4 years, and are all of good quality and large type. Have also a couple of stallions for sale at right prices.
 Long-distance phone **GEORGE G. STEWART Howick, Que.**

Shire Stallions and Mares, Shorthorn Cattle (both sexes); also Hampshire Swine. Prices reasonable.
Porter Bros., Appleby, Ont., Burlington Sta. 'Phone.

Salem Shorthorns

I am offering a number of heifers, different ages, for sale. They are bred in the purple and should interest any body in search of the right kind.
J. A. WATT, SALEM, ONT., ELORA STATION.
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.**

Springhurst Shorthorns and Clydesdales
 I am now offering a number of heifers from 10 months to 3 years of age. Anyone looking for show material should see this lot. They are strictly high-class, and bred on show lines. Also several Clydesdale fillies, imp. sires and dams, from foals 2 years of age off. **Harry Smith, Hay, Ont., Exeter Sta.**



The Howard Watch

WHEN the jeweler shows you a HOWARD Watch—note the printed price ticket affixed to the box. It states the standard price of that watch.

Responsible jewelers all over the Dominion sell HOWARD Watches—and the price of each grade is uniform everywhere.

That means that you buy on the one sound basis of value received. It means that you and every other HOWARD purchaser owns the finest practical watch in the world on the most favorable terms.

It means the fullest possible service from the jeweler—his attention

and advice as an expert in watches, not as a shrewd bargainer over the splitting of a half-dollar.

A HOWARD Watch is always worth what you pay for it.

Several months ago the demand for the higher-priced HOWARDS became so great that we had to discontinue the making of the models at \$35 and \$37.50

The lowest-priced HOWARD that we are making now comes at \$40. It is a 17-jewel (double roller) cased in Crescent or Boss gold-filled. The 23-jewel HOWARD in a 14K. solid gold case sells at \$150—there are several grades in between these prices.

You can buy HOWARD Watches in every part of Canada. Find the HOWARD jeweler in your town. Not every jeweler can sell you a HOWARD. The jeweler who can is a representative merchant—a good man to know.

Send us your name on a postal card and we will send you—free—the little HOWARD Book, full of valuable information for the watch buyer.

E. HOWARD WATCH WORKS

Dept. No. 218 Boston, Mass., U. S. A.
Canadian Wholesale Depot: Lumsden Building, Toronto

QUESTIONS AND ANSWERS. Veterinary.

MUD FEVER.

Clydesdale mare contracted mud fever last fall and is still affected. Would getting her legs wet irritate the disease?

J. M.

Ans.—Wet increases the irritation in these cases. Give her a purgative of 10 drams aloes and 3 drams ginger. Follow up with 1½ ounces Fowler's Solution of Arsenic twice daily for a week, after which give 1 dram iodide of potassium twice daily. Dress her legs three times daily with a lotion made of one ounce each of acetate of lead and sulphate of zinc to a pint of water. Do not wash the legs. If they get wet or muddy rub dry with cloths, or if you have not time for that, allow them to dry naturally and then brush.

V.

ENLARGED, PUFFY JOINTS.

The knees and hocks of my three-year-old heifer all have large, puffy swellings, making them twice their normal size. They have been this way for a year. She does not thrive well, and I cannot get her in calf. If fattened, would the flesh be fit for use?

G. B.

Ans.—These are serous abscesses, caused by bruising, probably by laying on hard floors without a sufficient quantity of bedding. The condition does not interfere with her as a breeder. These puffs seldom interfere with health, hence they are seldom treated. Treatment consists in opening each and allowing escape of the fluid, then the cavities should be flushed out twice daily until healed with a five-per-cent. solution of carbolic acid. The failure to breed is probably due to closure of the os (the entrance to the womb). When in heat, get your veterinarian to dilate this, and breed her in an hour after the operation. The swellings will not interfere with the quality of the beef if she be slaughtered.

V.

SWEENEY.

Have a young horse that got sweeneyed about the middle of May. I blistered him three times with Gombault's Caustic Balsam at intervals of about ten days each time. Have let him run in pasture and not worked him any since. It has filled in some, but seems to be doing so very slowly. Is there any better treatment I could use? Would light work hinder him from getting better?

HALTON SUBSCRIBER.

Ans.—Repeated blistering is the correct treatment for sweeney. If the blister you used—of which I know nothing—was any good, your treatment was all right. I would advise the application of another mild blister, composed of one dram of biniodide of mercury, mixed with an ounce of lard, and repeated in a month. The horse will be none the worse for doing light work. If put to the plow, he might better be worked on the nigh side to avoid walking in the furrow. He will come around all right in time.

V.

LOSS OF PIGS—EAR TROUBLE.

1. Two sows, in fair condition and healthy, farrowed July 18th. They had a great flow of milk, but became sick, would not eat, milk dried up, and most of the pigs starved to death, and those that are alive are not thriving very well.

2. Driving mare shows signs of ear ache. Frequently when driving she tosses her head, holds it to one side, and acts as if in pain for a minute or two.

R. P.

Ans.—1. The sows suffered from constipation, possibly caused by high feeding and lack of exercise. This caused loss of appetite and checked secretion of milk, consequently the litter suffered from hunger. The administration of about six ounces Epsom salts would probably have given good results.

2. Horses seldom suffer from ear ache, but are liable to it, and when it occurs nothing can be done. It is possible the trouble with your mare is in her mouth. Have her teeth dressed, and drive with a covered bit, also have her ears examined, and if anything abnormal be seen, have it corrected by a veterinarian.

V.



METALLIC SIDING FOR HOUSES

Metallic Rock Faced Stone or Brick Siding will give your home the appearance of a genuine stone or brick dwelling. It is easily and cheaply applied and absolutely fire and weather-proof.

Galvanized Corrugated Steel Siding

For Implement Sheds, Barns and Granaries

insures the safety of your grain and implements. It may be applied direct to the studs—no sheathing is required.

Write us for full information. Our suggestions will save you money.

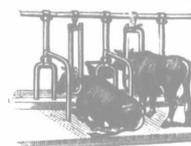
Phone Park, 800.

"Metallic saves you money all around. Why look how it will reduce your insurance rates."—The Philosopher of Metal Town.

MANUFACTURERS 1748



O.K. Canadian U-Bar Patented Steel Stanchions



Are free and easy on the cattle, but strong and durable, being made of high carbon U-Bar Steel it is impossible to break or twist them out of shape. The swing bar will not sag and guaranteed not to be opened by the cattle.

Write for our prices and circulars on Sanitary Stall and Stanchions.

Canadian Potato Machinery Co., Ltd.
145 Stone Road, GALT, ONT.

DR. J. M. STEWART'S LIGHTNING COLIC CURE

Is the result of thirty years of careful study of the causes and effects of colic. Colic kills more horses than all other diseases combined. Our remedy stimulates and relieves affected parts immediately, and by its laxative properties cleanses and removes the cause.

Absolutely no bad after effects, as is the case with ninety-five per cent. of the cures on the market.

Colic may kill your horse or cow within one hour, unless you have this remedy for instant use. Why risk the loss of a valuable animal when you can have this remedy at hand? Cost per bottle containing two doses only 75 cents. We refund your money if it fails. Write the

PALMER MEDICAL COMPANY, LIMITED
Windsor, Ontario.

Shorthorn Heifers

Have some excellent heifers all ages. Will make it worth your while if desiring anything in this line to call. Have also got some very nice bull calves.

WM. SMITH, COLUMBUS, ONTARIO

OAK LANE FARM Clydesdales, Shorthorns and Cotswolds

Heifers and cows for sale; prices right. Will sell our stock bull, "Uppermill Omega"; quiet and extra sure.

GOODFELLOW BROS., MACVILLE P. O., ONT.
Bolton, C.P.R.; Caledon East, G.T.R. Phone.

JOHN GARDHOUSE & SONS

Still have for sale a right good lot of young Shorthorns; a few No. 1 Shire stallions and fillies just imported in August; also a choice lot of ram lambs. Weston Station, G.T.R. and C.P.R. Long-distance phone.

HIGHFIELD, ONTARIO.

Shorthorns and Oxford Down Sheep

Trout Creek Wonder at head of herd. Young bulls and heifers of richest Scotch breeding. Phone connection.

Duncan Brown & Sons, Iona, Ontario.

Spruce Lodge Shorthorns and Leicester.

Offers a choice lot of one- and two-year old heifers, all sired by Imp. Joy of Morning = 32070 =; also Leicesters, rams and ewes, of all ages.

W. A. DOUGLAS, Tuscarora P. O. Brant Co.

SHORTHORNS, Clydesdales and Oxford Downs.

Seven red and light roan bulls, 6 to 12 mths., by Blossoms Joy = 73741 =; some with imp. dams. Heifers 1 and 2 yrs. Clydesdales, both sexes. Flock of Oxford Downs. All at low prices for next month. Phone connection. McFarlane & Ford, Dutton Ont.

Elm Park Aberdeen - Angus
The young bulls we have for sale are sired by: Magnificent, Imp., 2856, champion of Canada, 1910; Prince of Benton, Imp., 828, champion Toronto and Winnipeg, 1903; Lord Val. 2nd 868, champion Calgary, Halifax, Sherbrooke Dominion Exhibitions. Jas. Bowman, Elm Park, Guelph, Ontario. Phone 708.

ABERDEEN - ANGUS
Will sell both sexes; fair prices. Come and see them before buying.
WALTER HALL,
Drumbo station, Washington, Ont.

Consider what God can do, and you will never despair of success.—Thomas Wilson.

1861-IRVINE SIDE SHORTHORNS-1911
One right good yearling bull from imp. sire and dam, a good worker and sure; also a number of richly-bred young cows and heifers in calf or calves at foot. For prices and particulars, address:
Elora Sta., G. T. and C. P. R.

J. WAIT & SON, SALEM, ONT.

Robert Miller, Stouffville, Ont.
Can supply young bulls and heifers of the very choicest breeding, and of a very high class, at prices that you can afford to pay. The young bulls are by one of the greatest sons of Whitehall Sultan. They are good colors, and will make show bulls. I also have two good imported bulls at moderate prices and of choice breeding, and some cows and heifers in calf to Superb Sultan; the calves should be worth all the choice will cost. Some beautiful young imported Welsh Ponies still to spare. It will pay you to write, stating what you want. Glad to answer inquiries or show my stock at any time. Business established 74 years.

FOR SALE: 14 blocky, low-down bull calves, from 6 to 11 months old, all from imported stock. 20 yearling and two-year-old heifers of best Scotch breeding; also one imported bull, an extra sire. Farm ¼ mile from Burlington Jct. Sta.

Scotch Shorthorns

Mitchell Bros., Burlington, Ont.

ELMHURST SCOTCH SHORTHORNS AND LARGE ENGLISH BERKSHIRES

H. M. VANDERLIP, Importer and Breeder, Calnsville, Ont. Langford Sta. Brantford & Hamilton Radial in sight of farm. Bell phone

High-class Shorthorns
I have on hand young bulls and heifers of high-class show type, pure Scotch and Scotch-topped, sired by that sire of champions, Mildred's Royal. If you want a show bull or heifer, write me. GEO. GIER, GRAND VALLEY P. O. AND STATION, ALSO WALDEMAR STATION.

SPRING VALLEY SHORTHORNS
If you want a good Shorthorn bull, we have them. Canadian-bred and imported. Females all ages. Also a few good YORKSHIRES—boars and sows. Prices right.
Phone connection. Kyle Bros., Ayr, Ont.

WALDEMAR STATION.



**N. M. RUTHSTEIN—
The Steel Shoe Man**
—He Has Made a Million Feet Happy

Read Why Steel Shoes Correct All Feet Ailments—Protect Health—and Save You About \$20 a Year

Then decide whether or not you want to *try* a pair—to prove to yourself that all I claim for my Steel Shoes is true.

To Dealers

Get in line with the leading merchants of Canada and supply your customers with my Steel Shoes. Save them the bother and delay of ordering direct—as they do when dealers disappoint them. A man who knows Steel Shoes will have no other kind—he knows their extra comfort, extra health and economy features. Write for terms today to Blackford, Davies & Co., Ltd., 60-62 W. Front Street, Toronto.

Do it now and give your customers a square deal on the work shoe question.

To Western Dealers

Write for terms to George C. Lennox, 87 King Street, Winnipeg, Manitoba, sole selling agent for Manitoba, Alberta and Saskatchewan.

impossible to slip or slide or fall in them—as they are fitted with adjustable steel rivets which may be quickly replaced at any time—50 extra rivets cost only 30c and will keep your shoes in good repair for at least two years.

Foot Comfort and Economy

Go to your dealer at once. Try on a pair of Steel Shoes and see why they feel like an old carpet slipper on your feet from the time you put them on until you take them off. 750,000 farmers now wear them. Steel Shoes are the most economical shoes you can possibly buy. One pair

N. M. RUTHSTEIN, The Steel Shoe Man

Dept. 213, Toronto, Canada
G.T. BRITAIN FACTORY, Northampton, Eng. U. S. FACTORY, Racine, Wis.

HOW OFTEN we hear, "If it wasn't for my feet I'd be all right"—"My feet are simply killing me," etc. 98 out of every 100 such troubles come from wearing the wrong kind of shoes. Leather shoes get wet with moisture from the outside—and from perspiration on the inside. The socks become moist—the leather and the sock stick together—thus the friction—the rubbing—all comes on the flesh of the foot. What's the result? Blisters, bunions, burning sensation, sore, aching feet, tired ankles, actual torture.

Leather shoes always break down in the arch—causing the insteps to break also, and the result is known as Flat-foot—the most intolerable, uncomfortable, incurable disease that can happen to the laboring man's feet. If it hasn't happened to you, don't run the chance of it another week. Get my Steel Shoes now. If it has happened, my Steel Shoes will prove a double blessing to you.

For Your Health's Sake

It is impossible for you to have any of the above troubles wearing these wonderful Steel Shoes. Try a pair at your dealer's. See how Steel Shoes are made in the natural form of the foot—ample room for all the toes to lie in their proper positions. Note how the friction—the *rub* in Steel Shoes lies between the shoe and the sock—so you can never be troubled with blisters—corns—or bunions. My Steel Shoes positively cure tender, aching feet—and I can prove it.

And you can never catch cold in a Steel Shoe—you never suffer from a lame back—from a sore throat—tonsillitis—or lumbago or sciatica, rheumatism or pneumonia, or any of the other ailments that can be traced back to a common cold caught from working with wet, cold feet.

When you try on a pair of Steel Shoes you'll see why it is impossible to run a rusty nail into your foot—which oftentimes results in lockjaw—why it's impossible to get a foot cramped in a shoe—why a pair of Steel Shoes is a common cold caught from working with wet, cold feet.

of them will outlast six pairs of leather shoes. Steel Shoes are sold direct from my factory to the user, on Free examination and Try-on in your home—if your dealer can't or won't supply you.

Free Trial and Try-on Plan

I want you to try a pair of Steel Shoes. I want you to prove—in your own way, and to your own satisfaction—that everything I claim for these wonderful shoes is true—and that I do not claim half enough for them. See your dealer or, if you prefer—you can order direct from this advertisement—I give below prices and sizes. All you need to do is to give me the size of the leather shoe you wear—and I'll ship you, by return express, a pair of my Steel Shoes—guaranteed to fit you. Examine them carefully when they arrive—put them on two or three times—walk around in them—see how they feel—see how light and comfortable they are—convince yourself that they must give a tremendous amount of wear—satisfy yourself in every way—or let me know and I will send for them at my expense.

If you prefer—write for my booklet "The Sole of Steel". But act now—either go to your dealer and see a pair of Steel Shoes or order a pair direct from this advertisement—which you are perfectly safe in doing if you wish to get the shoes immediately—or send for the booklet and further details.

Four Styles—6, 9, 12 and 16 inch Tops—in all sizes— For Men and Boys

Steel Shoes 6 in. high, extra grade leather, black or tan color, \$3.50 per pair.
Steel Shoes 9 in. high, extra grade leather, black or tan color, \$5.00 per pair.
Steel Shoes 12 in. high, extra grade leather, black or tan color, \$6.00 per pair.
Steel Shoes 16 in. high, extra grade leather, black or tan color, \$7.00 per pair.

Boy's Steel Shoes—Sizes 1 to 4

6 in. high, Boy's Steel Shoes \$2.50 per pair.
9 in. high, Boy's Steel Shoes black or tan color, \$3.50 per pair.

In ordering give correct size. Boy's Steel Shoes will please the boy and save you money and worry.

Each pair of Steel Shoes is worth \$2.50 more than the regular working shoe.

For all classes of use requiring high cut shoes our 12 or 16 inch high Steel Shoes are absolutely indispensable.

Always Have a Pair of Steel Shoes Ready

—no matter how many pairs of leather or rubber boots you have. Most people keep their feet out of condition most of the time "breaking in" new leather shoes. My Steel Shoes have a hair cushion on the bottom, insuring ease and perfect comfort right from the start. They need no "breaking in." Now don't you want to try a pair? Go to your dealer, pick out the size and style of Steel Shoes you want—try them on and see if everything I've said is true or not. I leave it to you. Or, if you prefer, send me the price, and I'll ship the Steel Shoes you want by return express the day I get your order. If they fail to satisfy you immediately, you can simply notify me to send for them at my expense, and your money will be refunded at once.



FREE

Let me send you my book of surprising facts—"The Sole of Steel." Free to you, postpaid.

Shorthorns, Cotswolds, Berkshires.

In Shorthorns: 60 head on hand, including cows and heifers and calves of both sexes. In Cotswolds: A few shearing ewes and a good bunch of lambs coming on for fall trade. In Berkshires: A nice lot now ready to ship.
CHAS. E. BONNYCASTLE, Campbellford, Ont.

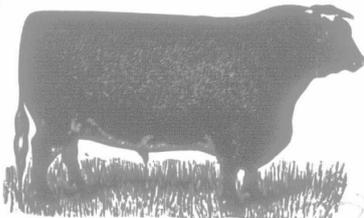
OAKLAND SHORTHORNS
Our herd, numbering about 50 head, should be inspected by any intending purchasers. Many of the cows are excellent milkers and grand breeders. Many young heifers and a few bulls for sale. Scotch Grey #72692 at head of herd, is one of the best bulls in Ontario. Prices reasonable.
JOHN ELDER & SON, HENSALL, ONT.

Maple Lodge Stock Farm

1854-1911
A splendid lot of Leicesters on hand. Shearings and lambs sired by imported Wooler, the champion ram at Toronto and London, 1910. Choice individuals and choice breeding.
A. W. SMITH, Maple Lodge, Ont.

Shorthorns
Choice selections of bulls and heifers at all times for sale at very reasonable prices. Robert Nichol & Sons, Hagersville, Ont.

Fletcher's Shorthorns and Yorkshires
Stock for sale of either kind or sex.
GEO. D. FLETCHER, Binkham P.O. Erie Station C. P. R.



ARTHUR J. HOWDEN & CO., ARE OFFERING

15 High-class Scotch Shorthorn Heifers

At moderate prices, including Cruickshank Non-pareils, Cruickshank Villages, Marr Emmas, Cruickshank Duchess of Glosters, Bridesmaids, Bruce Fames, Kinellars, Clarets, Crimson Flowers, and other equally desirable Scotch families, together with a member of the grand old milking Atha tribe, which have also been famous in the showing.
Arthur J. Howden & Co., Columbus, Ont.

Shorthorns and Clydesdales

PRESENT SPECIAL OFFERING:
Seven choice young Scotch bulls, from 9 to 15 months; 25 cows and heifers of choicest breeding. This lot includes some strong show heifers for the yearling and two-year-old classes. A pair of imported Clyde fillies, two and three years old (bred).

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

Long-distance phone. Burlington Jct. Sta., G. T. R., 1/2 mile from farm.



SHORTHORNS

Sold out of Bulls. Would be glad to have your inquiries for anything else.
CATALOGUE ON APPLICATION.
JOHN CLANCY, Manager. H. CARGILL & SON, Proprietors, Cargill, Ont.

Pleasant Valley Farm Shorthorns—Herd headed by Scottish Signet, and consisting of females of the leading Scotch families. Have for sale several good young bulls; also cows and heifers. Correspondence solicited. Inspection invited.
GEO. AMOS & SONS, MOFFAT, ONTARIO
Farm 11 miles east of Guelph, C. P. R., half mile from station.

DON'T BUY A GASOLINE ENGINE

Its Great Advantages are: 1st—Lowest Fuel Cost; pays for itself in Fuel Savings. 2nd—Delivers Steadiest Power Stream, adapting it especially for operating farm machinery. 3rd—Easy on the machine to operate. 4th—Uses Gasoline, Kerosene or Gas. 5th—Perfect Lubrication. 6th—Starts Easily and Quickly, occupying minimum space. 7th—It is the King of Portable Engines. No engine has so wide a range of use. **YOU WILL MAKE A MISTAKE IF YOU DO NOT WRITE FOR INFORMATION.** We make 1 1/2 to 5 1/2 H. P. single cylinder engines; 6 to 20 H. P. two cylinder engines; 30 to 50 H. P. four cylinder engines. All Heavy duty, slow speed engines. For surety of operation and low fuel cost our engines lead. **TEMPLE PUMP COMPANY, Manufacturers.** 400 West 15th St., Chicago, U. S. A. **Until You Investigate The Temple Make.** This is our 59th year.

GOSSIP.

In a letter just received from Dr. T. H. Hassard, of Markham, Ont., he wishes us to intimate that he is now on the water, bound for Scotland and France, where he intends making a selection of from thirty to fifty Clydesdales and Percherons. He assures us that price will not stand in the way when he sees something that suits, and with his many years' experience and well-known judgment is selecting the good ones, we shall expect to see the cream of Scotland's and France's drafters in his 1911 importation. Dr. Hassard has imported as many horses in the last few years as any man in the business in Canada, horses that have won many prizes and championships in the strongest company the world could put up, and in this lot his determination is to excel any and all previous importations, a fact which it is well for parties interested to remember, and arrange to look them over when they arrive, due notice of which will be given in these columns.

AMERICAN KERRY AND DEXTER CATTLE CLUB.

For some years a number of Americans have been importing Kerry and Dexter cattle from Ireland and England to America. These cattle have now increased in numbers sufficiently to justify the organization of the American and Dexter Cattle Club, to maintain a herd-book, and to assist in promoting the welfare of these cattle. This club was organized in July, with the following officers: President—G. M. Carnochan, New City, N. Y.; Vice-President—C. H. Berryman, Lexington, Ky.; Secretary—Treasurer—C. S. Plumb, Columbus, Ohio; Executive Committee—The three preceding, and in addition, Maurice Molloy, Port Washington, N. Y.; B. Nason Hamlin, Boston, Mass. The club will publish from time to time information concerning the breed, and this may be secured by addressing the Secretary, C. S. Plumb, Columbus, Ohio.

TRADE TOPIC.

EXCURSION TO WESTERN CANADA.

The Grand Trunk Railway System announce that on Tuesday, August 22nd, September 5th and 19th, 1911, Home-seekers' Excursions will be run from all stations in Ontario and Quebec to Western Canada, via Chicago and Duluth, or via Chicago, St. Paul and Minneapolis, at reduced round trip fares.

The well-known double-track line of the Grand Trunk from the East to Chicago appeals to the traveller, and with the superior train service that is offered by this line, including the famous "International Limited" from Montreal daily at 9.00 a. m., which is the finest and fastest train in Canada, many passengers will be attracted this way. The route via Chicago is a most interesting one, taking passengers through the principal cities and towns in Canada and in the States of Michigan and Indiana. In addition to this a choice of seven lines between Chicago and St. Paul and Minneapolis is offered.

Owing to the great number of Canadians who reside in Chicago, St. Paul, Minneapolis, Duluth and other cities en route, there is no doubt that the Grand Trunk will find many patrons who will take advantage of the opportunity thus afforded them for a brief visit at the stations with their friends.

Canadian citizens are exempt from so-called immigration examination, and there is no detention at any point.

Baggage is carried through the United States in bond without requiring any special attention on the part of the passenger. Inspection is not necessary at any of the points at the border.

Another feature that will appeal to the homeseeker is the comfortable transfer at points like Chicago, St. Paul and Duluth into freshly ventilated clean cars, avoiding the necessity of travelling a long distance in the same car.

In addition to the above routes, the sale of tickets is also authorized via Sarnia, and the Northern Navigation Company's magnificent steamers across Lake Huron and Lake Superior.

For further particulars, apply to any Agent of the Grand Trunk Railway System, or write to Mr. J. Quinlan, District Passenger Agent, Bonaventure Station, Montreal, or Mr. A. E. Duff, District Passenger Agent, Union Station, Toronto.

Was Troubled With Sour Stomach and Biliousness

Miss Bessie O'Leary, Campbellford, Ont., writes:—"I was troubled with sour stomach and biliousness for two years and could get no relief until I tried Milburn's Laxa-Liver Pills. I had only taken them a short time when I felt like a new person, and now I can recommend them to all sufferers."

There are very few people who have never suffered from a sour stomach or biliousness, but to those who are we can highly recommend our Milburn's Laxa-Liver Pills, as they are a specific for these not dangerous but very unpleasant complaints.

The price of Milburn's Laxa-Liver Pills is 25c. per vial or 5 vials for \$1.00 at all dealers or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

RICHIEU & O'NTARIO 1000 ISLANDS

Running the Rapids Montreal, Quebec and Saguenay River. Steamers "TORONTO" and "KINGSTON" in daily service, leaving Toronto at 3:00 p.m. Steamer "BELLEVILLE" leaves Toronto at 7:30 p.m. every Tuesday. Low round trip rates, including meals and berths. For rates, folders, etc., apply to local agents, or write: H. FOSTER CHAFFEE, A. G. P. A. Toronto, Ontario.

Messrs. Hickman & Scruby COURT LODGE, EGERTON, KENT, ENGLAND

Exporters of pedigree live stock or all descriptions.

FACILE PRINCEPS.

HOLSTEINS MONRO & LAWLESS

Elmdale Farms, Thorold, Ont.

Springbrook Holsteins and Tamworths A choice bull calf, sired by Brightest Canary, whose two nearest dams average over 26 lbs. butter in a week. Dam, a four-year-old, record of over 12,000 lbs. milk in one year. 25 fine young Tamworth pigs two weeks old; sire and dam imported; best quality; booking orders at \$8 for quick sale. A. C. HALLMAN, BRESLAU, ONTARIO.

HOMWOOD HOLSTEINS

Home of the champions. Headed by the great milk and butter bred bull, Grace Fayne 2nd's Sir Colantha. Only choice, thrifty bull calves for sale at present. M. L. HALEY and M. H. HALEY, SPRINGFORD, ONTARIO.

THE MAPLES HOLSTEIN HERD

Everything of milking age in the Record-of-Merit. Nothing for sale at present but a choice lot of bull calves sired by King Posch De Kol. Write for prices, description and pedigree. Walburn Rivers, Folders, Ontario

Holstein Cattle—The most profitable dairy breed. Illustrated descriptive booklets free. Holstein-Friesian Ass'n of America. F. L. HOUGHTON, Secy, Box 127, Brattleboro, Vt.

HOLSTEIN-FRIESIANS at Ridgedale. I have two young bulls fit for service, which will be priced at a snap for quick sale. Write, or come and see them. Shipping stations: Port Perry, G. T. R., and Myrtle, C. P. R., Ontario Co. Long-distance phone, R. W. WALKER, UTICA, ONT.

GLENWOOD STOCK FARM Have two yearling Holsteins and Yorkshires bulls fit for service, both of the milking strains. Will sell cheap to make room. Thos. B. Carlaw & Son, Warkworth P. O., Ont. Campbellford Station.

High Grove Jerseys No better blood in Canada. Present offering: Two choice young solid-colored bulls about 15 months old, out of heavy-producing dams. ARTHUR H. TUFTS, P. O. Box 111, Tweed, Ont.

GOSSIP.

Volume 29 of the British Shropshire Sheep-breeders' Flockbook, has been issued from the press and a copy received at this office, through the courtesy of the Secretaries, Alfred Mansell & Co., Bingley Hall, Birmingham. This volume contains 265 pages, the pedigrees of 208 stock rams, and a large number of flocks, a list of prizewinners at leading shows, and of Shropshires exported from Sept. 29th, 1909, to Sept. 29th, 1910, conditions of entry in the following volume, etc.

Notice the advertisement of Oxford and Hampshire Down sheep, by Henry Arkell & Son, of Arkell, Ont., near Guelph, who write: "We do not intend to exhibit this year, but can supply yearling and ram lambs for the show-ring. They are the best lot we have had for many years. We are also offering a nice lot of yearling and two-shear ewes, both Oxford and Hampshire, from imported stock. Although the weather has been hot and dry, the sheep have done exceedingly well. Wish every success to 'The Farmer's Advocate,' which we find a very good advertising medium."

The flock of sheep at the Arizona Experiment Station numbers 371 head, and these are grazed and fed on 35 acres. About thirty acres is seeded to alfalfa, and the remainder is planted with milo maize. Six head of horses and two milk cows are fed from the same land, in addition to the sheep. Barley, as an interculture, is regularly planted in the fall for winter pasture. Thirty-five and one-half tons of alfalfa for winter feed had been harvested from this strip by June 1st. The foregoing is an item from Hoard's Dairymen, and shows the value of alfalfa for stock feeding, and if ten sheep can be kept on one acre by this method, surely alfalfa is a paying crop. Farmers who have not tried either alfalfa growing or sheep breeding, would find either or both profitable.

The Lakeview herd of Holsteins, writes the proprietor, E. F. Osler, Bronte, Ont., has been progressing favorably during the past year. Count Hengerveld's Fayne De Kol is leaving some good stock. A dozen or so of his first heifers will freshen and be tested here this winter, and we are anxiously waiting to see results. His sons have been easy to sell, and I have only two on hand that come near the serviceable age. There is, however, a big crop of bull calves that will come on for sale this winter, ten of them out of cows that average 20.41 lbs. of butter each in seven days, the highest being a son of Rose Kattler, whose record is 24.19 lbs. This is a good calf, nicely marked, and will make a good herd-header for someone. Count Hengerveld's Fayne De Kol and a few others will be at Toronto Exhibition, but the Lakeview herd is not making a specialty of the show-ring, rather aiming at utility.

TRADE TOPIC.

SHOW OF SELECTED SEED.—L. H. Newman, Secretary of the Canadian Seed-growers' Association, has issued a pamphlet containing the different prizes offered by this association for seed grown, selected and exhibited in Ontario in 1911, the exhibit to be made at the Ontario Provincial Winter Fair at Guelph. Some ten classes are included in the prize list, and are made up of wheat exhibits, group exhibits, corn and potato exhibits, and three special prizes. New beginners are encouraged by special classes being provided for them where they do not have to come into direct competition with former winners. This gives all who wish to exhibit a chance of winning, and every member of the association should send an exhibit to this Exposition, and do his part in making the next Fair a great success. The prizes are worth competing for, and to further encourage growers, the Association agrees to refund all transportation charges over \$1 on all exhibits. The general rules governing the Seed Department of the Fair may be found in the official premium list, a copy of which may be had later. If any members have not received a pamphlet containing the prize lists, they should communicate with Mr. Newman, Department of Agriculture, Ottawa.

HIGH CLASS JERSEYS BY AUCTION



AT THE UNION STOCK YARDS, WEST TORONTO, ON.

Thursday, Sept. 7, 1911

COMMENCING AT 12.30 HIGH NOON

Mr. Thompson Porter will sell by Auction, absolutely without reserve, as the farm has been sold, his entire herd of 30 head of St. L. and Golden Lad Jerseys, consisting of 30 cows and 15 two-year-old heifers in milk, 25 heifers and calves under one year, 9 young bulls fit for service, and the two stock bulls Golden Fox and Stockwell Lad. The cows are mostly St. L. family, being rich, heavy milkers, the test for the herd being 5.9 per cent., with a number of them going over 40 lbs. of milk per day. Two are of Fern Ladter, Fontaine, being half sister to Noble of Oakland's, the Coopers \$15,000 bull, and the \$7,000 cow, Lady Viola, is her G. dam. She is a beautiful cow, very rich and heavy milker, making herself to be the richest and most profitable producer of both milk and butter, so says the report of the 120 days testing for the cheapest producing cow of all breeds at the St. Louis Exhibition when the Jerseys took 15 prizes out of a possible 16. For more particulars see catalogue. Terms of sale 5 months' credit by giving approved bankable paper. Bids by letter in order. Catalogue on application to:

Auctioneer: J. H. SMITH THOMPSON PORTER, Proprietor, 1520 St. Clair Ave., TORONTO, ONT.

Brampton Jerseys

Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand; 6 for sale; 6 now being bred. Brampton Stockwell the sire. A few good cows and some calves for sale. Production and quality.

B. H. BULL & SON, BRAMPTON, ONT.

FAIRVIEW FARMS HERD—HOME OF:

Pontiac Korndyke, the only bull living that is the sire of four 30-pound daughters, and the sire of the world's record cow for seven and thirty days. Rag Apple Korndyke, sire of eight A. R. O. daughters that, at an average age of 2 years and 2 months, have records that average 17 1/4 lbs. each, and over 4.2% fat for the eighth. Three of them made over 20 lbs. each. Sir Johanna Colantha Gladi, whose dam and sire's dam average 33.61 lbs. each or 7 days, which is higher than can be claimed for any other sire of the breed. We are offering some splendid young bulls for sale from the above sires, and out of daughters of Pontiac Korndyke and Rag Apple Korndyke.

E. H. DOLLAR, (near Prescott) HEUVELTON, NEW YORK

HOLSTEINS AND YORKSHIRES

More high-record cows in our herd than in any other in Canada, including the champion Canadian-bred three-year-old, and the champion two-year-old of the world for yearly production. The sire of these champions is our main stock bull. We have a large number of heifers bred to him that will be sold right to make room for our natural increase. Also bull calves for sale. We are booking orders for spring pigs, also sows safe in pig. We invite inspection of our herd. Trains met at Hamilton when advised. Long-distance Bell phone 2471 Hamilton.

D. C. FLATT & SON, MILLGROVE, ONT. R. F. D. NO. 2

LAKEVIEW HOLSTEINS

Can offer service bulls and bull calves sired by Count Hengerveld Fayne De Kol, and out of dam with official records from 20 to 24 pounds butter in 7 days. Write for catalogue giving full particulars, or, better still, come and see them. Telephone.

E. F. OSLER, BRONTE, ONTARIO

CENTRE AND HILLVIEW HOLSTEINS

Offers two June bulls, nicely marked, out of Record of Merit dams and Bonheur Statesman, whose daughters are testing high price of these; \$70.00 each f.o.b. Woodstock. Also younger ones. Long-Distance Telephone. P. D. Ede, Oxford Centre P.O., Woodstock Stn.

Woodbine Holsteins

Herd headed by King Segis Pontiac Lad, whose sire is the only bull that has sired five four-year-olds that average 30 lbs. each. Sire's sire is bull that has sired two 30-lb. three-year-olds. His two great grand sires are the only bulls in the world that have sired two 37-lb. cows. Bulls and bull calves for sale.

A. KENNEDY, Ayr, Ontario.

MAPLE HILL HOLSTEIN-FRIESIANS

Two yearling bulls fit for service; also choice bull calves. Three-year-old heifer due in July. Write for prices.

G. W. CLEMONS, St George, Ont.

SPRINGBANK AYRSHIRES

The world's leading herd of Record-of-Performance Ayrshires. Con-uders and big teats a specialty. A few bull calves, true to color and type, from R. O. P. dams, for sale at reasonable prices. A. S. TURNER & SON, Ryckman's Corners, Ont. Three miles south of Hamilton. Visitors welcome. Trains met by appointment.

STONEHOUSE AYRSHIRES

The champion Canadian herd for 1910 at the leading shows. 32 head imp., 56 herd to select from. R.O.P. official records, the best and richest bred types of the breed. Anything for sale. Young bulls, females all ages. HECTOR GORDON, HOWICK, QUE.

CHERRYBANK AYRSHIRES!

Imported and Canadian bred, with R. O. P. official records, headed by the renowned champion, Imp. Netherhall Milkman. Richly-bred females and young bulls for sale. P.D. McArthur, North Georgetown, Que.

CRAIGALEA AYRSHIRES!

Our record: Every cow and heifer entered in Record-of-Performance, and retained in herd until test was completed, has qualified. Heifers and young bulls for sale of show-ring form. H. C. HAMILL, BOX GROVE P. O., ONT. Markham, G. T. R.; Locust Hill, C.P.R. Bell phone connection from Markham.

Just Landed 45 two-year-old Ayrshire heifers,

all bred to freshen in September and October. They are a beautiful, strong lot, with plenty of teat. Also 12 bulls fit for service, and a few yearling heifers. R. R. NESS, HOWICK, QUEBEC.

Ayrshires

Bull calves, from 4 months to 9 months, from imported sire and Record of Performance dams. Records 50 to 63 pounds per day. N. Dymont, R. R. No. 2, Hamilton, Ont.

HILLCREST AYRSHIRES.—Bred for production and large teats.

Record of Performance work a specialty. Fifty head to select from. Prices right. FRANK HARRIS, Mount Elgin, Ont.

Ayrshires & Yorkshires

Special offerings at low prices from the Menie district: Bulls fit for service, 1911 calves. Dams of all are: some with good official records; others, if their owners entered them, would make good records. Many females, any desired age. A few young Yorkshires. ALEX. HUME & CO., MENIE, ONT.

HILLVIEW AYRSHIRES.—Imp.

Hobsland Hero at head of herd. Imp. and Canadian - bred females. Young bulls true to type and bred in the purple for sale, also a few heifers. R. M. Howden, St. Louis Station, Que.

Ayrshires bred for quality and quantity.

All young stock, have from one to three crosses of R. O. P. blood. Two young bulls of 1910, fit for light service; also a nice lot of 1911 calves, males only for sale. Write or phone. JAMES BEGG, R. R. No. 1, St. Thomas.

Stockwood Ayrshires

Imported and Canadian-bred. High producers and high testers. Females of all ages for sale. Imp. sires and out of imp. dams. Right good ones, and bred from winners. D. M. Watt, St. Louis Station, Quebec

BOG Spavin

Cure the lameness and remove the bunch without scarring the horse—have the part looking just as it did before the blemish came.

Fleming's Spavin Cure (Liquid) is a special remedy for soft and semi-solid blemishes—Bog Spavin, Thoroughpin, Splint, Curb, Capped Hock, etc. It is neither a liniment nor a simple blister, but a remedy unlike any other—doesn't irritate and can't be imitated. Easy to use, only a little required, and your money back if it ever fails.

Fleming's Vest-Pocket Veterinary Adviser describes and illustrates all kinds of blemishes and gives you the information you ought to have before ordering or buying any kind of a remedy. Mailed free if you write.

FLEMING BROS., Chemists
75 Church St., Toronto, Ontario

Chester Whites

Have a fine lot of young boar and sow pigs. **DAM** Beanie, sired by Ohio Chief. **SIRE** Longfellow, a well-known prizewinner. On both sire and dam side these pigs stand for **QUALITY** and **PREPOTENCY**. Price on application.

Glen Athol Fruit Ranch
DAVID SMITH, Mgr.,
St. Catharines, Ontario.

LARGE WHITE YORKSHIRES



Have a choice lot of sows in pig. Boars ready for service, and young pigs of both sexes supplied not akin, at reasonable prices. All breeding stock imported, or from imported stock, from the best British herds. Write or call on:

H. J. Davis, Woodstock, Ont.
C. P. R. and G. T. R. Long-distance phone.

FAIRVIEW BERKSHIRES

Ontario's banner herd. Prizewinners galore. For sale are: Young sows bred and others ready to breed, and younger ones. A number of young boars coming on. **JOHN S. COWAN, Donegal, Ont.**

There is a good story about Coleridge and a Somerset blacksmith. The poet's horse had lost a shoe, and as it was being replaced he asked the time.

"I'll tell 'ee presently, sir," said the man. Then he lifted a hind foot of the horse, and, looking across it attentively, said, "Half-past eleven."

"How do you know?" asked Coleridge.

"Do 'ee think I have shod horses all my life and don't know by sign what time it is?"

The poet went away puzzled, but returned in the evening and offered the blacksmith a shilling to show him how he could tell the time by a horse's hoof.

"Just you get off your horse, sir. Now, do 'ee stoop down and look through the hole in yon pollard ash, and you'll see the church clock."

One would like to know in what flights of speculation Coleridge had indulged before his return.

Clean the kitchen Oilcloth with "SNAP". It cuts out the grease and makes dirt step lively.



Get the genuine "S-N-A-P"—not a substitute. At all dealers—in 15c. cans.

QUESTIONS AND ANSWERS.
Miscellaneous.

OATS FILLING.

Will oats, after they are cut and stooked, fill out any? **J. R.**

Ans.—No; at least, not ordinarily.

PEDIGREE OF HORSE.

Where could I find out the pedigree and history of the Thoroughbred horse called either Kapanga Horse or Kapanga Colt? I think he was owned by Dr. Smith of Toronto. **J. F. S.**

Ans.—Write Accountant, National Livestock Records, Ottawa.

HOLIDAYS FOR HIRED MAN.

How many holidays is a man working by the year entitled to? **C. K.**

Ans.—A hired man may claim as holidays, after doing necessary chores, Sundays, New Year's Day, Good Friday, Easter Monday, Victoria Day, Dominion Day, Labor Day, Christmas Day, and, possibly, henceforth, the King's Birthday, together with any other day appointed by official proclamation as a holiday.

PROPOSED DAMAGE ACTION.

A and B are neighbors, and part of A's share of line fence was five strands of barbed wire, which was there when B purchased farm nearly seven years ago. A's son has a driver which has one leg hurt, supposed to be in wire fence, but did not see it done. B found no wire down; only top wire down about eighteen inches from ground in one place. When A's son, who is not of age, saw B, he told him he was going to sue for damages to horse.

1. Can he do so without first sending in an account as he was asked to do?
2. Is B legally compelled to pay damages?
OLD READER.

Ans.—1. Yes.
2. We do not see that he is.

PLANTING STRAWBERRIES.

1. Purpose starting an acre of strawberries so as to reap next year. Can I plant new plants this autumn and cover them with straw manure for protection, or would you advise planting in early spring, directly after frost?
2. Kindly let me know where and at what price I can get plants of Senator Dunlop and Splendid. **C. M.**

Ans.—1. Strawberries can be planted in the autumn, in August or September, and very often do very well, but most growers prefer spring planting, as it usually gives better results. If you wait until spring, you will not get a crop next year, and if planted this fall a full crop could not be expected.

2. Plants of these varieties should be obtainable from any nursery, or you might get them from some grower in your district who was taking up and moving his patch.

TRESPASSING PIGS AND POULTRY.

1. What can I do with neighbor who allows his geese and pigs to destroy my fields of grain? My field is just across the road from neighbor's house and barn.
2. Can I kill them, or have him fined for trespass?
SUBSCRIBER.

Ans.—1. If there be no by-law of the local municipality, making provision for such cases, you may drive the geese and pigs to the pound and have the pound-keeper take them in charge. Or, as to the geese, you may notify the owner in writing of their trespass, and then, if he should refuse or neglect to prevent them from further trespassing on your premises, you could have him brought before a justice of the peace and fined.

2. You have no legal right to kill either pigs or geese; but it is open to you to lay an information before a J. P., as above suggested in respect of the geese after giving the prescribed notice, and as to both pigs and geese, after impounding same, you would be in a position to obtain damages through the pound-keeper.

It, however, there is a local municipal by-law on this subject, advantage should be taken of it. Inquiry as to same should be made of the municipal clerk.

PEASE FURNACE

Another Exclusive Feature is that you do not have to stoop to shake the PEASE FURNACE, with the new vertical shaker.

"Ask the man who has one." **PEASE FOUNDRY COMPANY**
Write for our Books. Sent free on request. **TORONTO WINNIPEG**

PINE GROVE BERKSHIRES

Sold out of young boars. Have a few young sows three and four months old. Price right for quick sale. Milton, C. P. R. Georgetown, G. T. R. **W. W. Brownridge, Ashgrove, Ont.**

Swine

OF ALL BREEDS FOR SALE. I breed Yorkshires, Tamworths, Berkshires, Hampshires, Chester Whites, Poland-Chinas and Duroc-Jerseys. I have constantly on hand both sexes of all ages. Show stock a specialty. **John Harvey, Frelighsburg, Que.**

For Sale—Ohio Improved Chester Hogs. Sired by first-prize hog at Toronto and London. Also reg'd Jersey Bulls, from 8 to 10 months, from high-testing stock. Write: **CHAS. E. ROGERS, Ingersoll, Ont.**

Duroc - Jersey Swine.

Largest herd in Canada. 100 pigs ready to ship. Pairs and trios not akin; also a few sows ready to breed. Bell phone at the house.

MAC CAMPBELL & SONS, NORTHWOOD, ONT.

Monkland Yorkshires

I am making a special offering of 50 young bred sows. They will average 200 pounds in weight, and are from 6 to 7 months of age. An exceptionally choice lot, full of type and quality; also a limited number of young boars. **MATTHEW WILSON, FERGUS, ONTARIO**

Newcastle Tamworths and Shorthorns

For sale: Choice young sows bred and ready to breed. Boars ready for service; nice things, 2 to 4 months, by imp. boar. Dam by Colwill's Choice. Canada champion boar, 1901-2-3-5. Two splendid young Shorthorn bulls and six heifers—bred. Prices right. Bell phone. **A. A. COLWILL, NEWCASTLE, ONTARIO**

Willowdale Berkshires.

For sale: Nice lot of 5 months' sows, one 5 months' boar. Eggs from my famous flock of R. C. R. I Reds, \$1 per 13. Express prepaid on 5 settings or more. Phone 52, Milton. **J. J. WILSON, Importer and Breeder, Milton, Ontario, C. P. R. and G. T. R.**

MAPLE VILLA YORKSHIRES AND OXFORDS

A grand lot of boars fit for service. Some splendid sows to farrow to first-class boars. 30 ewe lambs, including 2nd pen at Winter Fair. Long-distance phone Central Beeton. **Bradford or Beeton Sta. J. A. CERSWELL, Bond Head, Ont.**

Hilton Stock Farm

Holsteins and Tamworths. Present offering: 6 yearling heifers and several younger ones. All very choice. Of Tamworths, pigs of all ages and both sexes; pairs not akin. **R. O. MORROW & SON, Hilton, Ont.** Brighton Tel. & Stn.

Maple Leaf Berkshires

For sale: Young sows bred and ready to breed; boars fit for service; also young pigs eight to ten weeks old. Imp. sires and dams. Pairs not akin. C. P. R. and G. T. R. Bell phone. **Joshua Lawrence Oxford Centre, Ont.**

Pine Grove Yorkshires

For sale: A choice lot of young boars fit for service; also sows already bred. Are booking orders for young pigs, not akin, for spring delivery. Descendants of imported stock. Property of **Joseph Featherston & Son, Streetsville, Ont.**

Morrison Tamworths

From the best blood in England; both sexes for sale, from 2 to 10 months old; young sows, dandies, in farrow to first-class boars. **Chas. Currie, Morrison, Ont.**

ELMWOOD STOCK FARM offers Ohio Improved Chester White Pigs.

Largest strain. Oldest established registered herd in Canada. Choice lot, 6 to 8 weeks old. Pairs furnished not akin. Express prepaid. Pedigrees and sale delivery guaranteed. **E. D. George & Sons, Putnam, Ont.**

American Shropshire Registry Association

Has the largest membership of any live stock association in the world, and is steadily growing. Life membership \$5.00, no yearly dues. Write for information.

J. M. WADE, Secretary, LA FAYETTE, INDIANA

FARNHAM FARM Oxford and Hampshire Downs

Our present offering is a number of superior yearling Oxford Down rams and ram lambs by our champion imported sires; also a number of yearling ewes and some older of both breeds from imported stock. Prices reasonable. **Henry Arkell & Sons, Arkell, Ont.** Long-distance phone in house; ask Guelph for 152, two rings.

SPRINGBANK Oxford Downs

We never had a better lot of lambs of both sexes to offer than this fall, sired by Imp. Bryan 13; they are big, well covered and of ideal type; a few shearing ewes and two shearing rams can also be spared; order soon. **Wm. Barnett & Sons, Living Springs P.O., Fergus Station, Ontario**

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs

Present offering: Lambs of either sex. For prices, etc., write to **John Cousins & Sons, Harriston, Ont.**

First-Class Exhibition Stock for Sale BOTH SEXES Leicesters

Lambs that are hard to beat; sired by my big imported ram, Burnside Speaker. One of my ram lambs would creditably head your stock.

WILLOWDALE STOCK FARM, LENNOXVILLE, QUE
J. H. M. PARKEE, Proprietor

Alloway Lodge Stock Farm

SOUTH-DOWNS—Do you want a fine-fitted Southdown to win out with at the shows, and to put some good new blood into your flock? I am now taking orders, and you will advantage in ordering early. I guarantee to please you, and at reasonable prices.

ANGUS—The first offering since founding the herd. Bulls and heifers for sale of showyard quality, and the choicest breeding.

COLLIES—That win at the shows and make excellent workers. Railway station, London.

ROBT. McEWEN, Byron, Ontario.

CATTLE and SHEEP LABELS

Metal ear labels with owner's name, address and any numbers required. They are inexpensive, simple and practical. The greatest thing for stock. Do not neglect to send for free circular and sample. Send your name and address to-day.

F. G. JAMES, Bowmanville, Ont.

SHROPSHIRE BARGAINS AT FAIRVIEW

Choice shearing rams sired by grand champions, and out of the best of dams. We have in the lot flock headers and showing propositions. We guarantee them to be as described. See representatives at Toronto's Canadian National.

J. & D. J. CAMPBELL, FAIRVIEW FARM, WOODVILLE, ONTARIO



FARM LABORERS' EXCURSIONS

\$10.00 to WINNIPEG

And certain points in Western Canada, including points on Grand Trunk Pacific Railway, via Chicago, Duluth and Fort Frances.

\$18.00 Additional Returning

Aug. 23rd { From all stations Toronto, North Bay and west in Ontario.

Aug. 25th { From all stations Toronto and east of Orillia and Scotia Junction in Canada.

Full particulars from any Grand Trunk Agent, or address A. E. DUFF, District Passenger Agent, Toronto.

THE WESTERN FAIR

Canada's Pioneer Agricultural Exhibition **London, Ont.**

September 8th to 16th, 1911

<p>\$26,000.00 offered this year in Prizes and Attractions</p>	<p>MAGNIFICENT LIVE STOCK EXHIBITS</p>
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All prizes awarded by judges paid regardless of competition in the different sections.

\$1,000.00 added to the Live Stock Prize List this year. Come and win some of it. Attractions better than ever. Firework and Military Tattoo each evening.

SINGLE FARE OVER ALL RAILROADS IN WESTERN ONTARIO. SPECIAL EXCURSIONS. SPECIAL RATES FOR EXHIBITORS.

Prize lists, entry forms and all information from the Secretary.

W. J. REID, President, A. M. HUNT, Secretary.

This Wagon Will Carry Heavier Loads At a Saving of Time and Horses



Decide to-day to buy a T-K Handy Farm Wagon. You'll be proud of your purchase every day. Proud of its style and beauty, proud of its easy riding and splendid service. It has the lightest draft, and is the handiest to load and unload of any wagon you ever saw. These wagons never fail, no matter what kind of road you strike—they carry you to your destination, regardless of any unfavorable soil conditions, with as heavy a load as any team can draw.

T-K Wide-Tire Steel Wheels Make Farm Work Lighter



The farmer who investigates at once sees points of great superiority in these wheels. He sees the reason for wide steel wheels, staggered spokes and indestructible hub. He sees why, under any road condition, there is no danger of accidents, side strain or wear on his farm wagon, and how it is possible to haul 25 to 50 per cent. greater load without tiring the horses. There are other points of superiority. Write for catalogue, and learn how farm work is made profitable with our vehicles and equipments.

TUDHOPE-KNOX CO., LTD., ORILLIA, ONT.



GOSSIP.

Part I, of Vol. 57 of Coates's Short-horn Herdbook, published by the Short-horn Society of Great Britain and Ireland, has been issued from the press, and a copy, by courtesy of the Secretary, received at this office. This part of the volume contains pedigrees of bulls only, numbered from 107575 to 110677, to 31st December, 1910, a total of 3102.

In farmhouses in small communities, and even in the badly cared for portions of large cities, typhoid germs are carried from excrement to food by flies, and the proper supervision and treatment of the breeding places of the house fly become most important elements in the prevention of typhoid. Other intestinal germ diseases, as Asiatic cholera, dysentery, and infantile diarrhea, are all so carried. Other disease germs are carried as well. There is strong circumstantial evidence that tuberculous, anthrax, yaws, ophthalmia, smallpox, tropical sore, and parasitic worms, may be and are so carried. Screening of windows and use of some sticky preparation are preventive measures known to everyone. Absolute cleanliness will greatly abate the fly nuisance. Chloride of lime was found to be an excellent maggot killer. Where one pound of chloride of lime was mixed with eight quarts of horse manure, ninety per cent. of the maggots were killed in less than twenty-four hours. "The insect we now call the 'house fly' should, in the future, be termed the 'typhoid fly,' in order to call direct attention to the danger of allowing it to continue to breed unchecked."—S. D. Howard. The foregoing are gleanings from Farmers' Bulletin 454, of the United States Department of Agriculture, by L. O. Howard.

NOVA SCOTIA CROP REPORT.

From M. Cumming, Secretary of Agriculture in the Province of Nova Scotia, has just been received the Government Crop Report of that Province for July, 1911. Some 128 correspondents, representing all the counties in the Province, have contributed to this report. The season has been remarkably dry until recently, with the promise of a record crop of apples, well matured, and free from spot; a hay crop slightly below the average, and fair crops of oats and other cereals, potatoes and roots.

The estimated yield of hay, compared with that of 1910, is upland 76, intervalle 87, marsh 78, and with an average yield, upland 82, intervalle 94, and marsh 84. Clover was, unfortunately, considerably winter killed.

The oat crop, and other cereal crops, while below that of 1910, are distinctly above the average. Compared with 1910, they stand at 94 per cent., while compared with the average they are 112 per cent.

Potatoes show an increase of three per cent. in acreage. It is early to forecast, but if present weather conditions hold, the crop is sure to be good. The crop is estimated at 99 per cent. of that of 1910, or 89 per cent. compared with the average.

Turnips have increased in acreage, while mangels have decreased. It is really too soon to forecast the root crop, but indications are that, compared with 1910, it will be 90 per cent., and with the average, 106 per cent.

Forage crops are grown in Nova Scotia mainly for the purpose of supplementing early summer and late fall pastures. The condition of live stock and the output of the dairies would be greatly improved if more forage crops were grown. In the counties producing the most milk, these crops are increasing slowly. Owing to the dry weather of July, the forage crop is estimated about 6 per cent. below that of last year. Pastures were poor at first, and their condition for the remainder of season depends upon the rainfall.

All live stock is reported in extra good condition, due to last year's abundant crop and extra hay. Dairy cattle have increased 3 per cent. Beef cattle remain stationary, sheep have declined 3 per cent., and hogs increased 4 per cent.

Plums and small fruits are almost a failure, but apples are a bumper crop. Cultivation and spraying have received more attention than ever before. The aphid is the most serious pest, very little black spot showing.

WAS TROUBLED WITH HEADACHE FOR OVER TEN YEARS Dr. told him to try Burdock Blood Bitters

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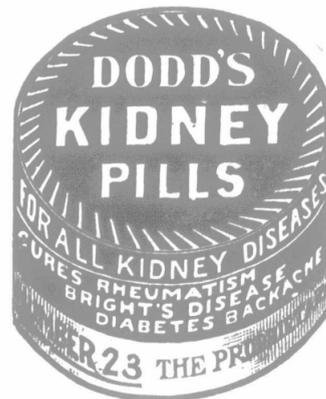
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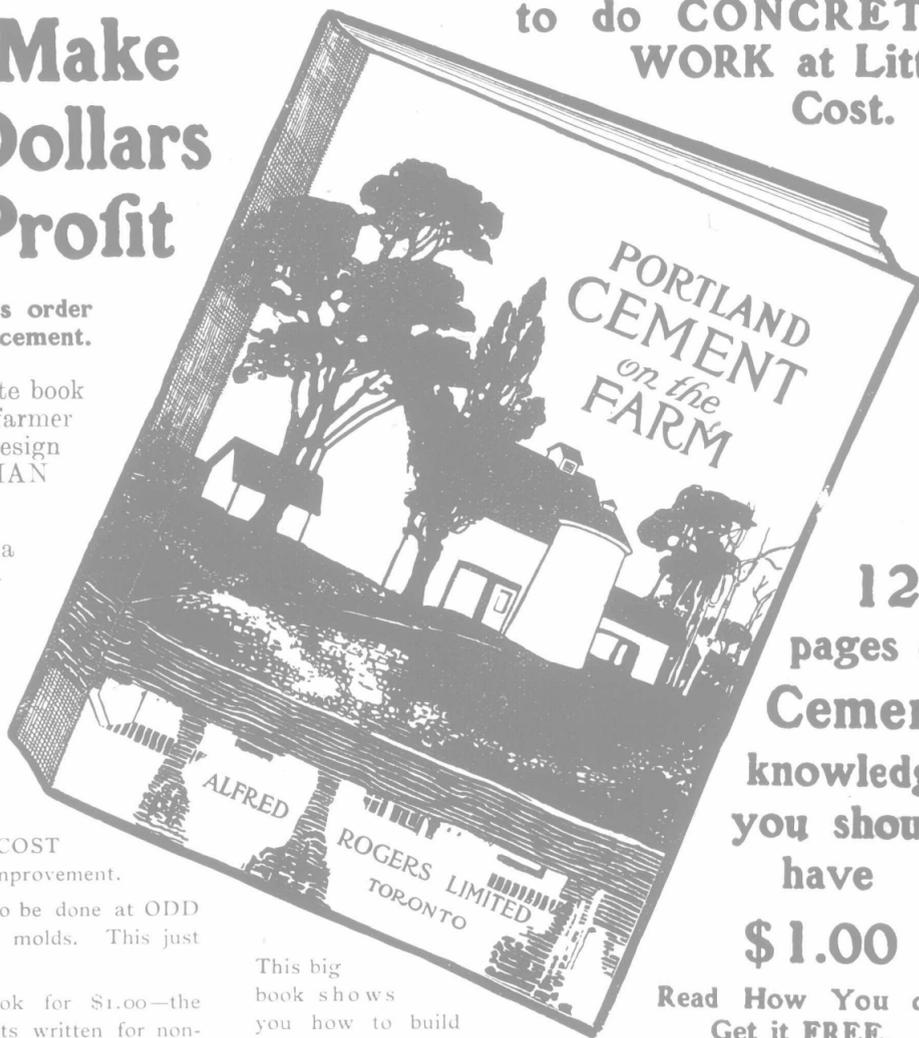
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