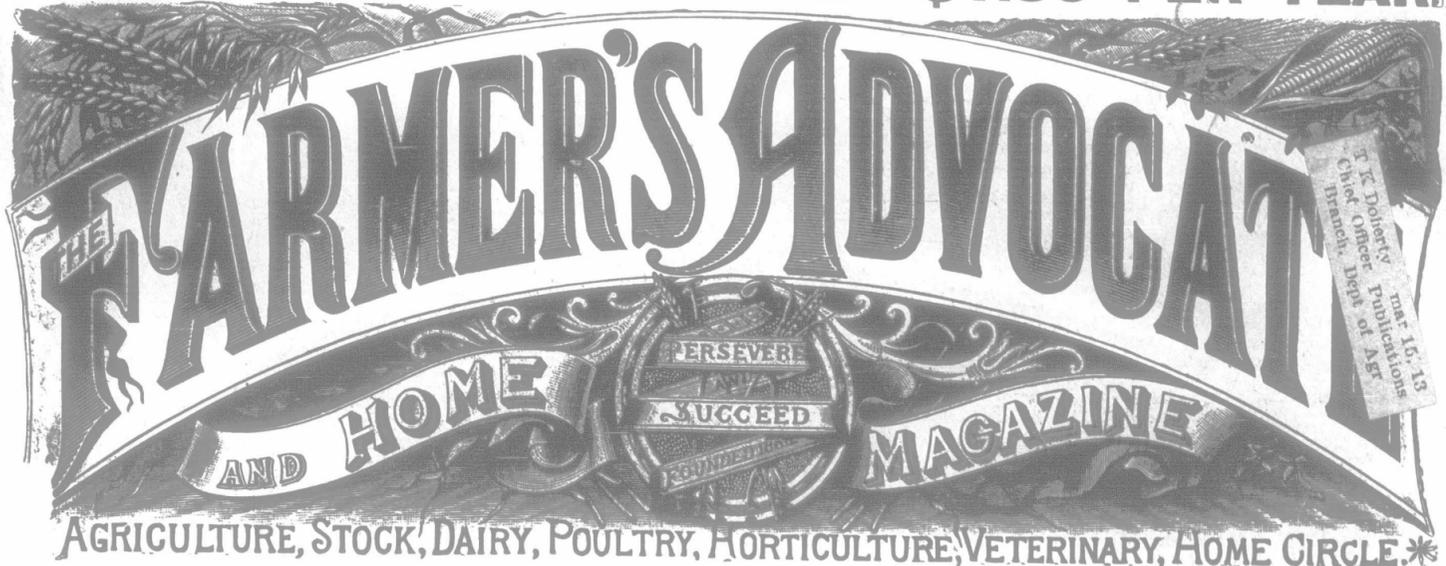


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Vol. XLVIII.

LONDON, ONTARIO, JUNE 19, 1913

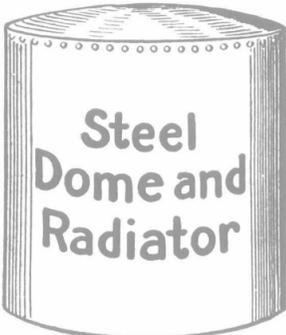
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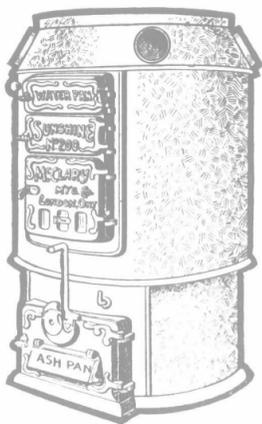
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Three-sided Grate Bars



Steel Dome and Radiator



Install A Modern ^{Publications Branch.} Furnace

One With Latest Features,
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CONSIDERING its extra weight, the superior quality of the materials, the skill and experience put into it, McClary's Sunshine furnace is the cheapest furnace on the market. You get more value for every dollar you invest in the Sunshine than you do in any other furnace.

McClary's Sunshine Furnace is the product of the largest stove and furnace makers in the British Empire. It has labor-saving, health-producing and fuel-economizing features—the result of long experience—that no other furnace has.

It has, for instance, the "rocking-down" system which eliminates the old-time back-breaking, dirty shaking. It has a conveniently located water-pan over the fuel door. It has a sure-acting dust-flue to prevent dust from falling ashes getting into the house. It has an almost straight-sided fire-pot to prevent ashes forming "pockets" and deadening the fire. And some coal-economizing features our agent will be glad to tell you about.

But, too important to overlook, is the fact that the Sunshine furnace is built to last. The materials are the best, and every piece of metal is tested. Every operation in the making is inspected, too. Nothing is left to chance.

As an example of the quality of materials used, take the fire-pot. This is of semi-steel—not gray iron as are other fire-pots. Semi-steel is not affected by sulphur fumes from burning coal. In addition, a semi-steel fire-pot weighs twenty per cent. more than the same size and pattern in gray iron.

But that's not all. The fire-pot is in two pieces to prevent it cracking from extreme expansion or contraction. One-piece fire-pots are continually cracking, having to be replaced.

Then take the grate bars. Those on the Sunshine are very heavy and have three sides—three lives. By exposing a different side to the fire every few days, the life of the grates is greatly prolonged.

Examine the dome, too. It is of heavy steel, as is also the radiator. The frame of the ash-pit, the doors on the furnace, the casing—every part of the furnace is of the most durable material. All joints are accurately fitted together, and rendered dust-tight by a special cement originated by McClary's.

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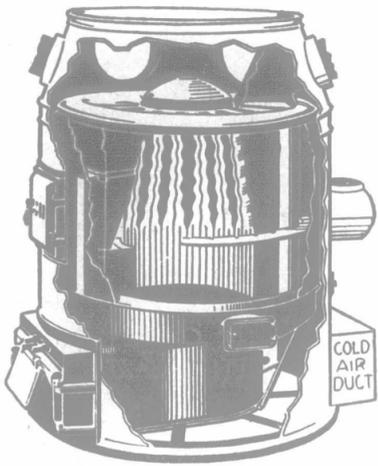
326

20 to 30% Less Coal

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A Kelsey has 61 square feet of radiating surface to 1 square foot of grate.

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That is why the Kelsey is the

most economical of all heating systems. It saves from 20 to 30% of coal bills.

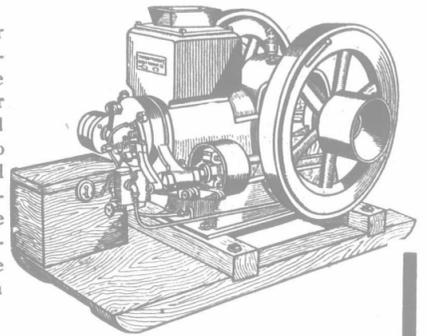
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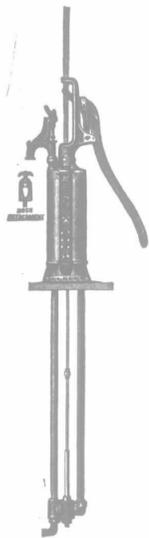
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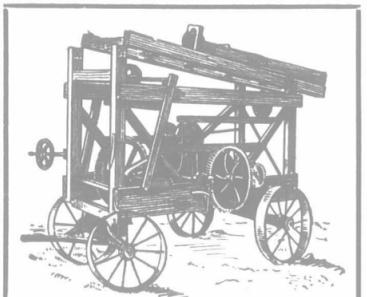


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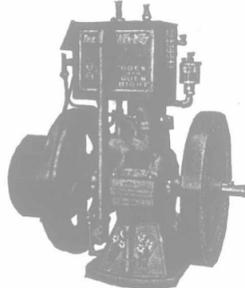
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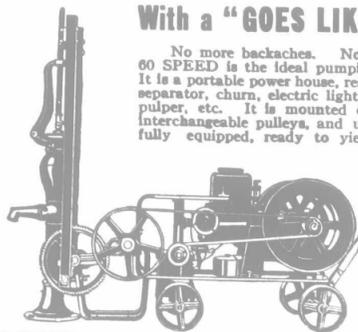
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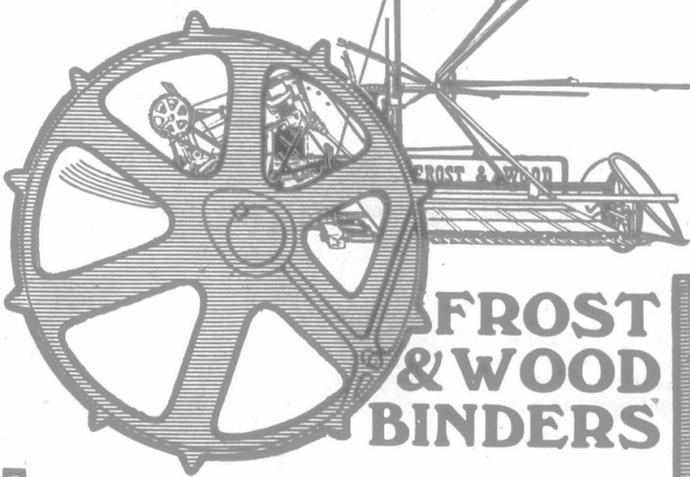
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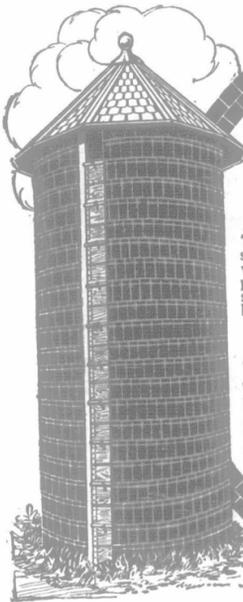
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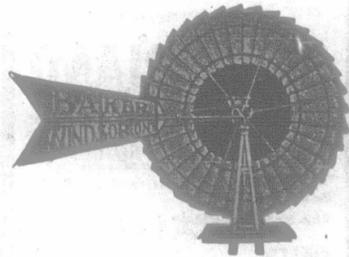
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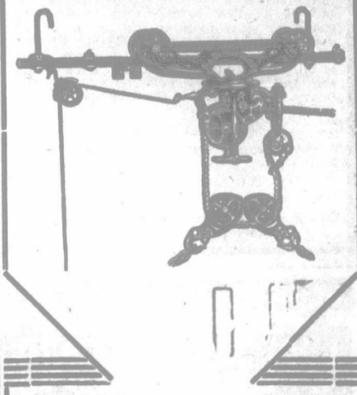
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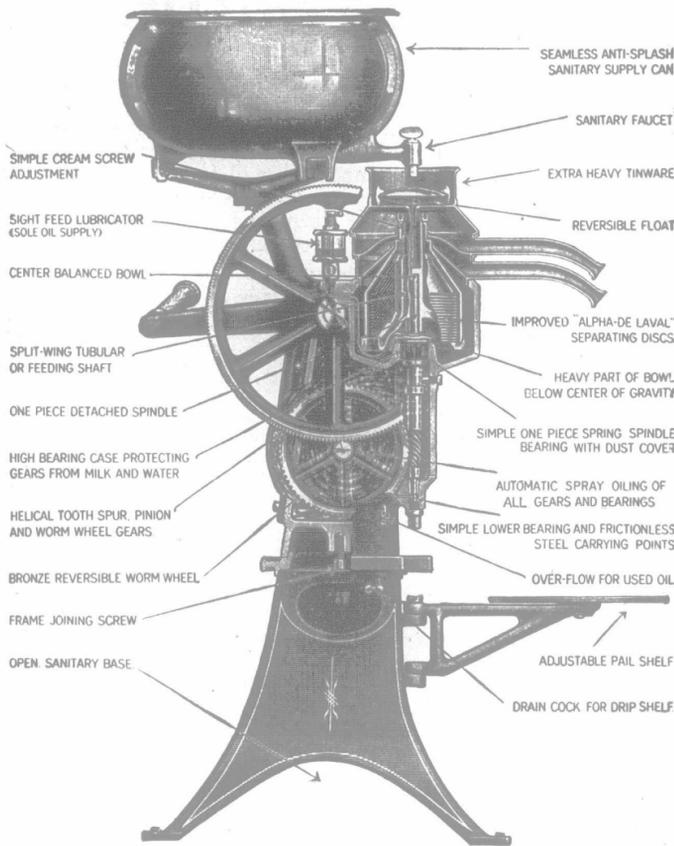
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The Farmer's Advocate and Home Magazine

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ESTABLISHED
1876

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

Vol. XLVIII.

LONDON, ONTARIO, JUNE 19, 1913.

No. 1083

EDITORIAL.

The yelping dog lowers the milk pail.

The two-horse corn cultivator is a great labor saver.

Alfalfa, like corn, stands drouth better than excessive wet.

In Western Ontario, and even farther east, corn is about our surest crop. Even though weather conditions prove unfavorable, one can do much by cultivation to promote its growth.

For some unknown reason an attractive backyard is very much more attractive than a beautiful lawn in front of the house, observes an American writer, who pleads for a back porch overlooking the backyard and garden.

If a man is rich and asks a government for millions to assist enterprises designed to make him still richer, he is called a subsidy hunter. If he is starving and asks a fellow man for bread-money he is called a beggar.

The Kansas plague of grasshoppers is being destroyed by a fungus, according to newspaper reports. Thus does Nature raise up friends to fight our battles for us. Among our greatest friends are insectivorous birds—which we allow sportsmen (?) to shoot.

Reversal of prospects is a common experience in farming. The crop which looks best in spring may disappoint sadly before harvest, while the crop whose early chances appeared slim may compensate. As a rule, the husbandman who does his own part well and awaits the issue with calm faith comes out all right in the end.

If you have held some silage over for summer feeding, take a look into the silo to see whether rats have found their way into it. They may be burrowing down through the decaying surface layer to get at the sound corn underneath. This will let the air in, and greatly increase the amount of spoilage. If they are working, close the silo doors and set a trap or two inside. We would hardly feel safe in recommending poison, for fear of it being carried down and subsequently mixed with sound silage fed to stock. If the rats have not yet gained access, close the doors and keep them out.

In a message vetoing a farcical direct-primaries bill passed by the State Assembly at Albany, N. Y., William Sulzer, Governor of New York, used this trenchant paragraph:

"Every intelligent citizen is aware that those who subvert the government to their personal advantage have found their greatest opportunities to do so through the adroit and skilful manipulation of our system of party caucuses and political conventions. We have been given leadership dishonorable to the various political parties of the State, and we have been given party tickets which reflect this dishonorable leadership in disgraceful secret alliances between big business interests and crooked and corrupt politics. It must cease, or our free institutions are doomed."

Economy in Fencing.

With the progress of invention, capital becomes increasingly necessary on the farm. Each decade the farm is equipped with less of what labor directly achieves, and more of what requires capital to purchase. There are not a few hundred-acre dairy farms in Ontario to-day representing an investment of ten, fifteen or twenty thousand dollars in buildings, fencing, tile-drainage, implements, vehicles, tools and live stock, over and above the value of the land itself. The demands for more outlay steadily increase. Experience proves that it pays to purchase good stock, good implements, and good equipment, as well as good land. Poor stuff soon plays out. It is usually economy to buy the best, but it certainly does run into a lot of money. And there seem so few chances for economy where economy will not prove short-sighted.

It behooves us, therefore, to be on the alert to save where expedient. One of the best opportunities lies in reducing the amount of fencing. There is a wise and well marked tendency to do away with many of the superfluous cross fences which cut properties up into small fields that are expensive to cultivate, waste land in fence bottoms, and add not only to the farmer's capital outlay, but correspondingly to his interest and depreciation charges.

Consider the cost of fencing. To erect a good nine-strand woven-wire fence with 20-cent cedar posts set a rod and a half apart, will cost in the neighborhood of sixty cents a rod. This includes labor of digging the post holes, setting posts (including anchor and brace posts) stretching and stapling the wire.

A typical "inside" hundred-acre farm 200 x 80 rods will have 240 rods (a half share) of line fence, 80 rods of front fence, and with a lane through the centre, about 400 rods of lane fence or a total of 720 rods, exclusive of cross fences. This, if all erected new, well built, would cost about \$430. To cut this up into ten-acre fields would require another 320 rods of somewhat cheaper fence, costing, perhaps, \$150.00, maybe somewhat less if old posts could be utilized. On this 320 rods of cross fencing there will be annual depreciation to the extent of eight or ten dollars and interest eight dollars more or say fifteen dollars, besides the obstruction to cultivation, the waste of land and the harboring of weeds.

Part of the outlay and expense of cross fencing might be dispensed with by having a couple forty-rod stretches of woven wire to be stretched across from time to time where it may be desired to pasture stock. A couple brace posts, a few dozen sharpened heavy stakes, an odd line post or so planted for stiffening, are all that is needed to put up such a fence. Two or three men can drive the stakes, plant the brace posts and stretch and staple the wire for a forty-foot span in half a day at a cost of two or three dollars. It can be placed where needed, and shifted when it comes time to plow across the line. It saves capital and reduces expense. What fence you buy, buy the best, but do not purchase more than you need.

In Business for Oneself.

Experience shows that the man who works always for salary, even though it be a good one, has a poor chance of becoming well off. It is astonishing how hard it is to save much out of a fixed weekly or monthly wage. Easy come easy go. The tendency is to live up to one's income, sometimes a little beyond. Expensive habits of living are unconsciously formed, and the income leaves a very small margin to save out of. Years pass, family increases, the scale of weekly expenditure advances, but the savings account remains pitifully small, quite inadequate, it seems, to furnish capital for a business that would maintain the family on anything like the standard of living to which they have become accustomed, and from which it would be a severe wrench to break away. By and by the hope of branching out for oneself is relinquished to the distant or improbable future, and one finds himself permanently bound to the wage or salary class. The effect on character is subtle. Bit by bit the wage earner loses that masterful self reliance developed in the man who is carving out a future for himself, and in its stead comes a pliant dependence upon the employer who issues the pay check. Vocational slavery is hardly too severe a term to describe the psychological condition of such a person. Contrast him with the man who, thrown upon his own resources, forced to battle with life, struggling for a means of keeping his head above water, finds some niche into which he can fit and gets into a business of his own. Humble though it may be, it has in it the seeds of a future. It will become what he makes it, and what he makes it will depend upon his own capacity and character. It becomes a child of his ambition, an urgent repository for thrifty savings, and a field for self-expressive effort. It is a great thing to be working up a business of one's own. It is at once the surest way of getting ahead financially, and a first-class means of strengthening character and developing mental capacity. Every farmer has just such a chance. As compared with the city wage earner or salaried employee, his lot is one to be envied. Farming is a good business, a clean, straight, wholesome, self-reliant, self-developing business, such as any king might envy. Do we realize when we are well off?

A New Brunswicker for Truro.

Prof. J. M. Trueman, head of the Dairy Division at Storrs Agricultural College, Connecticut, U. S. A., has accepted the position of Professor of Agriculture and Farm Superintendent at Nova Scotia Agricultural College. This is one of the strongest appointments yet made at this Eastern institution. Prof. Trueman was born in New Brunswick and some twenty years ago graduated from the School of Agriculture, Truro, N. S. In 1895 he received his degree of B. S. A. from the Cornell Agricultural College. Since that time he has had nearly twenty years' experience in agricultural college work, and in the management of private farms in the United States. He is regarded as one of the strongest men in his subject in America, and the Nova Scotia Agricultural College is to be congratulated on having added to its staff a man familiar from birth with Maritime Province conditions, who has had such an extended experience in the leading institutions of the United States and who stands so high, especially in dairy husbandry in America.

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED).

JOHN WELD, MANAGER.

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
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Rules of the Road.

A very great deal of confusion exists as to the rules of the road, particularly those applying when one vehicle overtakes another. Many drivers of horses, for instance, when overtaken by an automobile, will turn to the left, expecting the automobile to pass on the right. This is wrong. The person ahead should keep to the right; allowing the overtaking vehicle to pass on the left. This applies, at least, in the province of Ontario. In the case of two vehicles meeting it is well enough known that they both turn to the right. The converse of this rule applies in England, in the Maritime Provinces, and on Vancouver Island, unless recently altered. Elsewhere in Canada the rule is to keep to the right. The Ontario law on this point is very well explained in the 1912 annual report of W. A. McLean, Provincial Engineer of Highways. The rules are principally covered by the Highway Act, 2 George V.c. 47, and the Motor Vehicles Act, 2 George V.c. 48.

1. When two vehicles meet on the highway, each driver shall turn to his right-hand side, allowing the other vehicle one-half of the road.
2. A vehicle, or horseman, overtaken on the highway shall turn out to the right and allow the overtaking vehicle or horseman to pass on his left-hand side.
3. A person overtaking a vehicle or horseman, in passing shall turn to the left-hand side sufficiently far to avoid collision; the person overtaken to leave at least one-half of the road free.
4. In the case of a bicycle, or tricycle, the foregoing rules apply, except that the bicycle or tricycle can require only sufficient room on the travelled portion of the highway to pass; also when overtaking another vehicle, the person on the bicycle or tricycle is to give audible warning of his approach before attempting to pass.
5. When a vehicle is so heavily loaded that, when meeting or being overtaken, the driver finds it impracticable to turn out, he shall immediately stop, and, if necessary for the safety of the other vehicle or if so required, he is to assist the person in charge to pass without damage.
6. A portable or traction engine is required, if practicable, to give half of the road, and to remain stationary until a horseman or horse-drawn vehicle has passed. The engine is to stop at a distance of not less than one chain from the

vehicle, and assistance is to be given to the driver of the horse, if so requested.

7. Between sunset and sunrise, a traction engine on the highways is to be preceded by a person carrying a light.

8. Between sunset and sunrise, a red light is to be carried on the front of an engine, and a green light on the rear.

9. The speed of motor vehicles is restricted to 15 miles an hour, within a city, town, or village, and to 20 miles an hour on country roads.

10. Motor vehicles are not to be driven recklessly at any speed or in any manner dangerous to the public, having regard to all circumstances and the amount of traffic on the highway at the time.

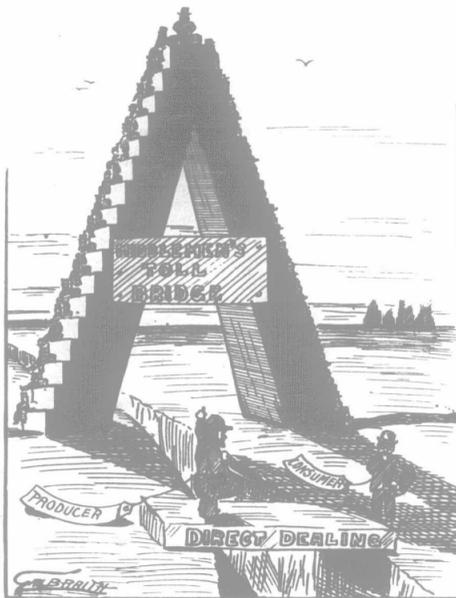
11. The driver of a motor vehicle is to exercise every reasonable precaution to prevent frightening horses driven on the highway.

12. A motor is not to pass a horse-drawn vehicle outside of the limits of a city or town, at a greater speed than 7 miles an hour.

13. Should a horse appear to be frightened, or upon a signal to do so, the driver of a motor vehicle is to stop and take such steps as will enable the horse-drawn vehicle to pass in safety.

14. The rights of a pedestrian on the travelled highway are co-equal with those of a vehicle, and the driver of a vehicle is therefore required to exercise every effort to prevent injury or inconvenience to pedestrians when approaching or passing them. Irrespective of statutory provisions, every reasonable care must be taken to prevent accident to either pedestrians or vehicles.

While the foregoing represents the principal features of the Statute respecting travel, yet no rules or regulation can possibly take care of the many instances in which courtesy only can facilitate the free and convenient use of the highways.



Bridging the Chasm.

Producer to Consumer—"Meet me half way on this plank, and we'll be independent of these dealers."

Misunderstandings are sometimes due to the limitations of the automobile. When a motor car gets into a deep rut, it is almost impossible for the driver to turn out promptly to allow others to pass; also in wet weather, it is very dangerous for an automobile to turn out on a steep or slippery side slope, as the car is very apt to slew and be struck in the ditch.

A further cause of misunderstanding is due to the fact that, on a good road, an automobile can be turned out in a very short distance. When a motor car approaches a horse-drawn vehicle, the tendency of the chauffeur is to keep on the smooth centre of the road as long as possible. The driver of the horse-drawn vehicle, seeing no indication of the motor turning out when he would expect it to do so, goes farther and farther from the centre of the road to avoid collision; or at times because of a nervous horse. When the chauffeur has reached the point at which he would expect to turn out, the horse vehicle is so far from the centre of the road, possibly in the ditch, that there seems no necessity to turn the motor car from the straight course. The result has been a feeling on the part of those who live in the country that this is intentional on the part of the drivers of automobiles, whereas it is more thoughtlessness than otherwise. Drivers of motor cars should commence to turn out at a sufficient distance from horse-drawn vehicles to clearly indicate their intention to give at least half the road.

Nature's Diary.

By A. B. Klugh, M. A.

Birds which are more often heard than seen are the cuckoos, of which we have two species in Canada—the black-billed cuckoo and the yellow-billed cuckoo. The notes of the two species are very similar, and are both loud. They have two sets of notes, one a loud "kow-kow-kow-kow-kow-kow-kow-kow," beginning quickly and becoming very slow towards the end; the other a softer "cuk-cuk-cow-cuk-cuk-cow."

The cuckoos are long, slender, graceful, fawn-colored birds, the main distinctions between the two species being the color of their bills and the white tips on the tail-feathers of the yellow-billed cuckoo when seen from beneath.

The yellow-billed cuckoo is not as common as the black-billed, and is restricted in its range in Canada to Southern and South-central Ontario.

The cuckoos have one peculiarity in their food habits—they are very partial to hairy caterpillars, which are avoided by most birds. Thus they are decidedly valuable friends of the farmer.

Our cuckoos, unlike the cuckoo of the Old World, make nests of their own, though the nests are mere platforms of twigs.

Another bird with a loud and penetrating voice is the mourning dove. This species is a little smaller than a domestic pigeon, and has a much longer tail. It is a somewhat pinkish fawn color.

The mourning dove is the bird which is often mistaken for the now extinct passenger pigeon. It derives its name from the rather sad cadence of its notes, which sound like "coo-ah-oo-oo-oo-oo-oo-oo-oo-oo."

In some places the mourning dove is on the list of game birds, which it should not be, as its body affords but little meat, and it is a great eater of weed-seed.

There is a plant which is common along the borders of woods and thickets which it is well to know; this is the poison ivy. It is usually a shrubby plant growing about six to twelve inches in height, and the leaf-stalks bear three leaflets. Later in the season it bears clusters of white fruits.

The effect of the poison of this plant upon different people is very different. Some are very susceptible to it, and contact with it causes intense inflammation of the skin and the formation of blisters. Others are entirely immune. There is a current idea to the effect that the poison is given off into the air, and that if persons susceptible to it even go near it, without touching it, they will be poisoned. This is not a fact, and in many cases where people have been poisoned without touching it with their hands, they forget that they have walked through it and that they usually take off their boots before going to bed, thus getting the poisonous oil on their hands, and often from their hands to their faces.

The best remedy for the effect of poison ivy is the application of a saturated solution of acetate of lead in fifty per cent alcohol.

While poison ivy usually grows low, it sometimes is a climber, running up trees to a considerable height.

A plant often mistaken for poison ivy is the Virginia Creeper, but the latter has five leaflets instead of three.

There are a large number of warblers which breed in the settled portions of Canada, many of them being hard to identify; but one which is common in Eastern Canada and is easy to recognize is the black and white warbler. It is about five inches in length, and it is streaked black and white nearly all over. The female has more white in proportion to the black than the male.

The song of this species is a very high-pitched "see-swee-see-swee-see-swee," a sound somewhat like that made by the sharpening of a fine saw.

The black and white warbler is much given to creeping about the trunks and branches of trees, while most of the other warblers fit about among the leaves and smaller branches.

This species, as a rule, conceals its nest pretty well. A nest which I found near Guelph was placed between three basswoods which grew together at the base. It was composed of strips of bark and lined with a little horse hair, and contained four young black and white warblers and a young cowbird, which latter I promptly executed.

The parents were feeding the young on small caterpillars, and had a definite route to the nest, descending one basswood trunk and ascending another when leaving.

It is interesting to watch the "lone fisherman," the great blue heron, fishing. It wades about in the shallow water, with its body inclined forward and with its head drawn in. When it sees a fish its head shoots out with open bill, the fish seized, held in the tip of the bill and shaken for a few seconds, then the head is

thrown back, and the fish swallowed with a succession of jerks.

It is a pity that this bird is so frequently the target of a thoughtless gunner, as while it is of no economic value, it certainly adds a graceful touch to our water-ways.

HORSES.

Did any immediate good ever come from raising a row with the judges over a decision?

It has been said that a good horse is never a bad color, but very often the color of a horse detracts very much from his appearance.

The draft-horse judge usually looks for plenty of size and substance, and these not at the expense of quality.

The mare owner may well bear in mind that the fall colt is better than no colt, and is preferred by some successful horse breeders to the colt foaled in the spring. If the mare has not conceived, there is still time. Give her every opportunity to become a producer.

White Knight, a Thoroughbred stallion, has recently changed hands at what is said to be a record price for a horse, viz., \$200,000. His former owner was W. R. Wynham, and the purchaser, a French race-horse man, Edmund Blanc, the same man who paid over \$196,000 for Flying Fox. White Knight was sired by Desmond.

If there is any one place where horse manners count more than another, it is in the show ring. A drafter that does not lead up well, a roadster or a harness horse that does not drive right up to the bit, a saddler that does not walk, trot and canter readily or a hunter that bolts at the fence, has little chance of winning the coveted rosettes, silverware and accompanying money prizes. Get ready for the fall exhibitions.

How Many Horses for the Farm?

Too many work horses on a farm are a bill of expense; too few is mistaken economy. The number of work horses kept on any given acreage, depends wholly upon the class of farming carried on. A rough, hilly farm, largely used for grazing purposes, does not require so many work horses as does the same-sized farm with its acres all under cultivation. No set rule is possible upon which we may base the number of horses kept upon the number of acres in the farm.

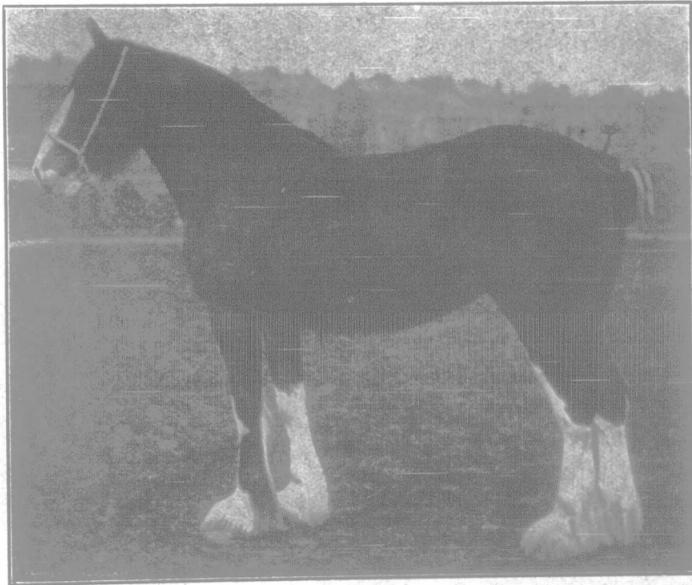
Farmers are sometimes horse-poor in the same sense that a man who owns several thousands of acres of arid or blow-sand land, is considered to be land-poor. The writer remembers a man who considered himself considerable of a horse fancier, and who kept around him, on a farm of less than one hundred acres and operated as a mixed farm, from ten to twelve horses of all ages, most of which were of a very indifferent class and not marketable at the best prices, nor were they very efficient as farm work horses. This man was always horse-poor. He seemed to imagine that it required nearly all these horses to do his farm work, and was always ready to buy another scrub, for such he usually purchased, because it sold at a low price which he called cheap, but which in the end proved to be very dear, for once in his stable the animal generally remained until death removed it, or it was disposed of at a loss. These horses ate up practically all the feed the farm produced, which might have been used to good purpose in feeding a few real good breeding mares and their progeny, the mares being the farm work horses.

If a man is in the horse-breeding business and is producing the good things, which are in most demand, he may profitably keep a larger number of horses than the average farmer can, but this article refers to the average farmer who plans to keep just enough horses to work his land and sells the surplus from his brood mares. Of course, where three or four good brood mares are kept and they breed fairly regularly, there may seem to be a rather large stock of horses on the farm sometimes. For instance, there may be the four mares and the four foals, and it is possible that there may be four yearlings and four two-year-olds although the latter is not probable, for it is seldom indeed that four mares are found in one stable and all four are so regular breeders as to produce a foal each in each of three consecutive years. The point is this, the owner of these mares (good brood mares mark you) and all the colts could not be considered horse-poor, as was the man heretofore mentioned, for his mares are choice, and he

simply keeps their progeny to be sold at three or four years of age because it pays him to do so.

The good colts grow in value from year to year to such an extent as to far more than pay for the feed consumed. It is a business proposition. But with the four mares one can scarcely estimate more than fifty per cent increase one year with another, so the stock would not be so large as reckoned. Suppose these mares raised two colts each year, and the colts were kept until rising three years of age, the farm would be stocked with four mares, two foals, two yearlings, and two two-year-olds, or ten all told. Each and everyone is a good individual, marketable at a good price any time, but the colts are held until ready to go to work, on account of their increased value then. Compare these conditions with those of the first man alluded to who kept from ten to twelve scrubby individuals, mostly mature or nearly so, and the greater part of them geldings, useful only as serviceable workers and scarcely "serviceable," and never marketable at a profit. One has too many horses, the other, because his horses are the right kind and are managed on a paying basis, is not overstocked.

There is something in the kind of horse kept as a factor in determining the number which the farm can profitably support. We gather from the operations of the horse-poor farmer that a poor horse is a money loser, and the more of them a person has the greater his losses per head. On the other hand the man who keeps good, sound, useful brood mares to do his work gets his farm work done in good time, has a few colts which may be used to help out during the rush seasons, has a product in his colts which is readily marketable at a profit, and his work horses are money makers.



Phyllis.

A three-year-old Clydesdale filly, female champion at the recent Glasgow Show.

How many work horses should the man on the hundred-acre farm keep? Of the poor class, none; of the good kind, what his line of work demands together with the progeny from them to be sold off when most profitable. Four good work horses should be sufficient for most farms of 100 acres where mixed farming is carried on. Specialized conditions may require more or less than this number. This makes it possible to work a four-horse team or two two-horse teams, each of which may, at times, be found advantageous. Some get along with three good horses on this size of farm, and others keep five. It does not pay to limit the number to such an extent that seeding and like work, which must be done in the shortest possible time, is too long drawn out. Every day's delay after the land is ready to work means a shorter crop. The breeding of the mares used to do the farm work makes it possible to clear a profit on a mare which is not needed all the time, but which can be well utilized during seeding, harvest and fall work. She is thus given plenty of time with her foal. Besides, where the mares are used to do the work, a large enough number should be provided that it is not necessary to overwork any of them. With the best of care they will not all breed every year. Those not raising foals should be made to do the heavy end of the work.

The problem of how many horses to keep on the farm is one which must be settled by each individual farmer himself. He should know best what he requires. Avoid too many work horses, and plan not to keep too few. Never keep inferior animals, and let the workers be breeders as well.

The Roadster.

Editor "The Farmer's Advocate."

A certain type of automobile is called a "roadster" but it is not this that prompts me to write, but rather a breed of horses intended like the car mentioned to make good time on the road. It would be folly to say that one breed of horses was worthy of more praise than another, for all our recognized breeds in this country have their place; but the Standard-bred horse is one of the best light horses for driving purposes. One cannot but admire a nicely-turned trim, clean-limbed trotter with his free, easy gait as he glides over the ground. The ease with which the best individuals show bursts of speed is marvellous. As a good light horse for all kinds of road purposes, it would be difficult to find a better horse than the Standard-bred. He makes good time, does it easily, and possesses sufficient stamina to be a first-class all-day horse. As a general thing his manners are good, and, properly trained, he is quiet and safe. There can be no doubt but that the Standard-bred horse is one of the most useful of our lighter breeds of horses. His bulwark is his utility, and his glory is sure to endure.

HORSY.

The Horse - Market Outlook.

A reader of the Farmer's Advocate, in conversation on Agricultural topics recently, remarked that the horse trade seemed rather dull at present, and he didn't think sales were being made quite as readily as they were a year or so ago. Perhaps not. There may be a tendency towards easiness in the trade, but nevertheless the

fact remains that if a good horse is required, considerable searching is necessary before one for sale is found, and when it is located the price asked does not show much decline from those asked for such animals one or two years ago. The same gentleman who made the remark, and who is a very successful Perth county farmer, and a graduate of the Ontario Agricultural College, shortly afterwards asked "Do you know where I could get a real good, young driving horse? I have looked all over our section of country and cannot find one which would suit at a reasonable price." This just about fits the situation. People generally believe that horses are lower in price and yet they are scarce, and prices asked are high, and owners refuse to sell unless a good price is obtained. This same gentleman stated that good draft

geldings, three years of age, can now be purchased for \$200. This price is not too small to pay a man for producing the colt, provided the mare is kept as a farm-work horse as well as a brood mare. A farm requires a certain number of work horses, and why not have the majority of these brood mares? Let the geldings go to the city to do the heavy dray work, and retain the mares on the farm. A good deal of the difficulty experienced in raising colts is caused by the mare not receiving a necessary amount of exercise, she being kept solely for breeding. Let her do the work on the farm, and keep her at it regularly. If she does this and raises a colt each year, which at three years of age is worth \$200, raising the colt pays. Now we would not like to say that horses would or would not be cheaper in the near future. The horse market, like all other markets, has its ups and downs and foretelling what its condition a year ahead will be is almost as difficult as weather prognosticating so far into the future. But whether prices fall or soar we do believe that they will not, in several years to come, go so low that it will not pay the farmer with a few good heavy draft brood mares and who uses them to do his work as well as to raise colts, to breed his mares regularly year after year.

Special mention is made of the heavy draft horse, but there is right now a scarcity of the right kind of driving horses. Really good, sound roadsters, with size and substance and a reasonable amount of speed, are scarce, as shown by the remark of our friend previously quoted. This, from observations, seems to be the case

throughout the country. There is no room for some good horses of this kind at a fair to high figure, but the breeding of such should not be rushed into pell-mell. That is, no heavy mares should be bred to light horses in the hope of getting the desirable class, nor should any "scrub" roadster stallions be used. It is the topper in all classes which is making the most money for his breeder. Nothing but the best type of stallion should be recognized in any of the breeds. If the mare is a drafter, a foal from a first-class draft stallion is invariably worth more than one from a trotter would be, but many of the farm drivers could be profitably used just now to produce a few good driving horses for the trade would like to get them. The horseless carriage and motor truck seem to be shaking the faith of some in the old reliable horse, but the auto, the engine-driven truck, and the tractor are the power of the few; the horse is the people's means of transit, the people's power, the people's slave, and the people's pleasure. As long as this condition remains, the horse market is safe, and all good brood mares should be bred.

LIVE STOCK.

On May 15th prices of meat animals in the United States averaged about 10.7 per cent higher than on a like date a year ago, and 27.7 per cent higher than two years ago, though 4 per cent lower than three years ago.

The farmer who goes out of his way a few steps to pet or fondle his stock, never has to step out of his way to keep any of them from striking, kicking or biting him.—Farm and Fireside.

Profits from Sheep Raising for Ontario.

"Sheep Raising in Ontario" is the title of a new bulletin just issued by the Live-Stock Branch of the Ontario Department of Agriculture, and which shows the actual results obtained from the work as carried on at nine demonstration stations during two years. Each station was in charge of a good average farmer with experience in handling grade sheep. These stations were located in the counties of Brant, Middlesex, York, Huron, Simcoe, Muskoka, Victoria, Lanark and Leeds, pretty well covering conditions in the province.

Each flock was charged six per cent on the investment (as valued by the two inspectors in charge), and where any losses occurred the full cost was charged against the flock. Space does not permit of a full report of the results at all the stations, but a full statement of two or three is valuable, as it not only shows profits but gives the beginner some idea of feeding this class of stock.

The York County Station was in charge of Wm. Little. The flock consisted of 12 ewes, one being a Cotswold grade, 3 Shropshire grades, 3 Oxford grades, one Lincoln grade, and 4 Dorset grades, and a Southdown ram. The ewes were considered to be worth \$8.00 each.

First Year.—They were fed during the winter, 3,100 pounds hay, \$15.50; 1,000 pounds straw, \$1.00; 90 bushels turnips, \$5.40; 22 bushels oats, \$8.80; 700 pounds bran, \$8.20; clover, chaff and oil cake, 75 cents; total, \$39.65; average, \$3.05. The wool weighed 88 pounds, and sold at 15 cents for \$12. It was intended that the lambs from this Station should be placed on the Easter market. As Easter came unusually early in the spring, and plans had not been made long enough ahead the previous fall, it was found impossible to get any of the lambs ready before Easter. The first lamb was dropped on February 11th. During the spring, 6 lambs were sold for \$46. Two were taken into the flock for breeding purposes, at that time at an average of \$7.50 each. The remaining 5 lambs were held over and marketed in the spring of 1911. These were dressed by Mr. Little, and sold for \$48.07. This makes the total receipts from the lambs, \$109.07; average per head, \$8.39. The 5 lambs that were kept until 1911 were placed on the road during the summer of 1910, were fed one-half ton threshed alsike, \$3.00; 323 pounds oats, \$3.42; 65 pounds peas, 87 cents; 60 bushels roots, \$4.80; total, \$12.09; average per head, \$2.42. Total receipts, \$121.07; expenses, \$59.00; profit, \$62.07.

Second Year.—The flock was fed 2,700 pounds hay, \$16.20; 2,250 pounds clover chaff valued at \$6.75; 6,720 pounds roots worth, \$8.96; 2,154 pounds grain, valued at \$24.26. They pastured on the road, and were only charged 50 cents for summer with 50 cents added for dip. The cost for the year was \$57.17, an average of \$4.76. The lambs were sold for the spring trade and received no feed, which is not charged in the feed of the ewes. 22 of them were raised, which indicates that this flock is very prolific. They were sold at various times and at various prices,

realizing in all \$168. 103 pounds of wool brought \$14.99. The total receipts were \$182.99; expenses, \$64.43; profit, \$118.56. Profit for two years, \$180.63; or over \$15 per ewe for two years or \$7.50 per ewe per year, nearly 100 per cent profit yearly.

D. C. Ross was in charge of the Victoria Co., Station. He started with 12 grade Leicester ewes, valued at \$8.00 each, and a Leicester ram.

First Year.—The feed for the winter consisted of 3,000 pounds hay, \$15; 2,000 pounds straw, \$5; 125 bushels turnips, \$7.50; 420 pounds oats, \$4.20; some unthreshed peas, valued at \$2.00; \$10 was charged for the pasture. Total, \$43.70; average per head, \$3.36. 130 pounds of unwashed wool was sold at 13½ cents per pound for \$17.55. The sheep were not dipped. During the year one of the ewes died and was replaced.

Eighteen lambs were dropped. After weaning, their feed cost \$39.11, or \$2.80 per head. It consisted of 3,375 pounds hay, \$11.81; 270 bushels turnips, \$16.20; 21 bushels oats, \$6.30; 1,860 pounds unthreshed peas, \$4.80. One of the lambs was sold in November and 13 on March 27th. Four of the ewe lambs were kept in the flock. These were weighed at the time the others were sold, and charged for at the same price. The selling price was \$6.65, and the weight 2,339 pounds, making \$156.54. The November lambs sold for \$6.32, total, \$162.86, or \$9.05 per head. Total receipts, lambs and wool, \$180.41; expenses, \$98.07; profit, \$82.34.

Second Year.—The feed for the winter consisted of 6,370 pounds hay, worth \$22.29, and 10,920 pounds roots, valued at \$10.92; total, \$33.21; an average of \$2.55 for winter feeding. Fifteen lambs were dropped and 14 lived. On May 10th, all lambs were docked, and the rams castrated on June 1st. The 13 fleeces weighed 135 pounds and sold for 13½ cents per pound, bringing \$18.22. Summer pasture for the flock was valued at \$9.00. The lambs were weighed in August, and put into winter feeding November 17th. During the feeding period they were fed 1,500 pounds of hay, worth \$9.00; 230 bushels



Exmoor Horn Ram.

A prizewinner in England.

turnips charged at 6 cents per bushel, \$13.80; a quantity of straw, worth \$4.58; 994 pounds of grain, valued at \$12.42; a total of \$39.72, averaging \$2.84. On March 17th, 12 of them were sold, and the two which were kept for breeding valued the same as those sold. The weight of the 14 was 1,720 pounds, at \$7 per hundred, brought \$120.40. Total receipts, lambs and wool, \$138.62; expenses, including dip and interest on investment, \$90.02; profit, \$48.60. Profit for two years, \$130.94, or \$10.91 each for two years, or \$5.45 from each sheep per year.

The Brant Co. Station was in charge of W. A. Crichton, who started with 10 grade Shropshire ewes, worth \$8.00 each, and a Hampshire ram.

First Year.—The flock was fed during the winter 5,120 pounds of hay, \$23.04; 82 bushels roots, \$8.20; 9 bushels oats, \$3.60. The pasture for this flock was valued at \$17.50, making a total cost for the year of \$52.34, or \$4.76 per head. The sheep were not dipped. Seventy-seven pounds of wool was sold at 14 cents, amounting to \$10.78. The ewes were in particularly good health in the spring, and considerable credit for this was thought to be due to the exercise they got. This was attained by having a feed rack at each end of the yard, and with feed in both, the sheep were continually running back and forth.

The lambs numbered 16. One was sold in November, and the balance kept until May 1st. The winter feeding of the lambs consisted of 2,250 pounds of hay, \$9; 13,500 pounds roots, \$18; 3,000 pounds oats, \$30; and 2,250 pounds ensilage, \$3; total, \$68, or \$4 per head. The lamb sold in the fall went away before feeding commenced, and brought \$8.00. The remaining

15 when sold weighed 2,150 pounds, and sold at 7 cents per pound, bringing in \$150.50. Total receipts for lambs, \$158.50, an average per head of \$9.91. It should be noted that at this Station the charges for pasture and also for some of the feed are high. Total receipts, \$196.28; expenses, \$118.64; profit, \$50.64.

Second Year.—During the winter the flock was fed 4,915 pounds of hay, valued at \$18.40; 4,680 pounds roots, \$5.46; and \$3.60 was allowed for 360 pounds grain, making a total of \$27.46, an average of \$2.49 for winter feeding. The pasture for the flock was valued at \$15.75. In all 18 lambs were dropped, one ewe raising two pair of twins during the year. In January she dropped a pair, which were sold for Easter, bringing \$11. In October she dropped another pair, which were sold in February for \$15. The other lambs were not fed over winter, but sold at various times in the fall, \$97 being received in all. The flock yielded 73 pounds of wool, which sold for 15 cents per pound, \$10.95. Total receipts, \$107.95; total expenses, which include \$3.00 for a ewe which died, and \$2.08, which is the difference between the value and insurance received on one killed by lightning, were \$60.11; profit, \$47.84. Profits for two years, \$110.75, or \$11.07 per ewe for two years, or \$5.53 per ewe each year.

The total profit from 97 ewes and 9 rams, composing all the flocks, was \$802.88 for the two years or \$7.57 per head, started with including rams. It is scarcely fair to charge a ram up to so small a flock, as he would do for a flock of four or five times the size of these. Reckoning ewes alone, the average profit was \$8.27. After paying for all feed and allowing interest on the investment, and counting nothing for the manure and the value resulting from weed destruction, and charging losses, which were in most cases heavy, against the flocks, these ordinary grade ewes, not pampered or especially cared for, in the hands of ordinary farmers operating mixed farms, covering conditions good and bad over the entire province, made a profit of \$8.27 each. No wonder the writer of the bulletin, announcing the results, said:

"When we consider the results of these experiments, we are bound to agree with the sheep breeders who claim that sheep raising in Ontario pays. Try it with a flock of ten or twelve grade ewes and a pure-bred ram, and increase the profits of your farm."

The Horn Fly.

The United States Department of Agriculture year book for 1912, just issued, contains some very useful information. Among others we note a short history of the horn fly, with which most of our readers are familiar. Nearly all have seen the myriads of these little pests annoying cattle by perching in a mass near the base of their horns, where they bite and draw the blood. Of this insect the year book says:

"The horn fly is one of the most widespread and injurious insects in this country. It was introduced into the United States between 1885 and 1887, and its spread has been exceedingly rapid. In 1889 it had invaded most of New Jersey, and a considerable part of Pennsylvania, Maryland, and Virginia. New York, Ohio, Kentucky, Georgia, and Mississippi became infested about 1891, and in 1892 the insect had spread northward to Connecticut and Canada and westward to Michigan, Ohio, Indiana, Iowa, Louisiana, and Texas. Apparently it was first recorded from Colorado in 1894. Prof. W. B. Herms states that as nearly as he can determine the fly reached California in 1895. Two years subsequently it was transported with live stock to Hawaii, where it soon became a serious pest. Its spread northwestward appears to have been slower. Prof. J. M. Aldrich states that it reached Idaho in 1901, and there are certain sections in Montana where the fly has become established within the last two or three years.

"This insect is related to the house fly, but it is smaller and provided with lance-like mouth parts. The ox is its principal host, although the horse is sometimes quite severely attacked. The losses sustained are entirely due to the worryment and irritation produced by the bites of the fly and by extraction of blood. This worryment results in loss of flesh and great reduction in milk production. Sores are sometimes produced by it which may become infested with screw worms. In the Southwest the flies usually become very abundant in the spring and again in the fall, the hot summer weather checking breeding. Rainy springs and falls are the most favorable and cause the insect to appear in greater numbers. The flies spend the greater part of their existence on the animal, leaving only for a few seconds at a time to deposit eggs in freshly-dropped cow manure, in which the larvae develop rapidly. They usually work downward to the surface of the earth, and there transform to reddish brown pupae, from

which the adult flies emerge in from 10 to 20 days from the date the eggs were deposited. "Under ordinary conditions, and where few animals are kept on the farm, breeding can be largely prevented by scattering the manure every three or four days. This allows it to dry out, and thus prevents development of immature stages. The use of manure spreaders has been found to be well adapted for the distribution of manure from dairies or farms, where a considerable amount of it is accumulated." Where animals are under control, repellent substances, such as train oil, placed on the parts most attacked have given fair satisfaction. All such substances have to be applied at frequent intervals, thus entailing much trouble and expense. It has been found that where dipping of cattle is practiced against the Texas fever tick, mange, or lice, the vats may be provided with splashboards along the sides so as to turn the spray over the animals as they plunge into the dip, and thus destroy a large percentage of the flies which are on them."

Advertising Pure-Bred Cattle.

Failure to properly advertise their operations and their herds often causes breeders of pure-bred cattle to fail of achieving the highest possible financial success in their business. This is perhaps a condition that might be naturally expected, since the cattle breeder is generally recruited from the ranks of the farmers and cattle feeders. He has been engaged in producing, heretofore, one of the world's staples, food. The open market was always ready with its fixed price for his product. He had neither to solicit buyers, nor to create a demand for his products. As a producer of pure-bred breeding cattle, however, the conditions are different. He now must both solicit buyers and convince them that his cattle are desirable, will be profitable, and are as good or better than those they can buy elsewhere for the same money. In other words, he fixes his own price, and must be able to show his prospective customer that that price is right. Before, he could only expect to get the same price for his stock that his neighbor got for stock of equal quality, finish, etc. Now he may be able by reason of careful selection of foundation stock, pedigree, and prepotency being taken into consideration, as well as individual merit, to outsell his neighbor, two to one. Before, his market was a common one, to which all had the same access as he. Now it is a limited and special one, with fully as keen competition and with customers scattered all over the country. Hence the necessity for publicity for the pure-bred cattle breeder.

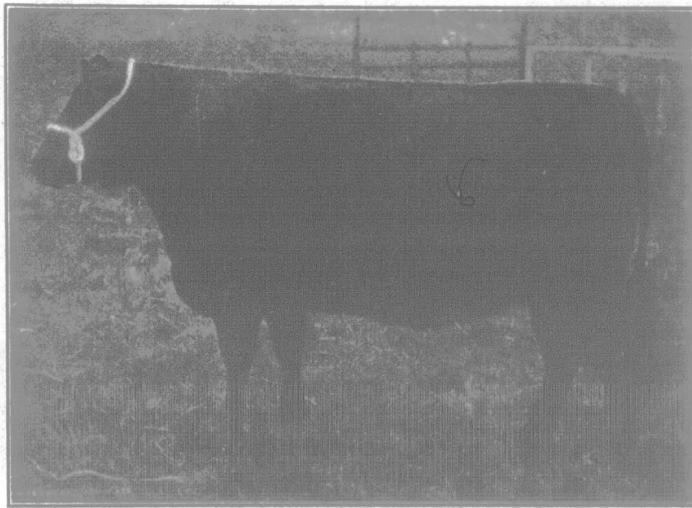
There are thousands of pure-bred bulls of good type and individuality sold to the butcher, which, if advertised for breeding purposes, would return twice or three times the amount of money to the producer. There is a strong demand for all these surplus breeding bulls. If the breeders of these pure-bred bulls would use the same means to introduce their cattle to the consumer that the proprietors of the various breakfast foods, farm machinery, etc., use to create a demand for their wares, beyond doubt the result would be astonishing to aforesaid breeders. Wider publicity of the merits of pure blood, the peculiar fitness of given breeds for given conditions, the established worth of certain lines of breeding within a given breed and the strong points of the individual breeder's herd are the things that will do most to add to the profits from a pure-bred herd.

Advertising being essential to the greatest success, let us examine the questions of mediums, methods, and details. The object of advertising is to call the attention of men who will be or should be purchasers of one's particular kind of cattle to the merits of his herd, and the desirability of patronizing him in preference to other breeders. This being the case, the investment in advertising space should be made where the largest number of these prospective customers will see it. To that end it is, of course, logical to use the columns of good, strong, agricultural, and live stock papers. Buyers of cattle will be more apt to see the advertisement if it is in a journal with a lively and up-to-date cattle department, and new converts to the "pure blood idea" will search for a buying place in the columns of the journal whose editorial or news columns were the means of leading them to see the error of using scrubs or grades. Where there are divisions of the trade, as in the beef breeds, into rangemen, farmers, and breeders, space can often be used to good advantage in various papers circulating more or less exclusively among these various classes. It is a good plan sometimes to put out circular advertising if one can get a reliable list of the names and addresses of men who are known to be interested in the class of cattle he has for sale, though there is danger of wasting time and money if the lists are not care-

fully selected. If the circular method be used, care should be exercised to have a neat and tasty job of printing done, and have the circular pointed and clearly understood.

Having invested in space, which, by the way, frequently comes at a seemingly high figure, it is to the breeder's interest to make the most effective use possible of his purchase. This means that the wording and illustrations (if the latter are used) be carefully chosen to tell just what one has for sale, dwelling especially upon its peculiar points that are lacking in other cattle, and striving to convince prospective purchasers that the animals will make money in their hands. Whether or not to advertise the price is a mooted question. Sometimes it may be justifiable, but often, if not generally, the tone of the letter of inquiry will give a hint about the notions of the prospective customer regarding price that can be taken advantage of in closing the deal, resulting in a more remunerative price being received than one would dare ask in an advertisement. Then, too, the quoting of a price in public print puts one at the mercy of his competitors and gives them a talking point, whether the price be high or low.

Profitable advertising results in inquiries for stock, and these should be promptly and fully answered, giving full particulars about the breeding and individuality of the cattle and emphasizing the good points of the animals offered, as well as of the breed, if a new convert is the enquirer. If good photographs of the cattle can be had they often help in closing sales. And in this correspondence is another place where the



Ermia.
A two-year-old Aberdeen-Angus heifer, champion at Glasgow this year.

usage of business men in other lines may be profitably followed. Good stationery and promptness in answering are essential. A typewriter will come in handy here and give the correspondence a more business-like appearance. If the first letter does not make a sale, it is well to try following it up with more particulars, or descriptions of other animals, and keep after the enquirer at regular intervals as long as he is known to be in the market. Good and well-prepared literature about the herd, put out in attractive folder or circular form, can often be made to assist in convincing buyers, when judiciously used. Smirchy, ill-printed matter, however, is worse than none at all, as a rule. These circulars should tell of the foundation stock, the herd bull, and the merit of his progeny, and of one's experience in the business, prizes the stock have taken, and any other items that will have an influence with prospective purchasers. They should stick as close to the truth as does the other advertising matter, which should be "closer than a brother."

If one advertises in a number of papers it is just as important for him to take as careful steps to know which of his advertising is bringing him results in inquiries and sales, as it is for his friend—the advertiser of machinery or other commodities—who is very particular about his part of the business. Cut the non-paying papers and methods out of the appropriation, and use only those that keep the sale expense down to a minimum. In advertising, as in every other line of business, experience is a mighty teacher, and if we but know how to profit from her instruction we are on the road to success.

In advertising, one should keep everlastingly at it if possible. Spasmodic advertising, like every other spasmodic effort, is wasted. When an advertisement has been put into a periodical it should be kept there until one is sure it is not paying. It should be kept there all the time, and not an issue missed, for the number of the paper

skipped may be the issue the man examines who is looking for that kind of cattle. Furthermore, if one's advertisement comes to be an integral part of the paper each issue he soon gains a prestige and an air of permanency associates itself with the announcement, which is an influence for success. One should not think that he should never change copy; a frequent change of copy is necessary, and this change should be made according to the conditions and circumstances of everything at the time the advertisement will appear in the paper. It is well to have something new to say as often as practicable.

W. H. UNDERWOOD.

Johnson Co., Ill.

Would Like Auction Marts in Canada.

Editor "The Farmer's Advocate":

Some time ago I saw in your paper a letter from a visitor to Scotland. In the letter he made some remarks about auction marts for the sale of live stock, such as are conducted in Scotland. Many weeks have passed, and I have not seen any further letters on this important subject—perhaps not considered important by the majority, but nevertheless by me. Is it not time that a move was made towards establishing markets in certain sections? We cannot sleep forever, and allow dealers to get all the profits. I have driven twenty miles after a horse before finding a suitable animal, and also went long distances after cattle, which journeys might have been saved if there had been a weekly or fortnightly auction mart in the district. Hundreds of people do the same every year. Auction marts conducted in Scotland pay a dividend, so why should they not do so in Ontario? On the farm next to me lives a cattle dealer, and I know that people have sold him cattle and other live stock, and he has resold them again at a very large profit. Now if there had been an auction mart in the district the seller to the dealer would have got a bigger price, and the buyer from the dealer would have saved some of his money; so in that instance the dealer was an unnecessary person, and he would have been substituted by the market, and the market would only have charged a moderate profit for doing the business. I think that is a good example. I would like to hear the opinions of Canadian farmers on this subject. I have been over two years in Canada, and have a farm. Elgin Co., Ont. GEO. McCULLOCH.

THE FARM.

One Large Silo or Two Small Ones.

I intend building a concrete silo for about 50 to 60 cows. Will you kindly let me know whether I should build one large one or two small ones. Please let me know what you think would be the proper size for two small ones, 12 by 25 or 14 by 30 or smaller. Was thinking of making them close together and using one wall in centre. Any information will be greatly appreciated, as I am an old subscriber. J. F. O.

Nearly a year ago we visited a prominent Ontario dairyman who was milking seventy cows and had four silos. "Look here," he said shortly. "some agricultural writers advocate small silos for summer use. Look at that," pointing to a big pile of brown stuff that had just been thrown off a silo recently opened for July feeding. "And look what stuff we're still into," pointing to some very brownish silage in the mangers. It isn't really fit to feed but they eat it, and we thought we had wasted enough. One big deep silo is better than an extra one for summer use."

We are inclined to think he is right. Our silo at Weldwood is forty feet high by fourteen feet in diameter, and if building another we would make it more rather than less. A silo of requisite diameter and forty feet depth, solidly filled, will enable one to feed from filling time in late September to pasture season in May.

and still have three or four feet in the bottom (partly underground) for use during July and August. The compact silage left over in the bottom of a deep silo will not spoil, to a depth of more than about four inches between early May and July, and when this is thrown off there will be less deterioration from day to day than there would be near the top of an extra silo of smaller diameter. In economy of construction and in settling capacity, there is decided advantage in one large silo over two smaller ones. The only disadvantages are a slightly greater maximum of power at filling, and the possibility of the proprietor subsequently wishing to reduce his stock and grow corn enough to fill only one small silo. In that case a large one half filled might present too large a feeding surface to be lowered at a satisfactory rate from day to day. The latter objection, however, is problematical, and the first may be largely obviated by an extra filling window part way down from the top. All things considered, our preference is very much for the large, and especially for the deep silo. In any case make it round. One 10 by 40 or 16 by 45 should meet your needs. If, however, you should decide to build two smaller ones, do not on any account make them less than 30 feet deep, more rather than less. Two silos 12 by 30 would not hold nearly as much corn as one 16 by 40. Their relative capacity would be about 70 tons 'apiece for the smaller ones to 180 or 200 tons for the large ones. The extra settling capacity of a deep silo is almost incredible to those who have never had any experience in filling.

Big vs. Small Farms.

A great deal of difference of opinion exists regarding small farms and large farms. One man, well-versed in agriculture and familiar with all its problems in the twentieth century, will in all earnestness state, fully believing that he is right, that the small farm worked on an intensive plan is the surest money maker. Another person, possessing an equally well-trained agricultural mind, and understanding present-day conditions just as well will just as earnestly plead the cause of the large farm and its possibilities for yielding profits. In conversation not long ago with a young farmer who had studied the question with regard to his own district, an inland county in Western Ontario, he pointed out that to make money on the farm it was necessary to employ labor and reap a profit from it, as is done by large concerns operating in the city. Each class of farm (the small and the large) offers an opportunity to do this. And he also pointed out that the class of farm which can be properly operated depends to a large extent upon the location of the farm and its soil conditions. The man situated where fruit growing is a success, can very profitably devote his time to intensive fruit growing, and a comparatively small acreage may be used to employ a large number of men. Likewise, land suited for vegetable growing, and situated close to a large city, may be intensively farmed. Poultry keeping, bee-keeping, and such sidelines may be operated to advantage with this class of farms. But land not close to any city, and not adapted to fruit culture either small or large, and not vegetable land, must be operated on a different basis. Live stock of some kind is necessary. Dairying, beef cattle, pigs, sheep, or horses must be kept to keep up soil fertility, and must form a large part of the income of the farm. In short, the farm must be a mixed farm, with perhaps some line of stock as a specialty, or it may be that pure seed of some kind is made a leading feature. In any case stock is kept to maintain fertility. Under such conditions as these the man with whom we were talking believes that the best chance comes with the large farm, or, as he put it "intensive farming extensively." The question is—Where will the labor come from? A large farm, well managed, is in reality farmed intensively. All the by-products are utilized, and all the side-lines operated to best advantage. The varying conditions in different sections almost seem to demand each class of farm, and in some places one will prove the better, while in other places the other will be more profitable. If some one would just evolve a means by which so many of those people now in the cities, and who are said to be banking after farm life, could be successfully transplanted on the intensive farms of the country, and include in the same system something to turn the tide of rural population cityward back to the country where it belongs, and where more good would be accomplished for the nation, and for the laborer as well, each class of farm properly situated would prove profitable. Labor is necessary for the large or the small farm well filled.

Windmill for Pumping.

Editor "The Farmer's Advocate":

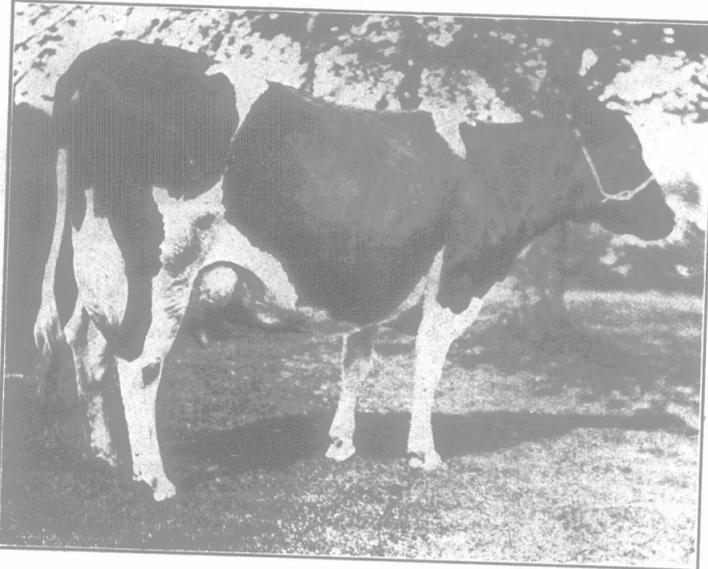
"Does a gasoline engine pay?" is a question, sometimes asked. To answer this question, "yes" or "no" does not do. Much depends upon the conditions. The average dairy farmer who has much work for his engine as pumping water, grinding grain, cutting roots, and ensilage, separating milk, churning, etc., cannot afford to be without one. But if a man simply requires an engine to pump water he would do better in many respects to erect a windmill. There are very few days without sufficient wind, and, if a man keeping from fifteen to forty head of live stock, has a tank holding about six hundred gallons he can almost be assured that he never has to pump water by hand, provided, however, the proper care is given, that is, letting mill run to keep the tanks full all the time so that he is prepared for calm days and oiling it at least once per week.

Oiling windmills is on some farms a very neglected matter. Anyone can understand that this is hard on the machine. During harvest some farmers are very particular about oiling their machine every hour or so, however good; but let the windmill run, day for day till it finally calls for oil by "squeaking."

Let a gasoline engine, or, in fact any other machine run without oil and you will soon notice that it turns harder and harder. Windmills sometimes do not pump a whole day simply because the bearings are all dry and consequently turn hard. If any bearing has been neglected till it "squeaks" it is well to use a little graphite in the oil to smoothen the bearing. Graphite is obtainable from a drug store.

Windmills are, of course, exposed to the wind, but well-built machines and towers are seldom damaged. A windmill should never be left running through a storm. Many windmills are destroyed in this way.

Around here two windmill wheels were blown down by the storm on Good Friday, the owners of which did not take the proper care. It is well to see that all nuts are kept tight. This is true with all machinery. No machine can prove durable if bolts and rivets are loose.



Jennie Bonerges Ormsby.

The only two-year-old to make 832.9 lbs. of butter in twelve months, and quality in the Canadian R. O. P. She is the only four-year-old in Canada to make 30.76 lbs. of butter in seven days, and 125.44 lbs. in thirty days, and the only cow to make 33 lbs. of butter in seven days, and 125.20 lbs. in thirty days. Owned by D. C. Platt & Son, Hamilton.

Care should be taken that the pull-in wire is in a good condition, especially if the windmill is of the old-fashioned type. By this I mean if the pull-in wire breaks, mill starts running. On many new makes if this wire breaks the mill stops. The wire should be a number nine, soft steel or, better still, copper wire, as galvanizing is sometimes poorly done and the wire corrodes. Breaking of this wire is one of the most frequent causes of storms destroying windmills.

As I was speaking of the storm of Good Friday I just remember the question in "The Farmer's Advocate": "Did your silo blow down?" in which readers were asked if they had heard of a cement silo giving way before the eighty-mile gale. I must answer this, on my part, in the negative. Some stave silos went down in this locality, but no cement. I believe cement silos are fire and storm proof.

To get back to the windmill question I would say that my windmill stands right on the well, and the tank on the barn floor seventy-five feet

away. I use a double-action force pump, so that I can get water at the well for house purposes, and by turning a lever make the water go to the tank. I have seldom experienced being short of water. S. K.

Waterloo Co., Ont.

THE DAIRY.

Decrease Dairy Labor.

A decrease of labor with no diminution of income, but with general improvement of results, is a combination which appeals to any one. Labor-saving machinery and thoroughly efficient machines might just as well be used by dairy farmers as by any manufacturer. So the questions come: Have we efficient cows? Do they save or make work? Are they so good that they decrease both comparatively and actually the necessary amount of labor in keeping cows, and at the same time increase the income? Every dairy farmer needs to answer such questions as applied to his herd, and he can answer them satisfactorily when he keeps dairy records.

A statement made by the Dairy Division, Ottawa, regarding Ontario cows last year, was that the dairymen are keeping sixteen cows to do the work of ten. So it is quite possible to cut down work one-third, and rejoice because possessing more efficient cows. To the scrap-heap with the old junk!

A Quebec dairyman, after one year of cow-testing, writes the Dairy Division that he now gets as much milk from his thirty-two selected cows as he used to get from his larger herd of forty-two cows. Ten inefficient were beefed. Dairy farmers have not time to waste working for poor cows, so make sure that each one pays. C. F. W.

Dairying and Grain Growing Not Incompatible.

The keeping of a small dairy herd, sufficient to meet current expenses, need not interfere with the grain-growing possibilities of the farm, says the United States Year Book. On the other hand, in good years the wheat crop can be sold

for cash, and the proceeds invested in improvements instead of being needed to apply on old bills. Dairying will enhance the profits of grain-growing in several ways: First, in poor years, when it becomes apparent that the grain crop is going to be a failure as grain, it can be cut and harvested as hay, or pastured; or, if the grain is of a poor grade, it can be fed instead of marketed. Thus a total loss may be converted into only a partial failure, because of the dairy herd. Second, results at dry-land experiment stations show that following a cultivated crop like corn, the yield of wheat is as good, or better, than that following summer tillage. The expense of good summer fallowing is found equal to that of growing a crop of corn. Fed to a dairy herd as silage, the corn crop is likely to average as profitable as any product, and, in addition, the cost of wheat production is reduced to the extent of the expense of summer tillage.

Third, most valuable of all results, though, will be the improved physical, chemical, and biological condition of the soil, because of the diversification of crops and the application of stable manure. In favorable years the yield and quality of grain will be improved, and in poor years drought will be less disastrous. Dairying can be conducted profitably on a small scale, and is possible to the settler with small capital. Sheep and beef cattle, to be handled with profit, require considerable investment of capital. A small dairy herd can be handled on every homestead, and the product, regardless of quantity, is marketable for cash at the nearest creamery. Cattle and sheep need to be shipped in carlots, and should be of a uniform grade to realize the best market.

Feed may be shoveled into cows by the bushel, but without good milking returns will disappoint.

HORTICULTURE.

Remedies for Root Maggot.

Owing to the difficulty of destroying root maggots and other subterranean pests and the cost of chemicals for the purpose, growers depend largely upon methods of prevention. To be thoroughly effective these methods should be employed before the fly's eggs are laid.

A common method for deterring the parent flies from depositing eggs consists in placing sand soaked in kerosene—a cupful (6 fluid ounces) to a bucket of dry sand—at the base of the plants, along the rows. This mixture will also kill young maggots attempting to work through it.

For all forms of root maggots a carbolized form of kerosene emulsion is effective. This is prepared by adding to one pound of soap, boiled in one gallon of water, one-half gallon of crude carbolic acid, and diluting the whole with from 35 to 50 parts of water. This mixture is applied about the stalks of the plants affected. It is best to use it a day or two after the plants are up, or are transplanted, and to repeat every week or ten days until about the third week in May.

Mineral fertilizers are useful as deterrents, particularly when employed just before or after a shower has thoroughly wet the ground. The principal fertilizers for this purpose are kainit, nitrate of soda, and sulphate or chloride of potash. They may be used as top dressings before planting, or if not employed until afterwards they should be applied as nearly as possible to the roots, the earth being turned away from the plants for this purpose. These fertilizers, also, by stimulating plant growth facilitate recuperation from root-maggot attack.

There is great danger in the use of other fertilizers, such as stable manure, cottonseed meal, and organic fertilizers, comprising moldy leaves, dead plant life, and even fish scrap. In an account of this species published several years ago the writer stated that numerous instances had accumulated lately, and a long list could be furnished—where the presence of the insect could be traced to the causes above-mentioned. It is advisable therefore, to avoid the use of manure of any kind, rotted leaves, or other organic fertilizer, and, above all, to avoid further planting in fields which have been infested, or contain diseased onion plants, or where cabbage, cow peas, or any other plants have been turned under.

As soon as seed fails to appear at the proper time, or the plants show signs of wilting and maggots are found to be present, the seed may be hoed out, or the injured plants pulled and destroyed, together with the younger maggots.

Most of the methods mentioned above have been used with success against onion maggots and other root-feeding species, and are all that are required in many cases of ordinary infestation of vegetable roots. Other remedies have been tested; mostly, however, without avail.—F. H. Chittenden, in U. S. Year Book.

One Crop at a Time.

After all that has been said and written to the contrary, many indifferent fruit growers still persist in trying to grow a crop of grain or hay in the apple orchard—trying to get two crops from the land in one year, and this often with very little cultivation or fertilization. It is said that a crop of apples takes as much out of the land as does a crop of wheat, and yet some will endeavor to produce both with less expense of putting land in condition than is given in the preparation of a field for winter wheat alone. A summer fallow is sometimes prepared for wheat, but this class of orchardist never summer fallows his orchard. When the double crop is harvested, perhaps a half a crop of wheat and practically no good apples, the grower decides that there is no money in fruit and declares in favor of the grain crop vowing to continue it and let the apples go. The bearing orchard is no place for mixed farming. It is one field which should be pulled out of the general rotation and given special orchard treatment. This means that fertilizer should be applied regularly and liberally, cultivation should be frequent and trees should be ripened up by using cover crops. The time to get in the cultivation will soon be over for this season, and the date for sowing the cover crop will soon be here. Keep the disk, or cultivator, going until the middle of July and then put on the cover crop of clover, buckwheat, cow peas, rye, or whatever you choose. The cover crop is not harvested, and all the plant food taken up by it is stored and conserved for the future use of the trees. Fruit growing and grain growing cannot be carried on successfully on the same land at the same time.

Is Lead Arsenate Affected by Frost?

Fruit and potato growers who have had spraying materials held over winter are always confronted with the question whether these have been depreciated by the time or conditions of storage. It is well known that lime sulphur is seriously weakened by freezing. It is advised, also, to keep lead arsenate protected from frost, though the necessity of this is not so clear. Prof. Harcourt of the Ontario Agricultural College, says so far as he knows lead arsenate would not be affected in any way by frost. It is a fully oxidized salt, so that it could not be affected in this way, and he cannot see why frost should in any way influence its value as a poison. He used some in his own garden this summer that was exposed to a low temperature the whole winter, and it has given excellent results. Naturally, if the container has been opened the amount of moisture will be less and the percentage of arsenic greater than in the original substance.

POULTRY.

Separate the Chickens.

Some very successful poultrymen separate their chickens as to size and age, and also according to sex, the former while the chickens are quite young and the latter just as soon as the sexes are recognizable, and a few of the more precocious males begin to "boss" the others. Some of the Mediterranean breeds develop at an earlier age than do the largest English and American breeds, and require attention earlier than do the latter classes. If the birds of both sexes are left together it will be noticed that a few of the males having the sex instinct a little earlier than the others commence to show their "authority" around the pen, with the result that the other birds become timid and remain away from the feed when their pompous mates are busy eating,

surprising how well they will stick to the place in which the first days of their lives were spent. Where this is done the various broods at least may be fed separately. But as the chickens become older the difficulty grows, they wander from pen to pen, and something is necessary to protect the younger stock, and the few birds which, for some reason, have not done as well as their mates. Small chicken-wire enclosures to keep the different sizes separated would be a good idea in this case.

The Hen in the City.

Editor "The Farmer's Advocate.":

I have a fellow-feeling for your contributor who gave his experience with hens in the city. I like once in a while to come across one who will take up a sideline mostly for the fun of it, or for the satisfaction he gets out of the work without squeezing for every cent he can get out of it. There are many sidelines a city man might take up that would yield him larger returns in cash than this man got from his hens, but think of the satisfaction of having eggs on your table that you're not afraid to boil in the shell without dreading to crack them, not knowing what you may find therein. Also the comfort it is to have a chicken that you know will roast, or a fowl that you don't have to start boiling the day before, because the age is uncertain.

I too had an experience with hens in the city, but I think I beat your contributor in returns. I didn't feed any rats. I knew them of old, and began by making the henhouse rat-proof with metallic siding. The lot had 80 feet of frontage (or backage) and 40 feet of length was available for the hens. The house was built 3 x 12, with a 4 x 3 closet at one end for storeroom, with slanting roof, the back being on alley. I also knew the hen of old, and was wise to the fact that a small number will give better returns per hen, than if crowded. Therefore, I only wintered nine hens and a rooster. I wanted a good table fowl, as well as an egg producer, so decided on White Orpingtons. Five of them sat, and averaged about 10 chicks each. Some of the eggs were sold at \$1.00 a setting, and some of the best young stock went off for breeding purposes at good prices.

It pays the city man who keeps a limited number of fowls to have them pure-bred. They cost a little more to begin with, but he is sure to get back the extra outlay in either the sale of settings or breeding stock. But I don't consider it fair to undersell the poultry fanciers. They go to much trouble and expense to keep up good, pure-bred strains which are badly needed throughout the country. Therefore amateurs should do nothing to injure their business.

City folk won't stand trespassing hens. That was another reason why I chose a large breed. Plymouth Rocks, or Orpingtons will scarcely bother going over a 36-inch fence, if given plenty to eat. The 30 x 40 ft. space was fenced with 58-inch poultry fencing, and a fence went down the middle, dividing the yard-space in two equal portions. A door opened from each of these yards into the henhouse, but one 4 ft. gate did at the opposite end, by hanging it midway between the two yards, which were partitioned from the house yard of 20 x 30 ft.

In spring the hens were shut out from one yard simply by closing the door on that side. The ground was spaded up, and planted to radishes, lettuce, onion sets, spinach, early cabbages, early peas, beans, and sweet corn. By July 1st the bulk of this crop was used up, or nearly ready for use, so the door leading to it was opened, letting in the hens, and the other one closed. The hens would be in this new run through the blazing heat of July and August, so in addition to the corn left standing, sunflowers and sugarcane were sown to provide shelter.

The other run was then spaded, and planted to tomatoes, late cabbages, cauliflowers, turnips, and celery. As early as possible in fall, the hens were again transferred to this yard, so that the



Royalton Canary Hartoj.

The only bull in Canada, with the exception of his brother, whose dam made 34.60 lbs. of butter in seven days, and gave 116 lbs. of milk in one day, and 6,196 lbs. in sixty days. Owned by D. C. Flatt & Son, Hamilton, Ont.

and run from them when these better developed birds show a desire for a test of strength, with the result that all those males which cover before their mates do not make the satisfactory growth which they should make, and the more-matured birds gain nothing from conditions either. When this stage arrives the sexes do better separated.

It is also a practice to be recommended to keep the birds in the various pens as nearly as possible of a size. Little chickens do not as a rule do as well in the same pen with and feeding from the same troughs as much larger chickens. Different hatchings, if the dates are far apart, do better kept in different pens. Inferior, sickly, or small chicks should invariably be kept away from the best stock. It is better for both. On the average farm, however, the few chickens raised have such a large free range as soon as they are big enough, that not so much attention to these points is necessary, but even then it is often noticed that when the chickens are all fed in one large flock, including big and little, weak and strong, pullets and cockerels, many of the smaller and weaker birds do not get their share, and are timid of a few of the bigger, stronger cockerels. It is well, where possible, to raise the various broods in different small pens, and teach them to go to roost in their own pens. This is not difficult, for it is

other could be sown to winter rye. This would provide them with green food in spring, and permit a rotation of crops.

Than this, there is no better sideline for the man who is confined in office or factory. When counting his gain he should take note of the improvement in health and spirits brought about by the wholesome work.

I liked it so well that I now have a country home, where I can disport myself for at least a part of the year, unless I decide to stay for good.

Essex Co., Ont.

THE KADI.

FARM BULLETIN.

Twenty-five Years' Experiment Record.

The complaint is often made that the results of the work of agricultural investigations are often lost to many for whose information they are issued, by being buried in "blue books" too complex and prolix to be waded through by busy farmers. One good service of an alert agricultural press, it might incidentally be observed, is to keep its constituency well informed regarding this experiment, and conclusive demonstrations of these institutions. As a variation from the orthodox style of report or bulletin there has just been issued by the Department of Agriculture, Ottawa, a unique review of the work of the Dominion Experimental Farms from 1886 to 1912, during which long period Dr. Wm. Saunders, who planned them, was their guiding mind in a more literal sense than is sometimes the case. A serious consciousness down to the minutiae of the plans which he initiated and carried on distinguished his directorship. The preparation of this resume of the outstanding achievement of the experimental farms was entrusted to Jas. B. Spencer, B.S.A., editor of the Publications Branch, and as might be expected from his previous work of this character, it has been admirably done. From a vast store he has selected with a discrimination that will appeal to practical men, and the illustrations add beauty as well as utility to the little volume. A number of them given in pairs show the progress of horticulture and arboriculture of several of the farms, vividly recalling the accuracy of a comment once made by "The Farmer's Advocate" regarding the Central Farm, which the genius of Dr. Saunders transformed from a wilderness of drifting sand until it blossomed as a garden.

The achievements with cereals like Marquis wheat, the rational housing of swine, the advantage of applying fresh stable manure, and other matters with which our readers are familiar, have due prominence, and under the present regime, with more adequate equipment, Mr. Spencer predicts a future of still greater usefulness. Excellent portraits of Dr. Saunders and the Minister of Agriculture, Hon. Martin Burrell grace the early pages of the work.

Well, -- Why?

Editor "The Farmer's Advocate":

In the editorial notes of the June 5th issue, concerning the complaint of the Saskatchewan farmer, that farmers did not get any help from the Government, or got it only after a long wait, you use the above words. You do well to ask that question. It would be better for us, and better for Canada if every farmer in it worked for the solution of that question.

If we take a look over our members of parliament the solution is, I think, easily found. Farmers, hard-working men, compose seven-tenths of the population, and produce seven-tenths of the wealth of the country, but when it comes to being represented in parliament where they could have a say in how the wealth they produce should be spent, they tell me you can count the real farmers on the fingers of one hand, or five out of a total of two hundred and twenty. Do farmers ever stop to consider what a difference it would make if they had one hundred and twenty bright and up-to-date young farmers down there to battle for their rights? Why doesn't every agricultural constituency elect a farmer? Why? Mr. Editor, you do well to ask that question. Why don't we use common sense on these political questions?

Well, why?

STYLO.

The business men's trip to Canada of the *Illustrirte Zeitung* of Leipzig, Germany, has been postponed till next year.

Country Happenings.

By Peter McArthur.

It took fully a month for the people of this district to find out how much damage was done to the apple orchards by the May frosts. Because there was a great show of blossom many thought that their orchards had escaped injury, but reports are now coming from all sides, and it seems that we are all in the same fix. There will be no apples of the early varieties, and very few of the late varieties. This is particularly unfortunate as many people who had never cared for their orchards before were caring for them this year. I am afraid that the frost will do about as much damage to our young apple-growers' association as it did to the fruit, for it will be hard to get some people interested a second time. And just as we were finding out the extent of the May damage from frost the June frost came along. At the first glance I thought that it had taken everything except my typewriter, but I find that the damage is confined to some tomatoes, early potatoes, and sweet corn in the garden. When the weather turned cold on Saturday we covered all of these tender things and left them covered until Monday. On the potatoes we tried the pioneer method of hoeing the earth over the tops. On Monday we uncovered them for it would not do to leave them buried too long, and on Monday night the real frost came and cut them to the ground. All the forehanded people who had their corn in early have had it so badly damaged that they are forced to replant, and although I was late in getting the spaces between the trees in the new orchard ready for corn, I am now starting on an equal footing with nearly everyone else. The damage to the corn was very considerable, and altogether farmers of this district have had a hard time of it with the frost this season.

This week I have a dog story to tell, and a beautiful moral goes with it. Sheppy, the Collie, did something that should give him a high

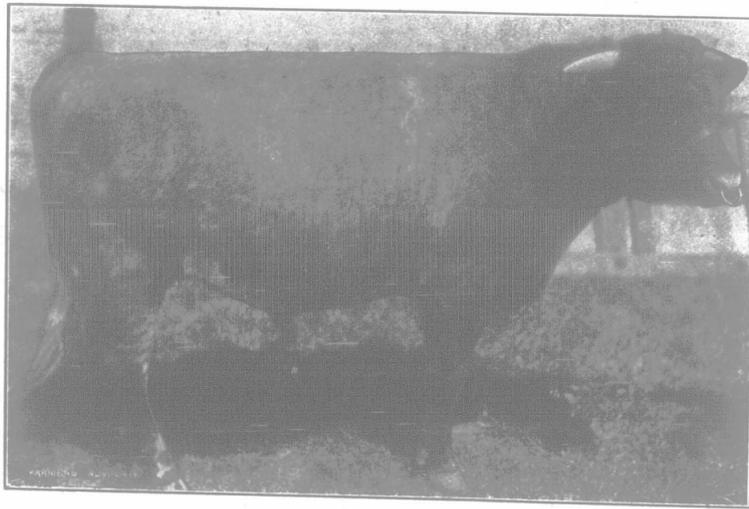
the road, and he has never been trained to fetch and carry like other dogs. Now will someone kindly explain how he came to bring home that parcel at that particular minute. He has never before carried anything home. If he had been one of those wonderful dogs we sometimes hear so much about this achievement would add to his fame. Everyone would be sure that he had understood all that was being said and had gone after that parcel, but as there is nothing in his past life to justify such a theory no one will give him credit. As a matter of fact, I do not believe myself that he understood and went after the parcel. The fact remains, however, that he brought it home in his mouth in good condition just as if he were one of the good dogs that always do the right thing at the right time.

Speaking of the intelligence of dumb creatures, I had an exhibition when disking the orchard that is worth recording. When going over the ground for the first time a couple of kill-deers made a lot of excitement in one corner of the field. They fluttered ahead of the horses, screaming and pretending to be wounded as is their habit when anyone approaches their nests. I left the horses standing and hunted carefully over several lands in the hope that I might find their nest and avoid crushing the eggs, but I could not locate it and finally had to go on with my work without minding their protests. When giving the same corner a stroke of the disk a couple of days ago a killdeer suddenly stood up with outstretched wings and tail, about a foot from the end of the disk. I stopped the horses, and for several minutes that bird stood there and delivered a lecture on squatter rights, and the laws of homesteading and the suffragette movement. It was very convincing both to me and to the little boy who was riding on my knee. The bird made no attempt to lead me away from the nest. She simply stood over her eggs and scolded. She even refused to move when I touched her with the end of the buggy whip

while trying to point out to the little boy the earth-grey eggs, over which she was standing. Even when we were so close to them it was hard to distinguish them from the clods, and it was no wonder that I missed them in the previous search. It is probable, however, that the disk destroyed the first setting, and that these were new eggs. What impressed me was that I had never seen a killdeer act in this way before. Had she made up her mind that I was probably a reasonable being and only needed to have matters explained to me? Anyway she stuck to her nest and

each time I passed with the disk, and later, when I came along with the corn marker, she simply stood up and gave me another lecture. Though the disk passed her within a foot on each side she refused to leave, though she made some very pointed remarks about being disturbed so much.

One morning recently, I had a lovely couple of minutes with a pair of blue jays and other birds that they had called to their assistance. The children had called my attention to a young blue jay that was under one of the apple trees, and I thought I would pick up one of the youngsters to examine him more closely, but as soon as I touched him he started to squawk and things began to happen. One blue-jay struck me back of the ear with beak and claws and managed to draw blood. At the same instant the other struck me full in the face. As I beat them away a couple of robins that had evidently been attracted by the noise also began to make swoop at my head. As this was the first time I had ever seen birds of another variety turn in to help I stopped to watch the robins that were making just as much noise as if I were trying to get one of their fledglings instead of the blue-jay's. By the time they had quieted down the blue-jays had managed to get their youngsters away to a place of safety. Now I have always had it in my head that the jays and robins are natural



Victorian = 87808 =

This grand young bull, head of the Spring Grove herd, will be sold at the dispersion sale of the herd, at Ilderton, June 25th.

place in the rank of intelligent dogs, but no one will give him credit for it. Unfortunately, Sheppy's range of virtues is very limited. No one had the time or knew how to train him properly, and beyond keeping the hens away from the house and chasing the cows from the wire fence nearby, he does nothing of value. It seems impossible to make him understand what is wanted when the cows are to be brought home at milking time, and even when he does go after them he always goes at their heads and turns them back. Taken by and large, Sheppy, although well bred, is just about as useless a dog as there is in the country. And yet he did something out of the ordinary. The other night, when the boys got home from the village, it was found that a parcel had been dropped from the buggy. Besides it was known that it must have been dropped some distance up the road for it was missed quite awhile before they got home. As it was too late and dark for anyone to go after it that night it was arranged that a boy should go back over the road before five o'clock in the morning to hunt for the parcel. As Sheppy was around at that time he undoubtedly heard these arrangements being made, but no one thought anything of that. But in the morning we got a surprise. Just as the boy was going to start on his trip Sheppy came to the door with the parcel in his mouth. He usually goes out for a run around the farm when he is turned out in the morning, but he seldom goes any distance along

enemies, but they seemed to forget all private grudges when a common enemy appeared on the scene. It is interesting to reflect that although these jays would protect their young at the risk of their own lives, in a few weeks, after the brooding season is over, they would probably rob their own young of any dainty morsel just as quickly as they would another bird.

Our Scottish Letter.

June has arrived, and with it some bright and sunny days, but there is still a curiously cold "snap" in the air, and it is hard to believe that we are into the second month of the summer. Everything that grows is now looking well, but even in the most favored areas the season, as we put it, is a fortnight later than usual. The month of May was abnormally wet, and especially in Perthshire, the extraordinary rainfall became a positive menace to the lives of the inhabitants. On one occasion during the month it rained continuously for 36 hours, with the result that the Tay rose to a great height, and all the rivers were in flood. The lower parts of the city had to be abandoned, and in the country lambs were carried away by the torrents. We have had no such rainy spring for many years, and we certainly saw no March dust. In spite of these things, and a very late turnip sowing season, there is a keen demand for almost all kinds of farm produce, and business generally appears to be flourishing at a great rate. It has been said in Parliament that we have reached the crest of the wave, and that the outlook for the future is not too bright. So far the average man sees no evidence of this, but those who prophesy may be sounder in vision than the average.

Among questions presently agitating the public mind is one concerning the setting up of a tuberculin-testing station. The Board of Agriculture and Fisheries have determined to establish such a station in England, near to Aldershot, and Mr. Runciman has indicated that he is only deterred from establishing another in Scotland by the fact that Scots' opinion on the subject is divided. At the meeting of the Scottish Chamber of Agriculture, held in December, a resolution in favor of establishing such a station in Scotland was negated. Since then meetings on the subject have been held in Aberdeen, Inverness, Perth, and Ayr. The Northern men are in favor of such a station, but the Western, or Ayrshire men, are opposed. They maintain that such a station would be useless, unless a guarantee was obtained from all our oversea customers that they would accept as final the results found at such a station. As things are the only guarantee given of that nature has come from South Africa, and its share of the export trade, while increasing in volume, is still limited. Unless Canada and the United States agree that testing at such a Government tuberculin station, as is contemplated, in Great Britain, would be final, Ayrshire men maintained that the station would be worse than useless. They would much rather have their animals tested at home. If they reacted under these conditions there was an end of the matter, and nobody was a bit the wiser: if they passed the bargain was completed, and the animal was henceforth at the purchaser's risk. If it reacts on arrival at the other side that is his affair. Further, the Ayrshire men argue, this way of dealing with the business means nothing so far as getting rid of the disease is concerned. It is only trifling with it: devising means for getting the sound animals out of the country, and leaving us at home with what could very well be done without. The position of the Northern breeders is simple. A testing station is to be established in England. We must have one in Scotland, or we will be cut off from the export stream. We will be out of it, and it will not pay to send cattle south to Aldershot, and then find that perhaps they do not pass the test. Many of one's neighbors would soon get to know what had happened, and a breeder's lot could be made miserable. The northern men say, let us have the station planted either at Glasgow, or at Perth, and we may rest assured that Mr. Runciman would not go so far as he has done without some grounds for believing that the test in this country would be accepted as final by all our customers. So far as the argument that the setting-up of such a station would put a premium on the export of our best is concerned, it is retorted that the fact of foreign or Colonial customers refusing to take anything but sound cattle is the best of all reasons why home breeders should do their very best to produce these and nothing else. This is an effective answer, but we should like to see breeders here more favorable to the tuberculin test, and more disposed to accept it as their guide in efforts to control and circumscribe the ravages of tuberculosis. I expect the northern

men will win, and that Scotland will have her tuberculin-testing station.

Death has been busy in the ranks of leading stockmen of late. Thus outstanding men have recently passed away. T. H. Bainbridge, a noted breeder of Aberdeen Angus cattle at Eshott in Northumberland, was one of the most successful business men in Newcastle-upon-Tyne. He began late in life to breed Aberdeen-Angus cattle as a hobby, and soon achieved distinction. He was a keen and enthusiastic breeder, and continually kept his herd to the front. Unhappily none of his family cared for cattle, and his herd was therefore dispersed. On the day of the sale it blew a hurricane, and business was carried through in great discomfort. Nevertheless it was a great sale. Sixty head made an average of £64 16s. apiece. The highest price was 215 guineas paid for a cow. Two two-years-old heifers made 130 guineas and 150 guineas; two yearling heifers made 170 guineas and 100 guineas, and a bull made 160 guineas. To-day the deaths are announced of Joseph Lee, of Congalton, East Lothian, a great breeder of Shorthorn cattle and Border Leicester sheep, and George Douglas, Upper Hindhope, Jedburg, on one of the foremost breeders of Cheviot sheep. Mr. Lee achieved distinction with his cattle, obtaining high averages for his bull calves, and one occasion making the highest price of the season, 850 guineas for a Shorthorn bull calf. He also paid one of the highest prices ever recorded for a Border Leicester ram. He gave £151 for the highest priced Polwarth ram at Kelso. Mr. Lee was a Northumberland man by birth, and before coming to Scotland had extensive knowledge and experience of farming in Cumberland, near to Brampton. All of these gentlemen rendered eminent service to agriculture, and they will be greatly missed.

Industrial and social problems still loom big on the horizon. The demand for small holdings in some districts is very keen. Unhappily it is chiefly in districts in which land can hardly be got that the demand is keenest, and some large farmers are beginning to plead for small holdings in order to furnish them with a supply of labor to work the large holdings. This view will, no doubt, obtain increasing support as time goes on. The enormous emigration to Canada has depleted many rural parishes, and men and women can hardly be got to work successfully at farm labor. No doubt the emigration of such a class as has gone is a first-rate thing for Canada, but it is not an unmixed blessing for us here. Some parts of our country are overcrowded—notably the Island of Lewis, and our Board of Agriculture is facing the problem, not of emigration, which solves itself, but of migration, that is the transference of population from one district to another. A transference of this kind which would do an excellent service would be from Lewis in the West to the Beach Isle on the other side of Scotland, where labor is scarce, and houses are being kept empty so that the proper class may be brought to fill them. You could afford to leave some remnant of our people with us, and we trust this migration scheme may work out to some good purpose.

Ireland has recently been visited by a large party of about 100 persons interested in dairying. Their itinerary was through the south of and west from Dublin to Limerick, and from Limerick to Cork, and then back to Dublin. This is preeminently the area of the small farmer, or landowner, and dairying. The co-operative movement caught on splendidly throughout this area, and everywhere it is said there are symptoms of prosperity and contentment, where once there was endless trouble. The system of making butter at the creameries has immensely improved the character of Irish butter, and it now holds a high position on the British markets. Extreme poverty was hardly met with during the ten days' tour, and on all hands it was admitted that rapid strides had been made in agriculture. The chief agent in effecting the improvement has been the Department of Agriculture and Technical Instruction. In every section of the work of this Department splendid results have been obtained. No one denies that a great improvement has taken place in the quality and merits of store cattle and sheep, or rather lambs. The ordinary commercial stock of the country has increased greatly in value, and plenty first-class cattle can be seen any day in the quarantine station at Merklands, where Irish cattle are now nearly all landed. These cattle are a credit to any country. The problem, however, faces the Irish breeder, "How is he to maintain his reputation for dairying, and yet breed high-class store or feeding cattle? The two seldom go together, the dairy type of one is not generally regarded as the ideal butcher's beast. The Department are, however, endeavouring to produce the dual-purpose cow, and they think they can succeed. They are establishing a register showing not only what the cows have done in milk yield, but also what they are in

themselves when judged according to points to determine their relative merits. The register thus founded for Irish dairy cattle is designed to show how a well-made cow may be at the same time a good useful milker. Some are sceptical as to the success of the movement, but the Department are buoyant and hopeful, and they anticipate the time when they will be able to supply bulls or dairy herds with milk record dams yet possessing good beef-producing qualities. It is admitted that something must be done, because the use of beef-producing cattle only for breeding purposes has undoubtedly impaired the milking properties of Irish cattle. What the future may have in store for Ireland no one can tell, but unquestionably the settlement of the Agrarian trouble, and the creation of a peasant proprietary have effected a revolution in the social and industrial condition of the country.

SCOTLAND YET.

Niagara Fruit Prospects Good.

The Niagara Peninsula Fruit Growers' Association has issued a report on fruit crop conditions, based upon reports received from about a hundred growers from Hamilton to Niagara. The general condition of trees, vines and plants is good. There is only one report of strawberries having been winter-killed. A few tomatoes are reported as having been killed by frost at Niagara. Grapes were slightly frosted in low-lying localities, and cherries partly frozen at Welland. Speaking generally, frost injury has been slight. Spraying was, as a whole, done on time, and cultivation generally sufficient, except in the case of apples, which have not yet received much attention. The average set of crop is thus summarized, 100% representing a full set, and 75% standing for a good average crop from all trees and varieties:

Strawberries, 67% (two total failures); raspberries, 66%; red currants, 72½%; Gooseberries, 70%; cherries, 71½% (sweet cherries, when reported separately, showed 90%, sour only 51%); Japanese plums, 65%; European plums 68%; early peaches, 68%; late peaches, 74%; pears, 79%; apples, 63% (Baldwins and Spies reported light). It is too early to estimate tomatoes or grapes.

It must be remembered that it is rather difficult to form an accurate estimate of the future crop at this early date, but later reports will give better indications, and may alter percentages.

Canadian National Fruit Growers' Officers.

At the last Dominion conference of fruit growers a movement was started having for its object the organization of a Canadian National Fruit Growers' Association. A draft constitution and provisional by-laws were adopted by the conference, and J. A. Ruddick, Dominion Dairy and Cold Storage Commissioner, was requested to undertake the organization. The election of officers has been carried on by letter ballot, and the list is now complete.

Membership in the association is limited to the officers of the provincial fruit growers' associations and such other persons as may hereafter be named by the association on recommendation of the executive. The provincial officers who have been elected are:—President, Robert Thompson, St. Catharines; Vice-President, S. O. Parker, Berwick, N. S.; Secretary-Treasurer, P. W. Hodgetts, Toronto; members of committee—W. C. Ricardo, Vernon, B. C.; R. M. Winslow, Victoria; Manning K. Ellis, Port Williams, N. S. The fruit division will now turn the matter over to the officers-elect.

A 300-Day Test Proposed.

The Executive Committee of the Dominion Shorthorn Breeders' Association have been considering the advisability of making the official R. O. P. tests of Shorthorn cows cover a period of 300 days instead of 365 as originally proposed, and as followed heretofore by the other breed societies interested. This would mean practically a ten-month milking period, and would admit of a cow under test having the full advantage of the time allowed, while still drying off in time to freshen in one year from date of previous calving. The change would be a good one, and the standards are low enough to permit any fair milking Shorthorn cow to qualify easily in three hundred days.

Calgary despatches state that Dr. J. G. Rutherford, C. M. G., heretofore Superintendent of the Husbandry Branch of the Department of Natural Resources of the C. P. R., has been appointed Superintendent of the Consolidated Agricultural and Animal Husbandry Branches. Professor Elliott, formerly Superintendent of the Agricultural Branch, has resigned to take charge of the Provincial Government's demonstration farm at Olds.

Markets.

Toronto.

REVIEW OF LAST WEEK'S MARKETS

At West Toronto, on Monday, June 16, receipts at the Union yards numbered 95 cars, comprising 1,983 cattle, 360 hogs, 62 sheep, and 36 calves; no sales made. At the City yards there were 7 cars, comprising 136 cattle, 23 hogs, 67 sheep, and 14 calves. Trade at the City market was slow. Butcher cattle sold at \$6.25 to \$7; cows, at \$4.75 to \$6; sheep, lambs, and calves, were steady. Hogs were quoted at \$9.85 fed and watered, and \$9.50 f. o. b. cars.

The total receipts of live stock at the City and Union Stock-yards last week were as follows:

	City.	Union.	Total.
Cars	22	340	362
Cattle	489	4,771	5,260
Hogs	240	5,849	6,089
Sheep	522	2,529	3,051
Calves	189	704	893
Horses	5	32	37

The total receipts at the two yards for the corresponding week of 1912 were as follows:

	City.	Union.	Total.
Cars	179	240	419
Cattle	2,206	3,253	5,559
Hogs	3,581	3,906	7,487
Sheep	1,177	491	1,668
Calves	1,024	230	1,254
Horses	6	232	238

The combined receipts of live stock at the two markets for the past week show a decrease of 57 cars, 299 cattle, 1,398 hogs, 361 calves, and 201 horses; but an increase of 1,383 sheep and lambs, compared with the corresponding week of 1912.

While the receipts have been liberal during the past week, and quite equal to the demand, they were not nearly as large as for the same week last year, as will be seen by the above tables. Trade was active in every class of live stock, and prices firm and steady, excepting in heavy steers and common, grass cows, which have made their appearance on the market. Calves were firm, at prices given. Sheep were easier, especially heavy ewes and rams. Spring lambs were about \$1 per head cheaper on an average. Hogs were about 10c. per cwt. cheaper. There was a fair outside demand from different points in Ontario and Quebec.

Exporters.—William Howard bought for Swift & Co., of Chicago, 200 export steers, as follows: One hundred steers for London, 1,294 lbs. each, at \$7.10; also 100 steers for Liverpool, 1,250 lbs. each, at \$6.95.

Butchers.—Choice steers of export weights and quality, for local killing, \$6.75 to \$7.10; good to choice butchers', \$6.60 to \$6.85; medium butchers', \$6.25 to \$6.50; common butchers', \$5.75 to \$6.20; choice cows, \$5.75 to \$6; good cows, \$5.40 to \$5.60; medium cows, \$4.75 to \$5; common cows, \$3.50 to \$4; choice bulls, \$6 to \$6.25; medium to good bulls, \$5.50 to \$5.90; common bulls, \$4.25 to \$5.

Stockers and Feeders.—Steers, 800 to 900 lbs., \$6 to \$6.35; stockers, 600 to 700 lbs., \$5 to \$5.85; common and inferior Eastern stockers, 500 to 600 lbs., \$4.75 to \$5.

Milkers and Springers.—There was a fair supply of milkers and springers all week. Good to choice cows were in good demand. Prices ranged from \$45 to \$80 each, the bulk selling from \$55 to \$65 each.

Veal calves.—The calf market was firm all week. Choice quality calves sold at \$8.50 to \$9 per cwt.; good calves, \$7.50 to \$8; common, \$5.50 to \$6.50; inferior, \$5 to \$5.50.

Sheep and Lambs.—Receipts were larger, but not more than equal to the demand. Ewes, light sold at \$6.25 to \$6.75; heavy ewes and rams sold at \$4 to \$5 per cwt.; spring lambs sold at \$10 to \$11.50 per cwt., or 10c. to 11c. per lb., and the range per head would be from \$1 to \$8. There was a carload of American yearling ewes and wethers that sold from \$8 to \$9 per cwt., or fully \$1 to \$1.50 per cwt. more than

Canadian yearlings were bringing, which shows the value of breeding and feeding for the market for which our cousins across the line have us beaten by a long distance.

Hogs.—There is an easier feeling on the hog market, although prices are not much lower. Selects, fed and watered, sold at \$9.85 to \$9.90, and \$9.50 to \$9.60 f. o. b. cars at country points.

Horses.—Trade at the Union Horse Exchange, Union Stock-yards, was a little more active than the previous week, but not as good as it should be at this season of the year, and all the rest of the sale stables report the same conditions. One carload was sold to go to Ottawa, and a few other small lots were shipped to outside points in Ontario. The local city trade was fair. Prices were unchanged, as follows: Drafters, \$175 to \$250; general-purpose horses, \$150 to \$200; express and wagon horses, \$160 to \$225; drivers, \$100 to \$150; serviceably-sound, from \$45 to \$90 each.

BREADSTUFFS.

Wheat.—Ontario, No. 2 red, white or mixed, 97c. to 98c., outside; inferior grades, down to 70c.; Manitoba No. 1 northern, \$1.04; No. 2 northern, \$1.01; No. 3 northern, 98c., track, lake ports. Oats—Ontario oats, No. 2, 34c. to 35c., outside; 36c. to 37c., track, Toronto; Manitoba oats, No. 2, 49c.; No. 3, 38c., lake ports. Rye—No. 2, 61c. to 62c., outside. Peas—No. 2, 90c. to 95c., outside. Buckwheat—No. 2, 52c. to 53c., outside. Barley—For malting, 50c. to 53c.; for feed, 43c. to 48c., outside. Corn—No. 3 yellow, 61c., Midland; 65c., track, Toronto. Flour—Ontario winter-wheat flour sold at \$3.90 to \$3.95, seaboard. Manitoba flour—Prices at Toronto are: First patents, \$5.30; second patents, \$4.80; in cotton, 10c. more; strong bakers', \$4.60, in jute.

HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, \$12 for No. 1; and \$10 to \$11 for No. 2. Straw.—Baled, car lots, track, Toronto, \$9 to \$10 per ton.

COUNTRY PRODUCE.

Butter.—Market easy. Creamery pound rolls, 28c. to 29c.; creamery solids, 27c. to 28c.; separator dairy, 24c. to 25c.; store lots, 21c. to 22c.

Eggs.—Market firmer, at 22c. to 23c. for case lots.

Cheese.—New, twins, 13c.; large, 13c.; old, twins, 15c.; large, 14c.

Honey.—Extracted, 13c.

Beans.—Broken car lots of ten bags, to the trade, hand-picked, \$2; primes, \$1.75. In car lots, per bag, 80c.; New Brunswick Delawares, \$1.10, in car lots, track, Toronto.

Poultry.—Receipts continue light, but equal to the demand. Turkeys, dressed, 18c. to 20c.; spring chickens, dressed, 35c. to 40c. per lb.; spring chickens, alive, 25c. to 30c.; hens, 16c. to 18c. per lb.

HIDES AND SKINS.

No. 1 inspected steers and cows, 13c.; No. 2 inspected steers and cows, 12c.; city hides, flat 12c.; country hides, cured, 12c.; country hides, green, 12c.; calf skins, per lb., 16c.; deacons, each, \$1.10 to \$1.25; lamb skins and pelts, 20c. to 40c.; sheep skins, \$1.50 to \$1.85; horse hair, 37c.; horse hides, No. 1, \$3.50; tallow, No. 1, per lb., 5c. to 6c.

WOOL.

Coarse, unwashed, 15c.; coarse, washed, 24c.; fine, unwashed, 17c.; fine, washed, 26c.

FRUITS AND VEGETABLES.

There is very little Canadian fruit or vegetables on the market at present. Canadian strawberries are beginning to come on the market, and are not a good sample thus far. Canadian strawberries, 12c. to 17c. per box; American strawberries, 17c. to 20c. per box; cabbage, per case, \$3; asparagus, per basket, \$1.75 to \$2; lettuce, 20c. to 30c. per dozen; Canadian hot-house tomatoes, 12c. to 20c. per lb.; Canadian hot-house cucumbers, \$1.25 to \$1.50 per basket; American potatoes, new, \$4.50 to \$5 per barrel.

British Cattle Market.

John Rogers & Company report Canadian cattle making 15c. to 15c.

Montreal.

Live Stock.—Market showed very little change last week. Cattle were steady at the recent decline, and demand was very fair. Choice steers sold at 7c. to 7c. per lb., while fine were 6c. to 7c., and good 6c. to 6c. medium 5c. to 6c., and common sold down to 4c. per lb. Sheep and lambs were lower in price, the offerings showing an increase. Demand was good, and sales were made at 4c. and 4c. per lb. for sheep, according to quality. Spring lambs sold at \$3 to \$5 each, and some choice stock brought as high as \$6 each. There was a fair trade in lambs, and prices ranged from \$3 to \$5 each for common, and up to \$8 each for best. Hogs were slightly lower also, and sales took place at 10c. to 10c. per lb., weighed off cars.

Horses.—A moderate demand is being experienced, and there is no difficulty in disposing of everything received. Heavy-draft horses, 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., \$125 to \$200; broken-down, old animals, \$75 to \$125, and choicest saddle and carriage animals, \$350 and \$500 each.

Poultry.—Storage stock: Turkeys, 23c. to 24c. per lb.; geese and fowl, 15c. to 17c.; ducks, 20c. to 22c., and chickens, 18c. to 19c.

Dressed Hogs.—The price of dressed hogs was rather lower, and abattoir-dressed, fresh-killed stock sold at 14c. to 14c. per lb.

Potatoes.—A further advance has taken place in the market. Green Mountains were quoted here, carloads, on track, at 90c. to 95c. per 90 lbs. Quebec potatoes were 75c. to 85c. Smaller lots sold at 30c. higher than these prices.

Syrup and Honey.—Three-quart tins of maple syrup quoted at 85c. to 95c., while syrup in wood was 7c. to 8c.; maple sugar, 11c. to 12c. per lb. Honey showed no change, and was quoted as follows: White-clover comb, 16c. to 17c. per lb., and extracted, 11c. to 12c.; dark comb, 14c. to 15c., and strained, 8c. to 9c.

Eggs.—Selects were selling at 25c. in a wholesale way, while straight receipts were 22c. to 23c.

Butter.—Finest creamery, 25c. to 25c.; fine quality could be had at 24c. to 25c., while inferior grades sold as low as 24c. Dairy butter was about steady, at 22c. to 23c.

Cheese.—Market a shade easier. Western white was quoted at 12c. to 12c., and colored about 1c. under these figures. Eastern white, 11c., and colored 11c. to 11c.

Grain.—No. 2 Canadian Western oats, 41c. to 41c., ex store; No. 1 extra feed, 41c., and No. 1 feed, 39c.; No. 3 Canadian Western, 38c. Ontario malting barley, 61c. to 63c., ex store; Manitoba, No. 3 barley, 56c.; No. 4, 55c., and feed, 50c. per bushel. No. 3 yellow corn, 65c. ex store.

Flour.—\$5.40 per barrel for Manitoba first patents, in bags; \$4.90 for seconds, and \$4.70 for strong bakers'. Ontario winter-wheat flour, \$5.25 for patents, and \$4.75 to \$4.85 for straight rollers.

Milled.—Some say bran may be had outside at \$15, but local mills quote \$17 per ton in bags; shorts, \$19; middlings, \$22; mouille, \$30 to \$32 per ton for pure, and \$26 to \$28 for mixed.

Hay.—\$12.50 to \$13.50 per ton for No. 1 baled hay, car lots, track; \$12 to \$12.50 for No. 2 extra; \$10 to \$11 for No. 2 ordinary, and \$9 to \$10 for ordinary. Some quote higher than these prices.

Hides.—Prices steady. Beef hides, 11c., 12c. and 13c. per lb. for Nos. 3, 2 and 1 hides, respectively. Calf skins, 17c. and 19c. per lb., respectively, for Nos. 2 and 1. Lamb skins, 17c. to 19c. each, and sheep skins, \$1.15 each. Horse hides, \$1.7 and \$2.50 each. Tallow, 11c. to 3c. per lb. for rough, and 6c. to 6c. for rendered.

Cheese Market.

Corwall, Ont., 11c.; Iroquois, Ont., 11c.; Napawee, Ont., 11 1/2-16c. to 11c.; Alexandria, Ont., 11 1/2-16c.; Picton, Ont., 11c.; Kemptville, Ont., 11c.; Belleville, Ont., 11c. to 12 1/2-16c.; London, Ont., 11c. to 11c.; Ottawa, Ont., 11c.

Buffalo.

Cattle.—Prime steers, \$8.50 to \$8.75, shipping, \$8.10 to \$8.25; butchers', \$7 to \$8.25; cows, \$3.75 to \$7; bulls, \$5.50 to \$7.25; heifers, \$6.50 to \$7.85; stockers and feeders, \$6 to \$7.75; fresh cows and springers, \$35 to \$85.

Veals.—500 at \$10.75.

Hogs.—Heavy, \$9.10 to \$9.15; mixed, \$9.20; Yorkers and pigs, \$9.20 to \$9.25; roughs, \$7.90 to \$8.10; stags, \$6.50 to \$7.25; dairies, \$8.90 to \$9.25.

Sheep and Lambs.—Lambs, \$4.50 to \$7.50; yearlings, \$6 to \$6.75; wethers, \$5.90 to \$6.15; ewes, \$3 to \$5.50; sheep, mixed, \$5.50 to \$5.75; spring lambs, \$5.50 to \$9.50.

Chicago.

Cattle.—Beeves, \$7.25 to \$9; Texas steers, \$7 to \$8.10; stockers and feeders, \$6.35 to \$8.25; cows and heifers, \$3.80 to \$8.40; calves, \$7.25 to \$10.50.

Hogs.—Light, \$5.35 to \$8.95; mixed, \$8.55 to \$8.95; heavy, \$8.30 to \$8.85; rough, \$8.30 to \$8.45; pigs, \$6.75 to \$8.40.

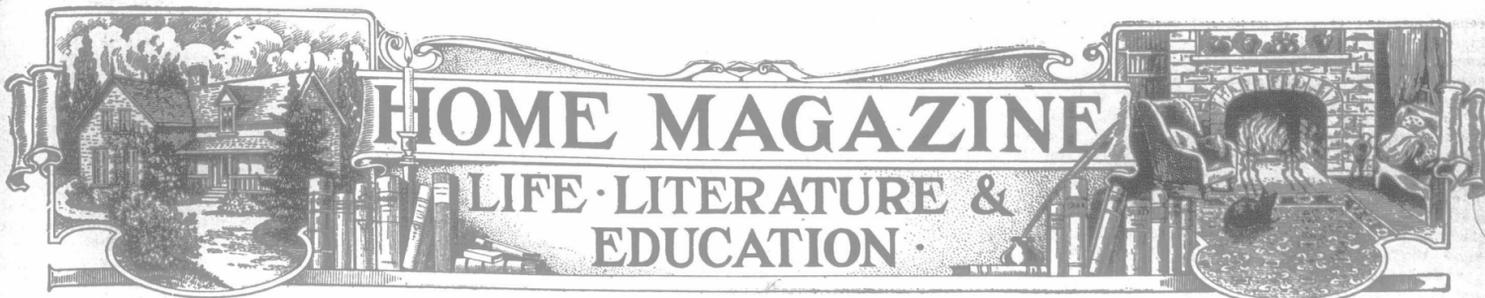
Sheep and Lambs.—Sheep, native, \$5.10 to \$6.20; yearlings, \$5.75 to \$6.80. Lambs, native, \$5.75 to \$7.80; spring lambs, \$5.75 to \$8.30.

Gossip.

A correspondent of an English exchange reports the case of a Shire mare recently giving birth to a foal which she was unable to nourish. The foal was placed on a young heifer in milk, the cow taking kindly to her protegee, and the two are seen together, side by side on the pasture, in perfect content and apparent affection.

G. A. Brodie, Newmarket, Ont., importer and breeder of Clydesdale horses, sends a list of sales which he has made during the past year, and which shows that the class of horses he is handling is meeting with the approval of Canadian horsemen. The list includes nine stallions, three of which, Bonnie Dee (imp.), Cashel Lad, and Torrs Tyne (imp.), were taken by R. M. Holtby, Manchester, Ont. Fyvie's Heir (imp.) went to R. Harman, Temperanceville, Ont.; Sir Hector of Westfield (imp.), to Jno. Henderson, Keady, Ont.; Benedictine (imp.), to R. F. Nixon, Osgoode Station; Bouncing Geordie (imp.), to E. Randall, Newmarket; Tatler (imp.), to John J. Miller, Staffa, and Gallant Murray (imp.), to D. J. Howard & Son, Fairbank. The list of mares includes thirty-nine head, all of which were imported but two, and which were distributed over a wide section of Ontario. The list is too long to be published in full, but shows a good year's business. If in need of any Clydesdales, see Mr. Brodie's advertisement in this paper, and write him to Newmarket, Ont.

The Secretary of the Canadian Standard-bred Horse Society informs "The Farmer's Advocate" that to encourage the breeding of Standard-bred horses, the Canadian Standard-bred Horse Society is this year donating \$50 to each of the following shows for the best Standard-bred brood mare with foal by her side: Canadian National Exhibition, Toronto; Canadian Industrial Exhibition, Winnipeg; Central Canada Exhibition, Ottawa; Edmonton Exhibition Association, Edmonton; Great Eastern Exhibition, Sherbrooke; Nova Scotia Provincial Exhibition, Halifax; Regina Exhibition Association, Regina; Western Fair Association, London; Saskatoon Industrial Exhibition, Saskatoon. All animals, of course, entered in the different classes at these exhibitions, must be recorded in our Studbook. The Canadian Standard-bred Studbook was not opened until the fall of 1910, but already we have accepted for registration over 1,100 horses, and Volume 1 will be published this year. All owners should have their horses appear. It is therefore desirable that application for registration be sent to the Accountant, Canadian National Live-stock Records, Ottawa, at once. The cost for registration is \$1.50 to members, and \$3 to non-members. Annual membership fee is \$2.



London the Great.

(By Hester Alway.)

A child of the woods, and no lover of cities, I yet could love London, that "most powerful magnet of mental, moral, and material forces man has ever made." True, her multitudinous life utterly wearies me, her heavy skies and smoke-laden airs dispirit, her labyrinthine streets bewilder, yet her charm is exhaustless—treasures of the past, and all nations are there, architectural glory, stores of art, shrines of the great.

To sail down the Thames from the Old Swan Pier at London Bridge in a boat medieval in type, past the grim and stately buildings, is to breathe the very breath of long-dead centuries; to turn the corner at Old Curiosity Shop, and ramble through the Temple Courts and Gardens with their cloister-like stillness in the heart of the maelstrom, is a surprise grateful as unexpected; to be borne with the surging crowd along the Strand and Cheapside, is to marvel at the intense earnestness, or is it the dogged, blind purpose of habit and necessity?—that sweeps the human tide along; to sit in historic Guild Hall at some great gathering international in import, over which the Lord Mayor presides in brilliant robes of office, or in Prince Albert Hall, with its sea of 10,000 faces, or, as did we, in the thronged Westminster Chapel, to honor the memory of the Titanic's greatest passenger, W. T. Stead, is to feel the pulse of thrilling life, world-wide in sweep; to drink afternoon tea with a college president and his wife in sweet gardens in the very heart of Old London, gardens hushed as though in mid-country, around which college halls are ranged, is to rejoice in one of those pauses of life England seems to understand so well how to preserve, and so to prevent the fever of our unrest; to walk along the Mall in the morning hours, and through Hyde Park, is to see wealth and fashion abroad; to pass through the East End is to behold degradation and misery unsurpassed in all the world; and everywhere, and at all times, to be in London is to be conscious, dully sometimes, sometimes acutely, of its vast unrest, to hear ever the "still, sad music of humanity."

It is not easy to discriminate between places where there is focussed so much of absorbing interest, but perhaps first of all, in the estimation of the stranger, is Westminster Abbey—the stranger, I say, because the Londoner might put the emphasis elsewhere. A friend of mine, a business man with wide interests, has passed all his days in the city, yet never has visited the world-famed Abbey Church. Church, did I say?—more fittingly a vast mausoleum or a hall of fame, so it seems to me, "England's Pantheon of Genius." Again and again, and yet again, and once again, I took my way to the sacred shrine, wandering through its stately aisles and chapels and cloisters, lingering for vespers, attending divine service on Sunday, but the mood of due appreciation evaded me. To the last, the impression was that of crowdedness, crowdedness to suffocation, just such an impression as a walk down Cheapside makes, only that here the throngs are arrested in marble. The Poet's Corner drew me, of course, and how thankful I was Wordsworth sleeps beside his rippling Rothay, Shakespeare beside his sweet Avon, Ruskin under the shadow of the mountains he loved, Carlyle beside his mother in dear old Scotland, instead of in this crowded city of the dead. Some recent words of the Chancellor of the Exchequer, Mr. Lloyd George, came back with new meaning. He, with a friend, was leaving the Abbey after a funeral, when his friend remarked, "We shall bury you here some day."

"No, you will not," came the quick, almost passionate reply, "You will bury me under the shadow of the mountains." The day after my first visit to the Abbey I was not a little interested to read in the Morning Post the following from Oliver Wendell Holmes, approvingly quoted: "On the whole, the Abbey produces a distinct sense of being overcrowded. It appears too much like a lapidary's store-room. Do not look around you with the hope of getting any clear, concentrated, satisfying effect from

pilgrimage.—Chelsea, the home of Thomas and Jane Carlyle for nearly half a century; of Leigh Hunt, George Eliot, Sir Thomas Moore, Rossetti, Turner, Whistler, Mrs. Gaskell, and others whose names are enrolled on the scroll of fame. No. 24 Cheyne Row (Carlyle's home), was first sought out, and that, like the homes of Knox and Wesley, had a sacred charm. How much had been lived there; how much suffered; what dreams had been dreamed; what noble thoughts penned. I entered, as in

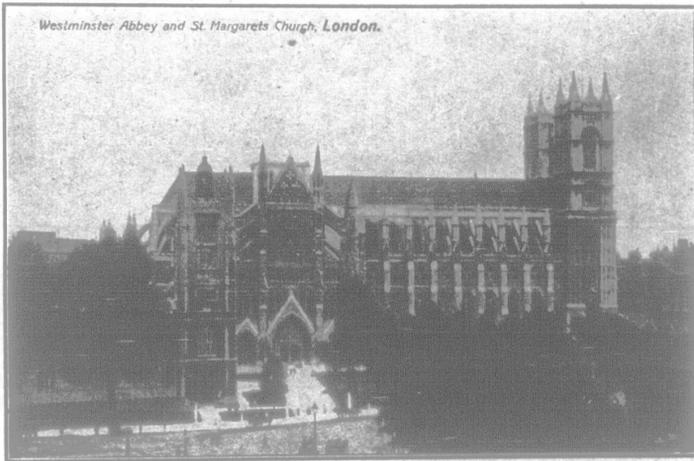
for money, he was already passing rich.

Of the British Museum I cannot speak in detail, it is too vast; but I can appreciate the reply of that writer, a resident of Rome, to whom it was suggested that he write a history of Ancient Rome, "It would entail too lengthened a residence in Bloomsbury." The Assyrian and Egyptian departments I visited repeatedly, Bible in hand, and as record after record in stone and marble were read confirmatory of the Scripture accounts, the Psalmist's words sang themselves jubilantly through my soul, "Forever, oh Lord, Thy word is settled in heaven."

Perhaps my greatest day in London was spent at the Tate Gallery. The dreams of the artists found interpretation in my heart, a private interpretation it may be, and spoke their message to me. A remarkable series, by E. Burne-Jones, will haunt my memory ever, the four paintings with their brief descriptive sentences portraying vividly a soul's history, the sculptor's, every high dreamer's; "The Heart Aspires," "The Hand Refrains," "The Godhead Fires," "The Soul Attains."

"The Annunciation," by Arthur Hacker, is wonderful in its conception and the impression of purity it conveys. O, maiden in the flowering gossamer, with the wide, wondering eyes, dark with mystery, the world waited long for thee, long for the angel-message whispered in thine ear, long for all the grace and truth through thee incarnated. Ah, and are there not other angel-annunciations awaiting white souls?

To close my letter on London, having spoken only of places and pictures and tombs and throngs, is to convey an inadequate conception of what my repeated visits to the greatest city of the world meant to me. To deal only in generalities, to shut out the individual, is to veil the deepest life; and yet how may one write of the sweet intimacies of high intercourse, the meeting of kindred spirits? Suffice it to say, great London was transformed from a vast wilderness of loneliness amid the multitudes, by the sudden finding again and again of one's own,—a brother, sister spirit—and the opening of doors into the palace beautiful of noble souls.
London, Canada.

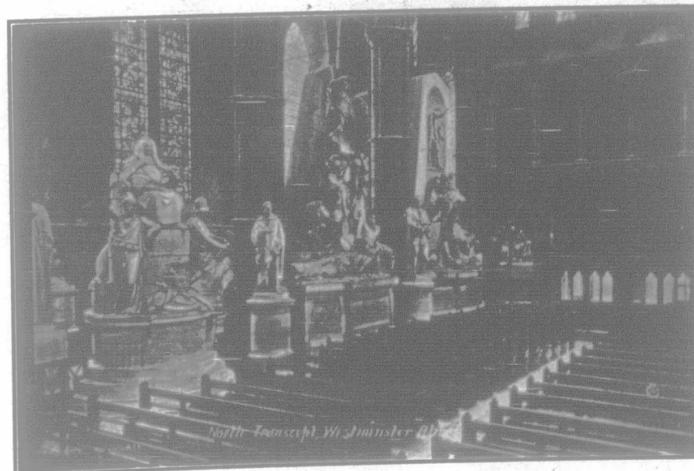


Westminster Abbey and St. Margaret's Church, London.

this great museum of gigantic funeral bric-a-brac. Pardon me, shades of the mighty dead!"

"The Mecca of Methodism" could not be passed by.—Wesley's chapel, where the famous preacher ministered for fifty-three years, assisted by his brother Charles; also his home. What delightful reading those autograph letters displayed in his study, bringing one so near to the heart and mind of the great man! "I have the credit of stationing the preachers," one letter ran, "but many of them go where they will go for all me";—a senti-

every similar case, with something of the hesitation and shrinking with which I first read the "Browning Love Letters," the feeling that I was intruding in a Holy of Holies, an inner shrine of hearts. The double-walled study where was written the French Revolution and the Life of Frederick the Great, the latter occupying thirteen years; the garden with its walls covered with ivy planted by Carlyle; the snug basement kitchen where Tennyson loved to sit and smoke with his host—it was after an evening thus spent in silence that Carlyle said,



North Transept, Westminster Abbey.

ment some superintendents to-day might echo, I fancy. The little prayer-room opening from his bedroom,—what a holy spot it was. In no place, however, have I so experienced the thrill of contact with a great personality that has passed, as in John Knox's house at Edinburgh. A living presence, an aroma of prayer, a penetrating spirit pervading the very walls, was there.

To Chelsea, too, I must perforce make

when the poet rose to go, "Come again, soon, old friend, we have had a grand time"; the drawing-room where the family life centered, all had their history. The letter from Lord Disraeli, offering in most gracious terms in the name of the Queen a baronetcy and pension to this eminent man of letters, was shown with its characteristic reply, "Titles of honor are in all degrees out of keeping with the tenor of my poor existence," and as

Dust and Its Dangers.

[A paper given by Miss Jennie M. Partridge, at the Percy Branch of the Women's Institute.]

Before discussing this topic, it might be wise for us to consider for a moment what is really meant by the word "dust." Webster's dictionary says that "Dust is fine, dry particles of earth or other matter, so small and light that it may be raised and wafted by the wind." This is the simple, common, omnipresent dust, the bane of the tidy housekeeper, the torment of the cleanly citizen who goes upon the streets in ill-kept towns, which is wafted by every breeze without, and stirred by every footfall within.

The dust particles of the air may be roughly grouped into two classes: First, those larger bodies which are readily visible indoors or outdoors; and second, the smaller particles which are usually only seen when strongly illuminated.

The coarser particles of dust, such as are met with out of doors, especially in dry and windy weather, consist largely of small fragments of sand, broken fibres of plants, pollen, fine hairs, ashes, fibres of clothing, and other fabrics, particles of lime, plaster, or soot, parts of seeds of plants, and other partially-ground-up materials.

The smaller dust particles, whose presence we may be aware of by the choking

sensation which they cause when breathed in, even though we do not see them, are most visible when a ray of sunlight shines into more or less darkened places. These are light, and consist of fragments of fine vegetable or animal fibres, and incorporate the greatest variety of bacteria and germs.

It is not necessary for us to enter in detail into those conditions of soil, climate, and human occupation, which favor the presence of dust in the air. We all know that dry air, dry ground surfaces, and winds, favor the distribution of dust, and that still air and moist ground tend to keep it in check. We know, too, that certain occupations confine people to closed rooms, or places where dust particles of various kinds are very abundant. Thus, day after day, persons are confined in air charged with coal-dust, stone-dust, or cotton- or woolen-dust.

As was mentioned before, the smaller dust particles contain myriads of bacteria and disease germs. Some germs are not only harmless to man, but are also very necessary. For example, the germ which is found in yeast, and the germ which causes milk to ferment. Other germs, on the contrary, are very harmful. Among these are found the germs causing consumption, typhoid fever, diphtheria, blood-poisoning, and many other equally fatal diseases found so common among the human race. It has now become well known that if these germs are kept under control, there will be no more trouble with such diseases as are now caused by the so-called disease germs.

All sorts of bacteria-laden material, then, when dry and ground up, as it so readily is by the varied movements of men and animals outdoors and indoors, may become a part of the floating dust. These are driven hither and thither by air currents, and finally, always, sooner or later, settling down to the lowest available resting-place, where they remain until again disturbed.

In winter months, and during rainstorms, and when the air is still, the number of germs in a place is comparatively small. A rainfall tends to free the air of its germs by washing them down, while during a snowstorm, many are caught in the crystals as they form. In wet weather, mould spores tend to predominate, partly because they grow faster than, and partly because they are very light and not as easily wetted and held down. It has been learned, not only from common experience, but from a long series of careful experiments, that the solid particles which we breathe in with the air, either through the nose or mouth, do not come out with the expired air, but are retained on the moist surfaces over which the air passes. These foreign particles, floating in the inspired air, are caught largely in the nose or mouth or throat, while a certain number pass down into the air tubes and lungs. Now, the body puts up a strong resistance to all foreign matter, and a great many of these particles of dust are expelled from the lungs, although some remain. If they be simply particles of dust not containing harmful germs, they may even then not do a great amount of harm, but, on the other hand, if these particles contain disease germs, they are very harmful, and unless the body is able to destroy them, that person will suffer from them. There is no doubt that a great deal of misery, if not positive disease, is caused by the inhaling of dust in the persistent coughs with which so many persons, otherwise healthy, are burdened. Then, again, dust may produce much distress when not inhaled, by irritating the eyes to such a degree as to cause great discomfort, if not disease.

There is a large number of diseases which physicians call "infectious." The more important of these infectious diseases are consumption, diphtheria, small-pox, scarlatina, measles, pneumonia, erysipelas, and blood-poisoning. Now, it has been proved without question, that the agent which causes some of these diseases is some form of bacteria. Each disease has its special form of bacteria, without which it cannot possibly exist. Some people believe that consumption is inherited. Now, this is a very common mistake. The disease itself is not inherited, but that condition of the body which renders it very favorable for the growth of the germ may be inherited. This predisposition again is not always inherited, but may be and often is ac-

quired, sometimes in ways which we understand, and often in ways which we do not fully understand. Some, again, believe that this disease is contagious. Well, in some ways it may be considered so, but there is no necessity of this. It has been shown that when due care and intelligent cleanliness are provided for, the attendants upon consumptives are not subject in any marked degree to the acquirement of the disease, but, on the other hand, where proper cleanliness is not exercised, the attendants are very liable to become victims to the disease. It has been proved without doubt that the infection or germ of tuberculosis is conveyed from sick to well persons by

does not show—is worse than useless, since the dust and germs are not in this way got rid of, but only redistributed.

Carpets and heavy hangings and upholstery with rough goods, all insure the more or less persistent retention of dust particles in rooms, and with these, the harmful germs, if such are present.

Hard floors with rugs which may be cleaned out of doors, as few and light hangings as are practicable, furniture upholstered as far as may be with smooth-surfaced fabrics, the use of moist dusting-cloths, and the wide opening of windows and doors when cleaning is going on, will confer in a large degree a sense of security against the dangers of dust

is usually done at night, but the difficulty is that the rooms are then shut up, and the result is that in the morning the first odor to greet you is that of dust.

Schools are our centers of culture, and must have the support and co-operation of every citizen, whether he sends children to school or not. I have heard men say, "I have to pay taxes, and I send no children." Education is a protection to property, and educated men and women are a national gain. Imagine if you can, how that man's property and the neighborhood in which he lives would lessen in value, if there were no schools, and the intellectual life of the place were not constantly stimulated. A good school, well kept, and finished in good taste, is an educative force in itself that cannot be over estimated in the lives of the children who are fortunate enough to spend some years within its walls. Life is a pretty serious business to the average child with his daily routine of school work, and if in after years he can look back with pleasure to his school and its surroundings and the games, the strenuousness seems a very little thing, for, after all, we like to forget the disagreeable to remember the pleasant.

A woman, trained in such a school, will never again be satisfied with tawdry furnishings nor an unhygienic home. It means better homes, better men, better women, and better citizens.

Letters from Abroad.

ON MEDITERRANEAN SHORES.

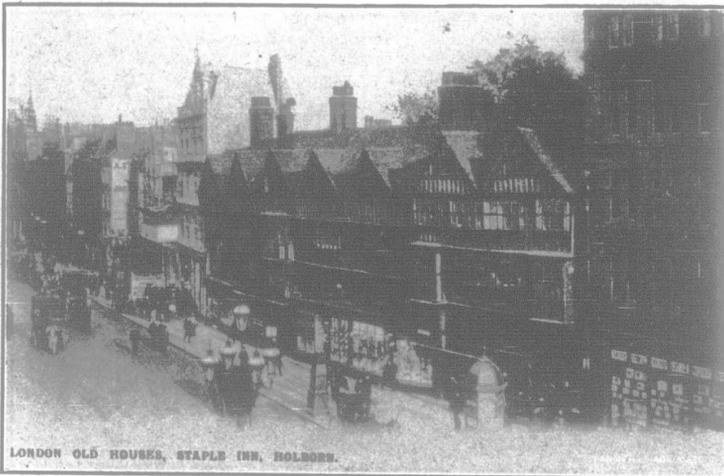
XIII.

Sienna, May 19, 1913.

My dear Jack,—I could hardly believe my eyes when I received a letter written in your distinguished hand-writing. "Whatever has come over the man!" thought I, as I flattened out the eight pages and began to read. "Perhaps he is suffering from a spasm of repentance over past chirographic delinquencies." But, alas! that comforting idea was soon dispelled when I read your graphic description of the cruel wind that blew the hall door shut on Jean's delicate fingers, and put them temporarily out of business. "It's an ill wind," etc., as the old proverb sayeth, and this particular wind was certainly kind to me, for it sent me a jolly good letter from you. There were one or two statements in the letter I didn't agree with, but I'll argue them out with you later. Of course, I'm awfully sorry Jean is disabled, but then it gave you such a fine chance to be heroic. I suppose it was as tough a job as pulling nails for you to write such a long letter. But, really, Jack, it was a good one, and when I came to the end of it and read that you and Jean were really booked for Europe, I felt like throwing my hat up in the air for pure joy,—only I couldn't, because it was firmly fastened on with three pins.

Well, as you see by the heading of this letter I am in Sienna. All my life I have heard of Sienna Brown, and now I am on the spot that gave the color its name. The soil and the rocks and the town, are all one rich, soft brown. We are perfectly charmed with the place. It is so picturesque, so full of color, and so medieval, with its towers and its churches, and its streets of old palaces. After the noise and bustle of modern Rome, Sienna seems like an Eden of quietness. The only disturbing elements are the occasional automobiles and jangling motorcycles that whirl along the stony streets, making as much noise as twenty sawmills! If I were running this world, I wouldn't have a motor-car nearer than Mars. It is so terribly exasperating when you are standing admiring some beautiful bit of fourteenth-century architecture to be rudely awakened from your dream by a harsh squawk, and see a vision of eternity in the shape of a motor-car bearing swiftly down upon you. I suppose you would say I shouldn't be dreaming on the streets; but then, you were never in Sienna. Think of streets lined with magnificent old palaces, with great, carved doorways, opening into courts where you catch tantalizing glimpses of fountains and flowers and statuary. Why shouldn't one dream?—You would yourself.

Sienna is one of the medieval hill-towns of Italy. It is built on three hills, and surrounded by a massive wall, with six



London Old Houses, Staple Inn, Holborn.

means of the material discharged from the lungs, which is allowed, through carelessness or ignorance, to dry, and finally mingle with the floating dust. The breath itself, the exhaled air of consumptives, no matter how seriously ill, is not dangerous; it carries no germs. It is only the solid discharged material that carries danger. This, then, shows us why consumption is such a widespread disease. The persons affected, either through carelessness or ignorance, carry the disease, not only wherever they go, but wherever the dust laden with the germ, goes. This preventable disease will then be held in check only when the people come to realize that it is caused always by this germ, and work accordingly.

in private houses where healthy persons live.

Such practices as the sprinkling of carpets with coarse salt or moist tea leaves, or other substances which keep down the dust, or the dampening of the broom in warm water in which has been poured a little coal oil, the use of carpet-sweepers and vacuum-cleaners, will aid greatly in keeping the home free from dust. A moderate-priced rug on a shellacked floor is more sanitary, will look better, and, on the whole, give more satisfaction than the more-expensive carpet. The former is capable of removal to the air and sunlight, the latter remains nailed down until spring to receive and retain with amazing tenacity, the sifting bacteria-laden dust of those who come and go.



Old Curiosity Shop, London.

We believe indoor dust to be much more harmful than that found out of doors, because the constant purifying agency of wind and air currents will soon either sweep away the dust or so largely dilute it that it will be practically free from disease germs. [Sunshine kills nearly all germs.—Ed.] Indoors, however, the conditions are different. It is perfectly obvious that unless the windows be widely open, or liberal air currents in some way established, the too-common method of so-called "dusting," that is,—the stirring up of dust which has settled on the smooth places in a room, so as to allow it to settle again on the rough surfaces of inconspicuous places where it

Because of the danger from dust and all uncleanness, the school-rooms should receive a great deal of attention. We would think our houses vilely kept if swept once a day, and cleaned thoroughly only once a year, and why should the children spend the vital impressionable period of their lives amid conditions that no careful housewife would tolerate? To be clean, every school should have a thorough cleaning each Saturday, and there's not a school I know of that cannot afford it. It is not difficult if the floors are of hardwood and are kept well oiled. The sweeping should be done, leaving many hours to elapse before the school is to be used. Fortunately, this

splendid gates, which are guarded by soldiers and tax-collectors.

Walking in Siena is full of queer surprises. You never know what strange thing you are going to meet when you round a curve or turn a corner. The first time I met a yoke of white oxen with horns that reached clear across the street I backed into the nearest doorway in double-quick time. Even the tram-car turns out for the oxen, and that reminds me that they have the funniest little trolley-cars here I ever saw. The wires are over-head, and there are no tracks, so the tram follows its own sweet will when moving along. Harmony says the tram-cars of Siena are the only things in Italy that are polite enough to turn out for everybody and everything, but then, she is rather sensitive on this subject, having had several painful collisions on the street with pedestrians who blocked her way. Every section of this country seems to have a road-rule of its own. In Sicily, carriages turn to the left; in Naples to the right; in Rome the street-cars turn to the left, but the cab-drivers get in wherever they can, and take particular delight in aiming directly for the timid wayfarer who is trying to avoid death by wheels.

The streets of Siena are all narrow and crooked, and either upish or downish—according to which way you are going. The entire town is paved with broad, flat stones, and there are no sidewalks. Some of the streets are very short, and terminate abruptly in beautiful arches or sunny piazzas, full of marble statues and expectant cab-drivers. Other streets are longer, and go wandering around, up hill and down, as if they were looking for something and couldn't find it. The Via Cavour, which is the main business street, comes in at the Porto Camollia, wiggles all through the town like a gigantic serpent, and disappears through the Porto Romano.

You would be very much amused at the street-watering system employed in Siena. It is very primitive. It consists of a man and a watering-can. He carries the can in his hand, and sprinkles a few stones along the way in a sort of wavy line, with large, dry spots, between the scallops.

The only level patch in Siena is the public park, and that has an artificial look, as if it had been filled in and levelled off for the convenience of promenaders. Adjoining this is the Fort, which was once strongly fortified, but is now a combination of barracks and pleasure ground. From the Fort walls there is a perfectly enchanting view of the country and the mountains. People throng there in the evening to see the sunset the same as they go to the Pincian Hill in Rome.

One day I went out on a kodak hunt for white oxen. As soon as I turned into the Via Cavour I saw some coming along the street. But the houses were high and the street gloomy, so I trailed along in the rear of the wagon till I saw a place where there was a bit of sunshine, and then I dashed ahead and took a snap-shot of the oxen as they stepped into the light. I followed them to the Camollia Gate, and just outside of it there was an ox market in a big field. The roads were white with caravans of oxen trailing up the hills to this field. It was a great sight. Hundreds and hundreds of snow-white oxen herded together, their mammoth horns towering up like a forest of spires, and glittering in the sunlight like polished silver.

They have a queer custom in Siena of hanging meal-bags on the heads of the horses and donkeys. The bags are very large, and made of netted rope. They are filled with green grass, and when the bags are empty they are refilled from a reserve stock carried on the wagon. It looks very queer to see the horses and donkeys trotting along all day with a green pasture hanging from their noses. They seem to eat and work at the same time. Every load that comes into the city is inspected and weighed at the gates by the customs officials.

Before I came to Siena I had heard of St. Catherine, and had seen millions of her in the art galleries, but I never thought of her in connection with any special place. But this is her native town. I have read a good deal about her since I came here; have been in the house in which she lived; have seen the stone which was her pillow; the bag in

which she carried alms for the poor; and the crucifix she wore. She was a very wonderful woman, full of zeal, and energy, and enthusiasm. She had tremendous influence in political and public affairs, and her advice was sought by kings and popes. She preached to thousands of people, and during the plague is said to have performed many miracles. She died in Rome at the age of thirty-three. Usually, in those days, people were buried where they happened to die, but St. Catherine was so celebrated that there was a great fight over the possession of her body. The Siense got her head, which was sent from Rome in a silk-embroidered bag. Every year, on

to be a special service and a procession. The long path up to the church was carpeted with rose leaves, and in the church itself there was a marvellous rug which stretched from the entrance door to the altar, made entirely of the leaves of flowers. The design was very complicated, full of church symbols, such as anchors, crosses, etc., and the border was very elaborate. It was a work of art, but very transitory—a little breeze would have swept it all away in a minute; yet it must have taken the patient monks hours and hours to make it.

The longest drive we took was to San Gimignano, said to be the oldest medieval hill-town in Italy. It was on the

ing for "Frankobolli" (stamps). Even in the cathedral we did not escape. In fact, that was where we were first attacked. We gave three stamps to four boys, and the result was a fight for possession on the church steps. There is tremendous rivalry between the collectors, and naturally the most successful boys are very unpopular with the others. I could write pages more about Siena, but there isn't any room, so—Goodbye. LAURA.

Hope's Quiet Hour.

The Glory of Love.

Father, I will that they also, whom Thou hast given Me, be with Me where I am; that they may behold My glory, which Thou hast given Me: for Thou lovedst Me before the foundation of the world.—St. John xvii.: 24.

In the wonderful prayer of Christ, uttered immediately before the agony in Gethsemane, His request for Himself was that He might receive glory from the Father. "Father," He cried, "the hour is come; glorify Thy Son. . . O, Father, glorify Thou Me with Thine own self with the glory which I had with Thee before the world was." Then He prayed for the disciples—for all who should believe on Him—that they might be with Him and behold His glory. What was this "glory" which meant so much to One Who cared little or nothing for earthly glory? The glory which the Father had given His Son before the world was created, is declared in our text to be the glory of love, the glory of perfect fellowship.

I have snatched time in the midst of the preparations for a great event to write this Quiet Hour. Do I need to tell you what is a "great event"? Two young people, who love each other, will soon be joined together by God Himself in the holy mystery of marriage. Beneath all the pleasant stir of preparation, there is a glory of love which makes a wedding a great event—great even in the eyes of God, and giving joy to the angels. If—as Christ has told us—there is joy in the hearts of angels when one sinner on this earth returns to his Father's love, certainly there must be rejoicing in heaven when two pure young lives meet and mingle. When the glory of love pours its radiance on the road before them, they can go forward hand-in-hand, with the trustful confidence of happy children, sure that their Father will guide and protect them.

When God stooped down to crown the happiness of Adam in Eden, He gave him a wife. We all know the sequel of that first earthly love-story, how Eve dragged down her husband instead of helping him to climb nearer to heaven. There is no sorrow so terrible as a blessing turned into a curse.

When JESUS the King was drawn by Love from His quiet home to inspire and bless the world, He went first to a marriage feast and there "manifested forth His glory"—the glory of His love.

A true marriage is a lovely and solemn occasion, the earthly shadow of the marriage-feast of Christ, Who will one day come to claim His Bride, the Church. Dare any Christian kneel and ask the blessing of God on his marriage if it is not shaming with the glory of love? Such a loveless wedding must bring certain misery to those who venture, in the Presence of the Searcher of hearts, to take lightly the awful vow which links them together.

But when—as in Cana—the honored Guest at the wedding-feast is the King of Love, when the best place in the hearts of the bride and groom is reserved for Him, and when they rest joyfully in the love of each other, then a wedding is crowned with glory such as no millionaire can buy with his gold. Then we who love the young people—and "all the world loves a lover"—are not afraid to sing:

"O, Perfect Love, all human thought transcending,
Lowly we kneel in prayer before Thy throne,
That theirs may be the love which knows no ending,
Whom Thou for evermore dost join in one."



The Old London Sidewalk Artist—Pictures in Chalk.

the sixth of May, there is a religious procession on the streets, and this head is exhibited. The rest of her body was divided up and distributed around among the different churches in various parts of the world.

The great yearly event in Siena is the Palio. No person knows its origin, but for over two hundred years it has been celebrated every year on the Palazzo Communale. It is a local horse race, and the Palio is the banner won by the winner. These banners are works of art, and every year the design is different. The horses that run in the race are ordinary work horses, and are ridden bare-back. Each contrada (ward) of the city has a horse in the race. Before the Palio is run, each horse is taken into the church of the special contrada it rep-

resents and is blessed by the priest. Then there is a grand pageant in which the most gorgeous and expensive medieval costumes are worn. After the race, the winning horse is taken again to the church and blessed and sprinkled with holy water, and the Palio of victory is deposited there for safe-keeping.

If I am anywhere near Siena in August, I am going to see the Palio if I have to ride there third-class, and nothing could be much more uncomfortable than third-class railroad travelling in Italy in summer.

There are a great many beautiful drives about Siena. The adjacent hills are sprinkled with monasteries, churches, and old ruins. One day we drove to the Church of Osservanza where there was



White Oxen in Siena.

together, after the manner of the fourteenth century, with the cathedral on the highest point, and the houses clustered around it. San Gimignano was once the abiding-place of the great Savonarola. We saw the church in which he preached, and the monastery in which he lived, but we could not enter it, because it is now a penitentiary. Our guide told us that the Camorra prisoners were lodged therein.

Just at present there is an awful "Frankobolli" epidemic raging in Siena. All the boys from six to thirteen have it. They have the same disease in Canada, but there they call it the stamp-collecting fever. You probably had it at the age of twelve or so. Everywhere we went we were pestered with boys ask-

ing for "Frankobolli" (stamps). Even in the cathedral we did not escape. In fact, that was where we were first attacked. We gave three stamps to four boys, and the result was a fight for possession on the church steps. There is tremendous rivalry between the collectors, and naturally the most successful boys are very unpopular with the others. I could write pages more about Siena, but there isn't any room, so—Goodbye. LAURA.

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But the wedding excitement will not last all through life. Trials of various kinds will test the love which is the glory; not only of the betrothal and of the marriage-day, but of the whole life. Real love should shine out more grandly in dark hours, when the light of other earthly happiness is clouded for a time. When our Lord appealed so confidently to His Father for the glory of eternal fellowship, it was when He was facing the agony and shame which the next day would bring. If love is real and glorious, it will draw into the home bright angels of faith, hope, and patient endurance, "with childlike trust that fears nor pain nor death."

As we grow older, we learn to know how little happiness can be extracted from earthly success. But love grows dearer and more precious all the way. How sweet is the love of little children! I am so glad we were told about the day when the little ones pressed against the heart of the Perfect Man. Unless He loved the children, there would have been something lacking in His nature. One of the most glorious hours of His earthly life was when He

"Took the brown little babes in the holy
White hands of the Saviour of men;
Held them close to His heart and
caressed them,
Put His face down to theirs as in prayer,
Put their hands to His neck, and so
blessed them,
With baby hands hid in His hair."

I don't know who wrote those lines, but they can hardly fail to go straight to your heart if you treasure the love of God's little children.

Then there is the love of the penitent, forgiven sinner. That also is a glorious treasure, dear to the heart of God. Do we know by our own experience the joy those who "love much," because much has been forgiven us?

I have heard people find fault with the story of the Prodigal Son, on the ground that all the joy of the welcome and the feasting was given to the one who had done nothing to deserve it. The son who had worked faithfully for years, did not share in the rejoicing. Why did he not share in it? Was he not also a son? Did not his father come out and implore him to take his rightful place at the feast? He was a prodigal, too, but he had not found it out. He had gone far away from the glory of fellowship with his father, so that he could not even understand that there was any reason for rejoicing over his brother's return. If we know nothing of the almost blinding glory of the Father's love towards His forgiven children, it must be because we have not yet discovered our own sinfulness and need of pardon. Our Father is loving us all the time. How many times a day do we slight that marvellous love? We are working and planning eagerly, and day slips swiftly after day, with so little remembrance of the Love that is always over us like a banner. We are delighted with words of praise from men and women, but forget to watch for God's approval. The prodigal was almost blinded by the dazzling glory of his father's love, knowing how undeserving of it he was. If we approach God in his spirit of penitent humility, we also shall understand the joy of the Father's welcome.

Then there is the glory of love, as it shines out in earthly fellowship. This is the natural result of penitence before God. We are all sinners, and hand-in-hand, like little children, we seek together our Father's forgiveness. The lower we bow before Him, the less likely we are to look down proudly on anyone else. Remembering how deserving of blame we are ourselves, we shall be less ready to find fault with other sinners. As for pride of birth and station, it will be quietly crowded out of a loving and penitent heart. Those who count it glory to walk humbly in the steps of One Who chose to be born in a stable, to spend nearly the whole of His earthly life as a poor working Man, and to die on a cross, cannot "condescend" to men of low estate—being already on a level with them. When we hear of a man of culture and refinement choosing to cross the ocean as a steerage passenger, we are not surprised. Neither are we surprised when he admires and respects other steerage passengers. The glory of

a man, he knows, is not the temporal glory of earthly rank, but the eternal glory of love and righteousness. Real worth—the worth of "being, not seeming"—can be found all the world over by those who are prepared to appreciate it very highly wherever it is discovered.

"Covet earnestly the best gifts," says St. Paul; and of all the gifts of God, the most glorious is holy, heavenly love. Of all the great Names of God, the greatest is LOVE. The "glory that excelleth" is within the reach of every child of our Father, if only we set our hearts on it and press towards the mark, unswervingly and prayerfully:

"Walking every day more close
To our Elder Brother;
Growing every day more true
Unto one another."

DORA FARNCOMB.

Fashion Dept.

HOW TO ORDER PATTERNS.

When ordering, please use this form:
Send the following pattern to:—

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Post Office.....
County.....
Number of pattern.....
Age (if child's or misses' pattern).....
Measurement—Waist,..... Bust,.....
Date of issue in which pattern appeared.....

Address: Pattern Dept., "The Farmer's Advocate and Home Magazin'." London, Ontario.

Note.—Price ten cents per NUMBER.
Allow at least ten days to receive pattern.



6972 Empire Night Gown for Misses and Small Women, 14, 16 and 18 years.



DESIGN BY MAY MANTON.
6838 Boy's Blouse Suit, 2 to 6 years.



DESIGN BY MAY MANTON.
7738 Girl's Dress, 10 to 14 years.



802 Girl's Dress, 8 to 14 years. 7809 Girl's One-Piece Dress, 5 to 12 years.



7697 Child's Empire Dress, 1, 2 and 4 years. 7652 Child's Bishop Dress, 6 mos., 1, 2 and 4 years.



7681 Child's Tucked Dress, 1, 2 and 4 years.
707 Embroidery Design.



7612 Corset Cover with Straight Upper Edge, 34 to 42 bust.



7854 Girl's Tucked Dress, 10 to 14 years.



7762 Child's Dress, 4 to 8 years.



7612 Child's Dress, 2 to 6 years.

The Ingle Nook.

[Rules for correspondence 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.]

What Shall We Do, Then?

Granted that the average Canadian child—or child anywhere, for that matter—would benefit by a little more training, a little more educating than he is at present receiving, "What shall we do, then?"—as Tolstoi asks in regard to the great social question.

And now, may we pause to repeat—But this reminds me of an amusing story which I must tell you, and which will be especially appreciated by those of you who have old Normal-school days, with all their work and fun, to look back upon.

In a boarding-house connected with one of the Ontario Normal Schools, was a girl who had a most annoying habit of studying aloud. She "couldn't remember," if she studied otherwise, she said, and so the girls in the adjoining rooms had to do their work to a constant accompaniment of "Fitch," or "History of Ed.," or "Psychology," droned out in a melancholy but unflinching monotone. Many a time, needless to say, there were mutterings, "not loud, but deep," from the neighboring study-tables, but upon one occasion at least, tragedy turned to comedy, and there was a shout of laughter.—"Pestalozzi says that the secret



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"Do you mean to say, son, they guarantee them to wear six months without holes?" That is exactly what we are doing.

Six pairs of cotton hose, guaranteed six months, for men, cost \$1.50 to \$3 per box; for women and children, \$2 to \$3 per box; also three pairs for children, \$1 per box,

guaranteed three months. Several weights; all sizes and colors. Three pairs of silk Holeproof, guaranteed three months, for men and women, cost \$2 a box for men and \$3 a box for women. All colors. Medium cashmere socks, six pairs, \$2; fine cashmere, six pairs, \$3. Women's fine cashmere stockings, six pairs, \$3. Six pairs of cashmere guaranteed six months.

Holeproof Hosiery
FOR MEN, WOMEN AND CHILDREN

These are soft, pliable and stylish. The foundation of the wear is yarn that costs us an average of 74c a pound. We could buy common yarn for 32c; but hose made from it wouldn't last.

Our guarantee covers every stitch, not just the heels and toes. Our inspection department, where each pair is examined, costs \$60,000 a year. But we cannot afford to replace many pairs, so we see that each pair is right.

The above figures refer to Hole-

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Finally, every child has a right to a happy childhood. Happiness is a great aid to health, and even if it were not, the child surely should not be denied happy memories of this one early period. He will have worries enough in later years, troubles enough in later years. Happiness is his peculiar privilege now while he is dependent, trustful, developing with a rapidity that cannot go on in mature life. As the editor of Harper's Bazar has well said:

"One often feels that the fundamental difference between strong and successful men and women and despairing failures, is due to the child's early environment."

"The child has an inalienable right to a period of security and peace while he is laying the foundations of character. If parents but realized how deep the impress can be of every storm, every injustice, every misunderstood rebuke, upon the sensitive plate of a child's mind and heart, more effort would be made to bring peace and sunshine into each home."

"A child has a right to feel that he is secure in a good world; and he has a right, too, to learn that this is a rational world, where effort begets results. He must believe in cause and effect. It is ruinous to a child's whole conception of the world, to laugh at him for perversity one day, and punish him for the same speech the next day. It is apt to make the man's whole universe inconsequential."

"Perhaps one may find a reason in these reflections for the harder race of men who grew up under strict rules and precepts. Their world was narrower, but it was safer, more rational."

"A happy and healthy childhood, full of sunshine and merriment and kindness and understanding, means successful and helpful maturity. A great deal of failure is fear, and a great deal of sin is stupidity. And nothing so increases fear and begets stupidity as a disorderly and inconsequential environment in the first few years."

"Moral and mental thunderstorms when they are least expected and understood, destroy the child's sense of security in life. And whatever evil be ahead, he has a right to begin with a sense of an ordered and intelligent universe."

(To be continued.)

I am writing this on the 9th of June, and last night it was necessary to put winter coverings on the beds! What a queer, cold, uncanny season! Really, climate seems to be turning topsy-turvy these years, and we don't know whether to provide muslins or tweeds for the summer. Indeed, with disastrous results to pocket-books, it seems necessary to have both.

Everyone is wondering, to-day, how the fruit came off after last night's frost, and the outlook seems so hopeless that at breakfast this morning the conversation turned on "substitutes," in case we have to exist for the rest of the year sans apples, sans pears, sans plums, sans strawberries, sans peaches—it almost seems sans everything!

But there ARE substitutes, thanks be, and here is the list compiled by the various minds at the breakfast table:

1. Citron.
2. Ripe tomatoes preserved with oranges.
3. Green tomatoes preserved with lemon or ginger-root.
4. Squash or pumpkin preserve. Let us hope, too, for raspberries.

The only advantage I can see in this cold weather is its freedom from mosquitoes. I am sure the surveyors and prospectors up North are feeling themselves almost in Paradise because of the lack,—and really if you want to know, by contrast, the full blissfulness of a state of mosquitolessness, you must spend at least one month up in the North woods,—one damp, warm, spongy, mosquito-infested, temper-rasping month. If, at the end of it, you don't feel that you have paid something for your sins, I miss my count.

A few miles north of Gowanda we learned the whole story. For two days, all the way up the river, we had fought mosquitoes with branches. At nightfall we reached camp to find our tent snugly ready, well-pegged down, lined with the far-famed "bed of boughs," and mosquito-net well in place. Tired, we retired at once and spent a blissful, almost mosquitoless night.

We appreciated that condition, for we thought we knew what mosquitoes were by this time. It remained for next day, however, to bring a new light. Indeed, before two hours had passed we had found out for a dead certainty that we had never seen mosquitoes before, never heard mosquitoes before, never felt mosquitoes before, until here on Lake Obush-kong. We got into the hammock; they stung us through hammock and all. We put on mosquito-veils; they crawled up under them. We sat surrounded by smudges, we waved branches, we wiped our red eyes, we exclaimed against the undeniable truth that all the biting mosquitoes were females—sufragettes, probably—and all the while we were blissfully unaware that a grilling worse than this was awaiting us, all because of our own fault, too.

To make a long story short, in our greenness, for in some respects we were then greener than anything in all that vast interminable forest, during all of that day we left the mosquito-net of our tent up. We were warned against doing so, but protested: "It was stuffy in there," "we must have the place aired,"—and so we were left to learn by experience.

We learned. At dark we retired once more, serene in the confidence that we could "smoke them out" of so small a space as that occupied by a little silk tent.

So we "smoked" (with a smudge on a pan, of course), and the mosquitoes disappeared—somewhat—then down went the mosquito-net, and we crept into the rabbit-skin.

But will you believe it?—those awful female mosquitos had not gone out at all. They had been either fainting or feigning, and before moonrise were all stirring among the boughs on the floor. They began to sing in chorus. With one impulse they arose and swooped upon us, and with one impulse we two hapless victims began to—bang. If you have ever banged mosquitoes for four mortal hours or more, you will know what that means.

But banging was of no use. For one that fell ten arose in vengeance, so at midnight drear I put on a hat and big automobile veil and lay down again—to rest. Tannis would not follow suit. She "couldn't sleep with a hat on," she declared, whereupon I ventured to suggest that she might sleep as sweetly as at present.

Well, my veil "worked" all right, but Tannis kept on working, too, banging away, hour in, hour out, while I kept quite still, hoping to drop off asleep in spite of the commotion. Tannis thought I was asleep, but I wasn't.

At about three a. m., I heard her say—a dreadful word!—Not a very wicked word, you know, still a dreadful word—for Tannis.

You could have no idea of how funny it was unless you knew Tannis, Tannis the purist, Tannis who never even would say a slang word, Tannis, described to me once by an enthusiastic young man as "the most cultured young lady he had ever met."

Of course, I "snickered," and the murder was out. Then we both fell to laughing, there in the heart of the woods, at three o'clock in the morning, to the accompaniment of the songs of ten million mosquitoes and the snores from surrounding tents. When I could get my breath I gasped, "Never mind, Tannis, I was thinking it."

Every year about this time I hold a sort of anniversary of the event and laugh to myself. This time I have passed it on. I hope Tannis will forgive me.

By the way, did you note what Dr. Hill said recently about treating rain-barrels, pools, etc., with kerosene, to prevent mosquitoes? Better remember it, for, for all we know, this year we may be having strawberries and raspberries and June roses and mosquitoes all in September.

[Note.—Since writing the above, it has become hot as Tophet is popularly supposed to be, and the mosquitoes may be out in full force to give "point" to my story.—O, Canada!—oh! Canada of multiple changes!]

ABOUT CEILING.

Dear Junia,—We intend remodeling our house this summer, and I wondered if

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you could give me any information on panelled ceilings, the material used, and how it is treated. M. G. Lanark Co., Ont.

Ceilings with stucco panels are not often seen now except in public buildings. The favorite ceiling is "beamed," or panelled if liked better, with wood stained to match the other woodwork, the background being plaster. The beams, of course, are hollow—to save both weight and expense. When a beamed effect is chosen, sometimes but two beams are used, dividing the ceiling into thirds; sometimes several are preferred. It is all a matter of taste.

A BUDGET OF QUESTIONS.

Dear Junia,—Here I come seeking for help like many others. I have enjoyed your paper for some time, and have always found it helpful, so am going to trouble you with some questions also.

What will remove butter color from clothes?

What will remove dandelion stains from clothes?

Will balsam pitch stain? If so, how remove it?

Will black knot on plum trees injure the fruit for eating?

Is froth of cream separator bad for young calves?

What is the leading color for this year? Are dark or light colors the more popular for this summer?

A SCOTCH LASSIE.

Wellington Co., Ont.

Not knowing the composition of the butter color I cannot say. Try rubbing the stain with glycerine, leave it for a while, then wash out. If this does not remove the spot try alcohol. Stains in white clothes usually succumb if treated with "Omo," or if a cupful of Javelle water be added to the boilerful of water in which they are boiled.

Try alcohol for the dandelion stains.

If I were you I should not try the balsam pitch on anything, then there would be no stain to remove. Scientific American gives the following as removers of pitch stains: benzine, benzol, or ether. All are very inflammable, and should be used out of doors where there is no fire or light.

Black knot will not injure the fruit for eating except as it deteriorates its quality, but it will kill the trees in time if not exterminated.

It is better to remove the froth from separated milk before feeding it to young calves.

Almost every color is "in" this season, especially, perhaps, for dresses and suits, the various shades of blue and tan. Touches of cerise, burnt orange, "paddy" green, and even certain shades of purple, seem to be very popular in hats. Indeed, just now we seem to be revelling in bright colors (in small quantity), and pastel shades are, for a little, relegated to the background. It is safe to predict, however, that they will soon return to favor. Light colors and white are always in favor for cotton dresses.

PICKLED WALNUTS—REMOVING PAINT.

Dear Junia,—Can you tell me what process walnuts must undergo in pickling in order to soften them? I have followed a recipe, using only young and tender walnuts, but the pickles were something akin to bullets put through the same process.

I have used Cross & Blackwell's pickled walnuts, and would like to know how they succeed in obtaining such soft, delicious pickles.

Another problem,—what shall I do to a painted dresser to remove the paint, and what should I do to the wood afterwards to prepare it for staining, as I want a dull finish?

Your Nook, dear Junia, is a boon to all of your readers. MRS. MAC.

Waterloo Co., Ont.

Can anyone tell if there is any especial softening process for walnut shells? Perhaps Mrs. Mac. did not succeed in getting them before they were too old. Usually they are ready early in July.

To Pickle Walnuts.—Get the young nuts and prick them with a fork, then put them in a brine made up of 1 lb. salt to each quart of water, and leave for five days, changing the brine three times. Put them in the sun until they turn black, then put into bottles and cover

with the following: Boil vinegar and spices in the proportion of 1 ounce black pepper, ½ ounce allspice, and ½ ounce bruised ginger. Put this on hot; cover closely, and put in a dry place. Ready for use in six weeks.

To Remove Paint.—Method given by Scientific American: Make a paste of soda and quicklime in equal proportions, putting the soda into the water first. Apply with a brush to the old paint, leave for a few moments, then wash off with a brush and hot water. Finally, rinse the wood with clear water and wash off with vinegar.

ROYAL SCALLOP.

Dear Jean,—I wonder if "Amy," of Wentworth Co., Ont., would send to the Ingle Nook her remedy for removing freckles. I am fair and freckled, but have not come across the right prescription yet.

She asks how salts can be used as a face wash. Don't use it at all. I had a friend who did, and it makes the skin very dry.

Your paper is a treasure I am sure to many people,—so many useful and very interesting things to be found in it.

I will send a very nice scallop recipe. Perhaps it will be something new. It is very delicious for a tea. Thanking you most kindly. KIZER.

Kent Co., Ont.

Royal Scallop.—Six hard-boiled eggs chopped fine, white and yolks separate; 1 cup boiled ham chopped fine; 1 pint cream sauce.

Cream Sauce.—One pint cream or milk (or part cream and milk); 1 lump butter size of egg; 2 tablespoons flour, thin with water. Salt, pepper (cayenne just a pinch). Cook till creamy. Butter baking-dish. Put layer of bread crumbs, chopped egg, then ham, then cream sauce. Repeat till all is used, with bread crumbs on top. Put little crumbs of butter on top of all. Bake twenty minutes.

Seasonable Recipes.

Orange Buns.—Take ½ lb. flour (2 small cups), 2½ ounces butter (about 2½ dessertspoons, rounded), ¼ cup sugar, 1 egg, a little milk, peel of ½ an orange grated.

Cream the butter, sugar and egg together for four minutes, then add the flour, milk, and grated orange peel, using just enough milk to make a stiff batter. Drop the mixture in heaps on a greased pan. Brush the buns over with the white of an egg, place a piece of orange peel in the center of each, dust with sugar, and bake in a hot oven.

Onion Porridge.—Five large Spanish onions, three pints of boiling water, one tablespoonful of cornflour, a little milk, a small piece of butter, and pepper and salt to suit taste. Peel the onions thickly; cut them into thin round slices, put into the boiling water with some salt, and boil them for one and a half to two hours. When they are done, do not strain them, but add the cornflour mixed with the milk, add the butter, and then boil all for a few minutes.

Savory Steak.—Cooked in this way, even a leathery piece of steak can be converted into a tender, savory stew, with plenty of good gravy. Required: Two pounds of stewing-steak, one large carrot, three large onions, one turnip, a small bunch of herbs, a strip of lemon-rind, one ounce of dripping, salt and pepper, a little flour, one pint of stock or water. "Stewing steak" is one of the cheapest cuts of steak. Cut it into four pieces. Wash and prepare the vegetables, and cut them in slices. Melt

the dripping in a frying-pan, roll the pieces of steak in the flour, then fry them a good brown on both sides. Put half of the onions in a stewing-jar or casserole, place the meat on them, then put in the rest of the vegetables, the herbs, and lemon-rind; the latter two should be tied in a piece of muslin. Pour in the stock, and add a seasoning of salt and pepper. Put the lid on the jar, and place it in a slow oven or in a sauce-pan of hot water, and let it cook gently from two to three hours. Then skim it carefully, take out the herbs, and serve in the jar in which it was cooked. If the gravy seems thin, add a little more flour to it, first mixing it smoothly with a little cold water, but be sure to let the gravy re-boil after adding the thickening.

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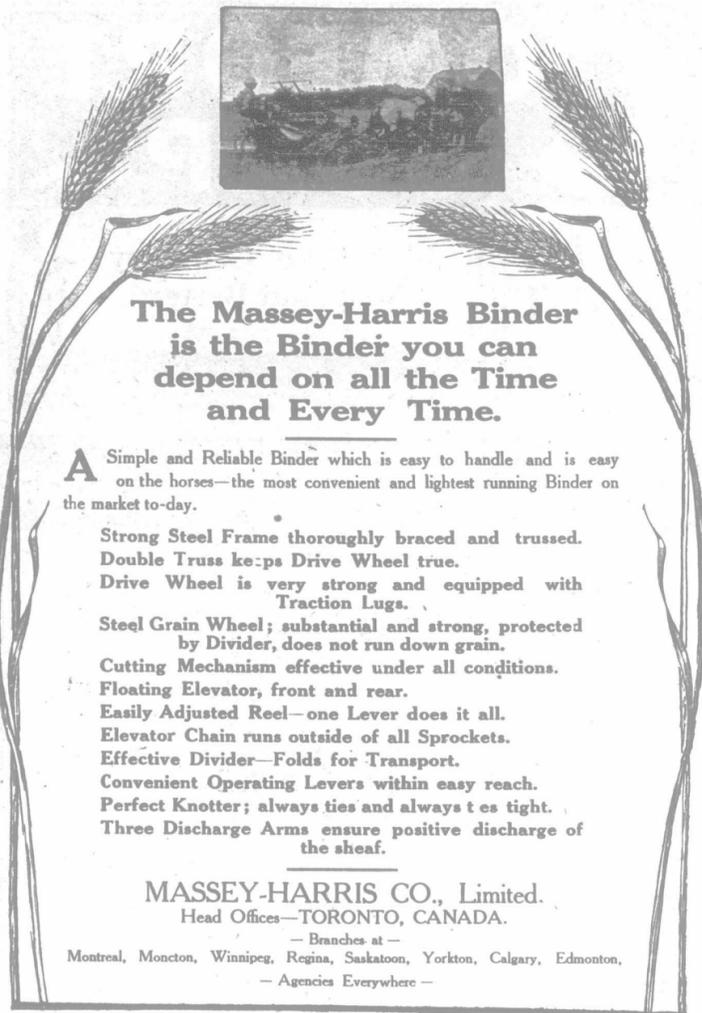
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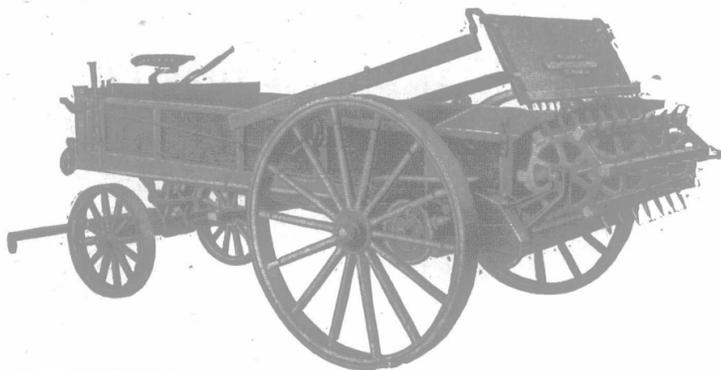
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(The three recipes given above were taken from a New Zealand paper, the Otago Witness. They certainly "sound" good enough to be worth trying.)

Rhubarb Shortcake.—Make a shortcake either like layer-cake or biscuit-dough, as preferred. Split and butter it while hot, and spread at once with a filling made as follows: Cook for five minutes two cups thick stewed rhubarb and one cup stoned dates, or stoned dates and raisins mixed. Put the cake together and serve at once with sweet cream and sugar, or whipped cream. The rhubarb may be used alone if liked.

Rhubarb and Orange.—Cut tender rhubarb in bits, and to 1 quart allow 3 cups sugar, 3 oranges, $\frac{1}{2}$ teaspoon mace, 1 dozen cloves, a little stick cinnamon. Wash the oranges and pare off the yellow rind thinly. Scoop the pulp into the other mixture, and add the thin yellow rind cut in bits. Add 2 tablespoons cold water, cover the dish and bake in a hot oven. Rhubarb cooked thus keeps well. A little of it is delicious with toast. It also makes a good tart filling.

Rhubarb Marmalade.—Equal quantities of prepared rhubarb and orange pulp, with their own weight in sugar and an extra cupful for the kettle, can be baked slowly to an excellent marmalade. Reduce the heat after the fruit is tender, and let it barely simmer in the syrup. Spice to taste, but taste will go wrong if it leaves out mace and cloves. Free the orange peel of membrane, and boil it tender in salt water. This is to remove the bitterness. Throw into fresh water. When cool, pare away the white inside and cook for half an hour in clear water. Cut into fine straws with sharp, clean scissors, and stir the straws well through the fruit. Let cook till they are preserved through. Keep the pan off the stove bottom with a rack or wire shelf and thus you minimize the danger of scorching. Stir occasionally, but only occasionally, and very, very gently. When a drop hardened on a plate shows the right consistency, take it from oven, cool till milkwarm, then pack in small jars. They may have paraffin on top, or oiled paper.—Boston Cooking School.

Brown Pudding (enough for 10 people).—Three cups soaked bread crusts, 1 cup flour, 1 good half-cup sugar, 1 good half-cup syrup (blackstrap), $\frac{1}{2}$ cup suet or a half-cup drippings (suet preferred), 1 cup raisins and 1 cup currants, or 2 cups of raisins, $\frac{1}{2}$ cup milk if necessary, 3 teaspoonfuls baking powder, $\frac{1}{2}$ teaspoonful salt, $\frac{1}{2}$ teaspoonful each nutmeg and cinnamon grated. Grease pan. Soak bread crusts a few minutes in cold water, and squeeze out dry in a cloth. Add the other materials. Mix and steam three hours.

Sauce.—One large tablespoonful flour, 1 cup sugar, 1 cubic inch butter, 1 tablespoonful water, 1 teaspoonful salt. Put on stove in an iron pan and stir till caramel-brown, then pour in boiling water until thinned to desired consistency.

Boston Baked Beans (in quantity).—Twelve cups beans, 6 cups bacon cut fine, say half-inch squares, 2 scant cups sugar, 3 dessertspoonfuls dry mustard, 4 teaspoonfuls salt (rounded), 2 teaspoons pepper (rounded). Pick over and soak the beans overnight. Strain off the surplus water; put fresh on and boil 20 minutes or so; pour water off again and boil again till the skins turn brown on exposure to the air. Now add the bacon, sugar, etc., and bake four hours or longer. In baking, add water as needed.

The Scrap Bag.

KEEPING SOUP STOCK.

When making stock which is to be kept for any length of time do not skim. Pour it while hot into glass or stone vessels (sterilized). The fat will rise to the top, and when cold will form a close covering, which will protect the stock from air. Put in a cool place and the stock will keep as long as the covering is not broken, loosened, or spoiled.

CUTTING UP PINEAPPLES.

This is the way to cut up pineapples in the country where they grow. Cut off the top. Stand the apple on the table, and, with a large knife, cut it into quarters. Take one piece at a time,

holding the rough outside next the palm of the hand, and, with a sharp-pointed knife, cut out small pieces. When the outside is reached, cut, with the point of the knife, the meat between the eyes. Sugar each layer of pineapple. This is much easier than peeling a pineapple.—Selected.

TO WHIP CREAM.

Use cream 24 hours old. Set it on ice, or wrap the bottle containing it in a pail containing cold water and salt. When very cold, whip. Some add the white of an egg to the cream to make it whip better. Here, also, is a Boston Cooking School wrinkle:

"It helps much in holding up meringue, to beat cold water into it; a teaspoonful for each egg-white. Add the water as beating begins, with a pinch of salt. Have the whites cold, and beat until they stick to an inverted dish, then add gradually powdered sugar, using six tablespoonfuls for each two whites, and three drops of clear lemon juice for each egg. Beat very smooth, and spread and harden at once. Allowing a meringue to stand before cooking is the root of more than half the trouble. Meringue made thus remains crisp under the fruit-cover until eaten, provided, of course, the eating is immediate."

COVERING COMFORTERS.

Enclose the cotton batting in mosquito-netting, tacking it here and there. Slip the comforter thus made into the outside cover and tack in place. When the cover is soiled, you will find it very easy to rip open one end and remove the inside. A good idea for keeping comforters clean is to baste a band of cheesecloth neatly over the edge that comes next to the breath of the sleepers. This may be frequently removed and laundered.

TO BANISH ROACHES.

Use equal parts powdered borax and pulverized moth-balls. Remove everything eatable, and sprinkle this powder about wherever the roaches usually run.

CANNING BEEF SUET.

Grind fresh beef suet in the food-chopper and stuff it firmly into sterilized fruit-jars. Fill as full as possible and seal tightly. Keep in a cool place in the cellar.

NEW RECIPE FOR A WASHING MIXTURE.

Take 2 lbs. of the best brown soap, cut it up, and put into a clean pot, adding one quart of clear soft water; set it over the fire and melt it thoroughly, occasionally stirring it up from the bottom; then take it off the fire and stir in one tablespoonful of real white-wine vinegar, two large tablespoonfuls of hartshorn spirits, and 7 large tablespoonfuls of spirits of turpentine. Having stirred the ingredients well together, put the mixture immediately into a stone jar and cover it immediately, lest the hartshorn should evaporate. Keep it always very closely covered. When going to wash, nearly fill a six- or eight-gallon tub with soft water, as hot as you can bear your hand in, and stir in two large tablespoonfuls of the above mixture. Put in as many white clothes as the water will cover; let them soak about an hour, moving them about in the water occasionally. It will only be necessary to rub with your hands such parts as are very dirty; for instance, the inside of shirt-collars and waistbands, etc.; the common dirt will soak out by means of the mixture. Wring the clothes out of the suds and wring them well through two cold waters. Next put into a wash-kettle sufficient water to boil the clothes (it must be cold at first), and add to it two more tablespoonfuls of the mixture; put in the clothes after the mixture is well stirred into the water, and boil them half an hour, at the utmost—not more; then take them out and throw them into a tub of cold water, rinse them well through this, and, lastly, put them into a second tub of rinsing water, slightly blued with the indigo bag. Be very careful to rinse them in two cold waters, out of the first suds, and hang the boiling; then wring them and hang them out.—From "Country Life."

The Beaver Circle

The Garden Competition.

(OPEN TO BOTH SENIORS AND JUNIORS.)

Several anxious Beavers have been asking, "What is my number in the Garden Competition?" so here is the list up to date:—

1. Geo. Thompson (age 8), Teeswater, Ont.
2. Bertha Bell (13), Caistorville, Ont.
3. Louise Read (12), Uptergrove, Ont.
4. Elleda Keys (11), Hulbert, Ont.
5. Mary Lemendin (14), Peterboro, Ont.
6. Maria Hopkins (13), Cumming's Bridge, Ont.
7. Minnie McKnight, Marshville, Ont.
8. Reggie Walters (11), London, Ont.
9. Winifred Colwell (15), Brookville Station, New Brunswick.
10. William Avery, Stayner, Ont.
11. Effie Stoltz (12), Auburn, Ont.
12. Oscar Oxley (12), Canfield, Ont.
13. Aldon Patterson, Rockwood, Ont.
14. Humphrey Copland (14), Harrison, Ont.
15. Gertrude Everett, Waterdown, Ont.
16. Mabel Gunning, Science Hill, Ont.
17. Margaretta Williams, Larchwood, Ont.
18. Bessie Currie, Lammermoor, Ont.
19. Howard Jamieson (15), Camborne, Ont.
20. Elizabeth Walser (13), Germania, Ont.
21. Edythe Card (12), Guelph, Ont.
22. Whylna D. Young (13), Allan's Mills, Ont.
23. Lillian Speers (11),—forgot to give post office.
24. Henry Clegg (11), East Amherst, Nova Scotia.
25. Lorne Tucker, Harold, Ont.
26. Hazel Yelland (12), Dale, Ont.
27. Dorothy Newton, Plaisance, Que.
28. Stanley Rivers (11), Dunganon, Ont.
29. Cameron Smith, Welland, Ont.
30. Elizabeth Hughes (13), Hanover, Ont.
31. Ruth Erb (14), Stratford, Ont.
32. Ruby Breadner (13), Fort Eve, Ont.
33. Hazel Leggett (14), Rainham, Ont.
34. Ruth Ross (12), Iona Stn., Ont.
35. Carmen Locke, Iona Stn., Ont.
36. Emma Runge (12), Gorrie, Ont.
37. Arthur Payne, Dunnville, Ont.
38. Hazel Tishman (12), Hagersville, Ont.
39. Lillian Speers (11), Caledon, Ont.
40. (No name given), Cumming's Bridge, Ont.
41. Bert Garland, Richmond, Ont.

You see one forgot to mention her post office, another forgot even to give his or her name, and several forgot all about the "age" question. Will these "forgetters" please supply the omitted information as soon as possible.

Senior Beavers' Letter Box

Dear Puck and Beavers all,—In answer to the question asked by Lorne Snyder I will try to answer to my best ability, although I am a girl. My idea is that the boy who lives in the country is far ahead of the city boy. The country boy is not tempted so much as the city one. The former spends his winter evenings skating or at such sports, while the city boy spends his saking with bad companions. So if any boy was about to leave the farm let him, first of all, think of the evil tempter. I would like if some of the Beavers of my own age (12) would write to me. I am a lover of horses. I would just love to have a pony.

Beavers, didn't all of you like that story of "Rebecca of Sunnybrook Farm"? I hope Puck finds another just as nice. Well, as my letter is getting very long I will have to stop or maybe Puck will never ask me to come again. EVA M. BLACK. (Age 12.)

Huntley, Ontario.
Don't you think you are rather hard on the city boys, Eva? You know there are very many good city boys, too. I pass a city school-yard twice every day, and, do you know?—I have never heard one "swear word" from any of those boys yet, nor have I ever seen any of them fighting.

I think there are bad and good boys

in both city and country.—don't you? But we hope the number of the bad ones will be less, year by year.—don't we?—P.

Dear Puck and Beavers,—This is the second letter I have written to your circle, but the first one wasn't printed so I thought I would try again. They always say to "try, try again."

I am thirteen years of age, and I am in the senior fourth book at school. I have a mile and a half to walk to school. Our teacher's name is Miss McLellan. I like her very well. My father has taken "The Farmer's Advocate" for many years, and he likes it fine. I don't think he would do without it.

My letter is getting long but I want to tell you one more thing. We have a little pup about three months old; he is a nice little thing, and I wondered if you would tell me a nice name for it. I hope this escapes the w. p. b. Wishing the Beavers every success.

IDA FLEMING.

Brown's Corners, Ont.

Can the Beavers suggest any nice names for a dog? What about Bruno, Mack, Pat, Caesar, Captain, Major, Ponto, or Frisk?

Dear Puck and Beavers,—At last I have taken up courage to write. My father has taken "The Farmer's Advocate" ever since I can remember.

I live on a farm of about 280 acres, a good part of which are woods. I go to the Model School, Charlottetown, P. E. I., five miles from our place, and go every day.

Now I will tell you about a wasp's nest. One day Selma and Edward were up in the Avenue, and Selma found a large wasps' nest under a little spruce tree. One day we went up to poke at it. I poked at it most, and one stung me on the leg. Now as my letter is getting long I will close, wishing the Beavers every success. Good-bye.

LOIS OWEN.

(Age 10, grade V. Sr.)

Charlottetown, Southport, P. E. I.

Dear Puck,—This is the first letter I have ever written to the Beaver Circle. Although I was a constant reader up to about two or three years ago, when, more through neglect than anything else, we delayed renewing our subscription, so I completely lost track of the doings in this interesting corner.

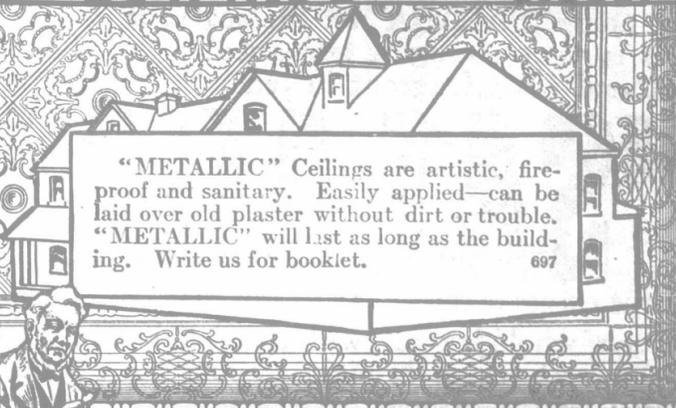
I was glad to find, upon reading it once more, that literature had been introduced. I am fond of reading and have quite a few books, and I think if asked what book I liked best I would say "Ben Hur," and if any of the Beavers who are fond of reading have not got it, then let the next book they buy be "Ben Hur." It is a book one may read three or four times, and yet not tire of it. Another very good one is "Scottish Chiefs."

My favorite author is Jules Verne. His works are both amusing and instructive, and their flavor of science makes them very interesting.

I can't understand why so many boys go wild about those Alger books. I have read quite a few of them, and they just seem to be about the same yarn over and over again. His Heroes are nearly always good noble boys and very good examples in some respects, but his works on a whole do not seem to me to be particularly interesting. But the only class of books I really detest is novels. I never read but one novel, and that was and will be the last. I never could digest those sentimental love yarns, though from all appearances one soon won't be able to get much else. Most of the Sunday School libraries are made up of such trash. I think Dr. Talmage hit the nail on the head when he said that modern literature was something like milk; some of it is all right, but the greater part of it is nothing but chalk and water.

Now, about magazines; I think every boy should read at least a couple of magazines. They keep him wised up on what is going on. I have pursued quite a few, and the two that seemed to me to be the best were "The Farmer's Advocate" and Munsey's. Now, when I say "The Farmer's Advocate" I am not saying it merely out of courtesy.

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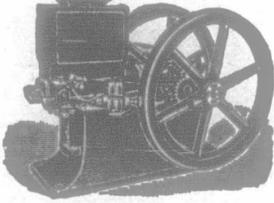
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but I mean it, and even if one is not a farmer he is almost certain to find in it much that will interest him, or as the saying has some of it will interest everybody and all of it will interest somebody. As to Munsey's I think it is just grand, and it is a magazine which amusement is not held at odds with instruction.

Now I guess I had better close, as I have already written a long letter. I would like if some of the Beavers would write and give their view as to the class of books they like best. I have been wanting to get the life history of Edison and Franklin, but I don't know where to send for them. Perhaps you, Puck, could give me a hint as to where I might get them, and will you think me presumptive if I suggest that we have a debate or something? I think it helps to make the circle interesting. So, hoping the circle every success, I will close. J. CLARKSON ROBSON,
Milton West, Ont. (Age 14.)

This is a very interesting letter, Clarkson.—Yes, we will have a debate some day. I am sorry I cannot tell you where to find "lives" of Edison and Franklin other than in "Who's who" and the encyclopaedias, but perhaps you have these in your public library.

Do you know, Clarkson, your letter very nearly went into the w.-p. b. because it was written on both sides. Only the fact that it was more interesting than most of the letters received saved it.

Dear Beavers.—As my first letter to the Beaver Circle was in print, I thought I would write again. We have taken "The Farmer's Advocate" for a number of years, and I enjoy reading the Beaver Circle very much. I live on a farm about four miles from Ridgetown. I have to help do the chores. My chores are to feed the cattle and calves.

I have a little puppy, his name is Bob. I go to school every day and like it fine. I am in the third book and am going to try for the fourth at summer holidays. Our teacher's name is Miss Handv. and we like her fine. In the summer I have to stay home and help on the farm sometimes. Well Puck there are many letters besides mine so I will close, wishing the Beaver Circle success. HERBERT CAMPBELL,
Ridgetown, Ont., R. R. No. 2.

Dear Puck and Beavers.—I have for a long time enjoyed the letters written by boys and girls. The letters are most interesting, and I think that most of them are clever writers.

I am going to school every day now, and maybe I shall try for the entrance. We have a nice teacher, and on Friday afternoons we have oral composition or debates. One day we had "Resolved that a good horse is better than an automobile." It was our first one, and we all thought it splendid. I am enclosing a short sketch of the life of Robert Burns, one of my favorite authors.

Will one of the Beavers correspond with me?

ROBERT BURNS.

Few Poets have ever gained so strong a hold upon the popular heart as this celebrated bard of Scotland, the anniversary of whose birth is still commemorated in his native land and by his fellow countrymen throughout the world.

Burns was born in the town of Ayr, January 20th, 1759, and we often hear him spoken of as "Ayrshire's peasant poet." His father was a plain farmer who battled with the misfortunes of life, and often when Robert would be ploughing he would stop and make poetry about the surrounding scenery; his father often became angry with him for this. Many of the subjects of Burns' poems are rude in their character. In his day he was honored by many persons of rank and fortune, but, being addicted to vices which he had not the strength of manhood to overcome, he cast a shadow on the otherwise spotless glory of his reputation.

Burns died on the 21st of July, 1796; his funeral was attended by many thousands, some of whom came from a great distance. Nearly twenty years after the poet's death a costly mausoleum was erected in the churchyard at

Dumfries; another appropriate monument at Calton Hill, Edinburgh.

JESSIE A. FRASER.
(Age 12, Book III.)
Williamstown, Ont. R. M. D.

Honor Roll:—Ross Wetherall, Eileen Brown, Hilda Minke.

Riddles.

What is it that has one eye and can't see? Ans.—A needle.

As I was going through the field, I picked up something good to eat; it was neither flesh, skin nor bone, and I kept it till it stood alone. Ans.—An egg.—Sent by Harold Elsely.

Why should a horse not be hungry on its journey? Ans.—Because it has a bit in its mouth.—Sent by Ross Wetherall.

Junior Beavers' Letter Box

Dear Puck and Beavers.—I thought I would write you a little letter, as I have never written to you before. My big brother has taken "The Farmer's Advocate" for over a year. I like reading the little letters very much. I am six years old, and I can read them. I go to school in the summer, but I don't go very much in the winter. We have the 'phone in, and I often talk to my little playmate, Florence Parker. I have three dolls and a dog which Santa Claus brought me. I have also a little kitten. He often plays with me. As my letter is getting long I will close for this time. ETHEL C. EWING,
Rosemont, Ont. (Age 6, Sr. I.)

Dear Puck and Beavers.—This is my second letter to the circle. My father put up two new barns last summer. One is for a cattle barn, and the other is to be used for a pig barn. We also have a chicken house in it. We had a heavy wind, and one man had two barns blown down, and we had the top of our windmill blown off. Three years ago my father and I went to England, and I saw Drake's and Raleigh's and several other monuments. I was also up to the top of the Eddystone lighthouse. I came home on the biggest boat then afloat. I saw other large gun boats. We had awful roads here this spring. It took a team to pull a buggy through. My teacher's name is Miss East. I'm a mile and a half from school, and a mile and a half from town. As my letter is getting rather long I will close. DICK P. COURTIS,
Wallaceburg, Ont. (Age 9, Sr. III.)

Dear Puck and Beavers.—I have not written for a long time. I like to read the letters and stories written by the Beavers. I am only ten, but soon will be eleven. I want to know whether I can join the garden competition.

I will close with a verse and a riddle.

"TIS SPRING."

"Tis spring, 'tis spring,"
Our old robins say;
'Tis spring, 'tis spring
All things are gay.

As round as an apple, as deep as a cup, and all the king's horses can't pull it up. Ans.—A well. Bye-bye.

CAMERON K. K. SMITH,
R. No. 1., Welland, Ont.

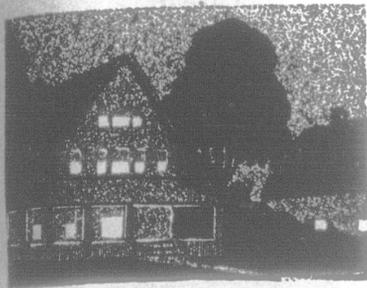
Dear Puck and Beavers.—This is my first letter to your circle. We have taken "The Farmer's Advocate" a half a year, and like it very much. I have three sisters and four brothers. I and my sister are going to school. I like to go to school, but, on account of smallpox in our neighboring village, Heidelberg, we were vaccinated, and were home for a long time.

I have a picture drawn with ink and brush, which I send you in this. It represents a small maple grove. I hope to see it in the paper.

St. Clements, Ont. ANNA KUNTZ.
(Age 8, Sr. II.)

Your drawing is very nice, Anna.

Dear Puck and Beavers.—This is my first letter to the Beaver Circle. I am getting along fine at school. I am in



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Erl. R. R. No. 2,

the junior third class now. I like going to school fine. We have eight horses; we call them Pat, Sandy, Maude, Harry, Fan, Topsy, (Flora, Daisy). The last two are colts. For pets I have a dog and three cats. We have twelve cows and six calves. My father has been taking "The Farmer's Advocate" for six years, and I enjoy reading the letters of the Beaver Circle very much. I live on a farm. I am taking music lessons. As my letter is getting rather long I will close, wishing the Beavers' Circle much success.

BELLE M. HARNDEN.
(Age 11, Jr. III.)
Dundonald, Ontario.

Dear Puck and Beavers,—My father has taken "The Farmer's Advocate" just lately and I enjoy reading the letters, so I thought I would like to join the Beaver Circle. I live on a farm, and I like to do the chores. I have a brother and a sister. My sister was six years on the 14th of February, Valentine Day. My brother is eleven years; he has three pet cats, and one, if he sings will jump up on his lap. This is my first letter, and I hope I will see it in "The Farmer's Advocate" next week. I have a lot of pigeons; fantails, pouters, trumpeters and tumbler. Well I guess I will close, wishing the circle every success. Bye-bye.

WILLIE RICHARDSON.
Crosshill, Ont., R. R. No. 1.

Dear Puck and Beavers,—As I am deeply interested in reading the Beaver Circle, I thought I would make an attempt to write. My girl chum is Hazel Dale. We have nine head of horses. We call the youngest colt Hector. For pets we have three cats and two dogs. We call the dogs Leddy and Gyp, and we call the cats Fluffy, Minnie, and Snowball. I am in grade I. modal. We generally raise a good flock of turkeys, pure-bred bronza. I have two sisters and four brothers. Wishing the circle every success. KATHLEEN SMITH.
(Age 11, Grade I. Model.)
Green Mount, Quebec.

Dear Puck and Beavers,—I enjoy reading your letters, so I thought I would write to your club. I go to school every day. I am in the junior third book. We live about a half a mile from our school. My teacher's name is Miss Fraser. I like her very much. My pets are two cats, Kitty and Fanny. I have a dog; his name is Jack, and I have a pet colt; her name is Topsy. My father takes "The Farmer's Advocate", and I like to read the Beaver Circle very much. As this is my first letter I think I will close.

WILLIE H. MacLAREN.
Metcalfe P. O., Ont. (Age 9.)

Dear Puck and Beavers,—I have read your letters for quite awhile. We have taken "The Farmer's Advocate" for about thirty years. We have a little dog, his name is Collie. I go to school every day. We have a lady teacher; her name is Miss Morrison, from Owen Sound. We like her fine. We have three horses; their names are Jim, Dunk and Prince. We have a store, post-office and blacksmith shop and church. We have the telephone in our house; it is handy too. We live eleven miles from Owen Sound. I am in the second class at school. I have not seen anybody from Hoath Head writing. As this is my first letter I will say good-bye. STEWART MCKENZIE.
Hoath Head, Ont.

Dear Puck and Beavers,—This is my first letter to the Beaver Circle. I like reading the Beaver Circle's letters. I live on a farm. I go to school when I am well, and like it fine. I have a mile to go. Our teacher's name is Miss Moore. I like her fine. For Pets I have one dog, his name is Carlo. I have a brother and sister. My sister's name is Kathleen, and my brother's is Arthur. I have a colt, his name is Charlie. As my letter is getting long I will close with a few riddles:

What is the difference between a Chinaman and a gardener? Ans.—One keeps

the lawn wet, the other keeps the laundry.
Round as an apple, busy as a bee. Prettiest thing you ever did see. Ans.—A clock.

Riddle, riddle, I suppose, a hundred eyes and never a nose. Ans.—The sieve in a fanning mill.

DORIS HAMILTON.
(Age 8, Book II.)

Harper's Corners, Ont.

News of the Week.

CANADIAN.

Rev. W. E. Wilson, of Little Current, Manitoulin Island, has been enthusiastically nominated as temperance candidate for the Legislature. He has reserved a definite acceptance until the matter has been brought before his conference.

Dr. C. S. Wright, of Toronto, who accompanied the ill-fated Scott expedition to the Antarctic Seas, arrived home last week.

John Burroughs, the eminent naturalist and author, visited Toronto last week.

The city of Toronto is undertaking a determined and well-organized effort to wipe out its slums.

The finishing touches are now being put on the southern portion of the Trent Valley Canal, a contract having been awarded for lock gates to complete the outlet to Trenton, on the Bay of Quinte, from Lake Simcoe. A sum of \$11,000,000 has been spent on the construction of the canal up to date, and \$5,000,000 more will be needed to complete it.

An "All-boy Exhibition," of things made by boys, was held in Toronto last week, and attracted a great deal of attention.

The town of Biscoe, Northern Ontario, was completely destroyed by fire on June 12th.

Hon. W. T. White, Canadian Minister of Finance, speaking before the New York Banking Association on June 13th, attributed the present high cost of living to war, and to the wasted money spent in keeping up armaments.

BRITISH AND FOREIGN.

The difference between Serbia and Bulgaria has been settled, as both have agreed to accept Russian arbitration.

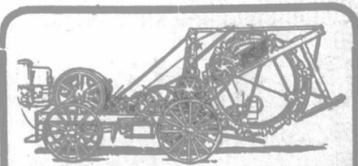
The Storting, Norway, on June 12th, agreed to extend female suffrage, giving all women a right to vote at Parliamentary elections.

A Zeppelin airship, carrying 24 people, made a trip from Baden-Baden to Vienna last week, covering over fifty miles an hour. The entire trip was made in less than 8 hours, whereas a train going over the same route requires 16½ hours. Count Zeppelin, who was one of the passengers, was tendered a public welcome in Vienna.

Miss Davison, who died because of injuries which she received when trying to stop the king's horse at the Derby races, was buried at Longhorseley, Northumberland. An inspiring funeral procession of suffragettes marched across London in honor of her memory on the same day.

A stranded Spanish warship was attacked last week, off Morocco, by Moorish sharpshooters. A crew of 112 men were on board, and only 63 escaped, including 12 who rowed off in a boat to seek assistance. As a result, Spain has taken the offensive, and one engagement has already taken place at Alcazar.

Sir Edward Carson is making a tour through Great Britain in an endeavor to



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POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at 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 for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisements inserted for less than 50 cents.

SINGLE-COMB Brown Leghorns. The kind that lays, \$1.25 for fifteen. William Barnes & Sons, Living Springs, Ont.

WANTED—Supply of strictly new-laid eggs, preferably from those keeping over 100 hens. Highest price paid for superior quality. J. D. Arsenault, 15 Grothe, Montreal.

Cream Wanted

We guarantee highest Toronto prices, full weights and prompt returns. Our 15 years' experience ensures satisfaction. We furnish cream cans and pay express charges. Write:

Toronto Creamery Company, Limited
Toronto, Ontario

Have best results by using

Rice's Pure Salt

It is above the average for all purposes on the farm. Write us direct for prices.

North American Chemical Co., Ltd.
Clinton, Ontario

MENTION "FARMER'S ADVOCATE."

Canadian Industrial Exhibition

FRONTIER DAYS

Winnipeg, July 8th to 16th, 1913

BRONCHO BUSTERS
OUTLAW HORSES
GENUINE COWBOYS
AND
GIRL ROUGH RIDERS.

See Texas Ranger Bull Dog, a wild steer—the violent—the thrilling—a sight to be long remembered.

The best live stock show in the West. The Canadian Percheron Society's first futurity event for colts of 1912.

SIR WM. WHYTE, President. F. J. C. COX, Vice-President.
W. H. EVANSON, Treasurer. A. W. BELL, Secretary.



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situation 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.

ALL kinds of farms. Fruit farms a specialty. W. B. Calder, Grimsby, Ont.

AIM FOR VANCOUVER ISLAND—Canada's most favoured climate; suits middle-aged and elderly people well; good profits for ambitious men with small or large capital in business, professions, fruit growing, poultry, mixed farming, manufacturing, mining, fisheries, timber, railroads, new towns, endless opportunities. Write to-day for authentic information. Vancouver Island Development League, 1-29 Broughton St. Victoria, B.C.

HELPFUL literature for Bible students free of application. Secy. International Bible Students' Association, 59 Alloway Ave., Winnipeg.

WANTED—Middle-aged woman for general housework. Highest wages to competent person. Apply Oxford Knitting Factory, Woodstock, Ont.

SCOTCHMAN, age 36, single, wants job in or near Toronto, July 25, as stable boss; life experience with draught horses; could also manage studs; best reference from importers and Canadian breeders. Strictly sober. Apply Mc. Farmer's Advocate, London.

WANTED—Man and wife without children to help on stock farm; wife to help with house work. State wages expected and references. Box 107, Mitchell, Ont.

MOLASSES FEEDS
For Dairy Stock and Horses
Write for FREE samples to
CHISHOLM MILLING COMPANY
TORONTO

arouse interest in regard to Uster's opposition to Home Rule.

The probability of war between the North and South of China, provoked by President Yuan Shi Kai's autocratic procedure in procuring the assassination of Dr. Sung and other eminent Republicans, increases daily. Yuan has now funds through the live-power loan, and is said

to be rapidly importing arms and ammunition.

Mahmout Scheffet Pasha, Turkish Grand Vizier, Minister of War, and his aide, were assassinated in Constantinople on June 11th. The murder is looked upon as part of a plot to overthrow the present young Turk Government.

The Windrow.

Practically broken in Europe, the Turks are now looking hopefully to the development of their Asiatic possessions, and are planning to enlist the services of European instructors in developing the natural resources, establishing government, and organizing defence measures.

A device based on the principle of a cable or trolley, has been invented by F. W. Fitzpatrick, Washington, D. C., to bring vessels safely through the tortuous entrances to seaport towns.

The Anti-Oriental attitude of California is, it is said, bringing China and Japan closer together. Dr. Sun Yat Sen, in a speech delivered recently in Japan, expressed himself squarely for a Chino-Japanese alliance.

It was stated recently by Dean Sumner, of Chicago, that over fifty ministerial associations, representing 3,500 clergymen, have adopted the rule of refusing to marry those who come to them unprovided with health certificates.

Dr. Sheldon Bull, of Buffalo, has issued a pamphlet urging that goats' milk be used in preference to cows' milk. The goat, he says, is "the only dairy animal immune to tuberculosis."

There is a great movement in favor of the abolition of decorations in Norway. Many politicians are already opposed to such honors. In the recently-elected Storting, there are 82 members who control a majority against decorations. They have already submitted an amend-

ment of the Constitution in this respect. A sensation has been created by the fact that an anti-Democrat, and even strong Conservative, M. Thorne, a Cabinet Minister and ex-Speaker of the Storting, sent back the Grand Cross of Saint Olaf, the highest distinction in Norway, which the King recently conferred upon him. He has rendered the fatherland great services, especially when Norway declared her independence, and the dissolution of the Swedish-Norwegian union took place. In a letter to the King's secretary, M. Thorne thanks his majesty many times for the great honor, adding that he sends the decoration back, as in doing so he believes he is merely doing his duty as a Norwegian citizen.—Otago (N. Z.), Witness.

Belgium possesses the oldest newspaper in Europe, the "Nieuwe Tydinghen," which was founded at Antwerp in 1605, and still appears in Flemish. France's first paper was the "Gazette," which appeared in 1640. It still exists, but no one reads it. In 1780, France had only 24 newspapers, but there were 360 ten years later, and at the end of the Second Empire there were 1,640.

In Sussex, England, is a seven-hundred-acre farm, controlled, financed and worked exclusively by women, who have fifty thousand dollars invested in the scheme. They raise cattle and poultry, and many institutions run by women have promised to buy the output.

"I suppose no one has a greater horror of war than that great man who has been calling aloud and eloquently for universal service—I mean Lord Roberts. But we can only deal with facts as we find them in our generation. We believe that the more civilizing factor for mankind is the supremacy of the Anglo-Saxon race: the defence of that supremacy is therefore the business of Great Britain. A general disarmament is the ideal towards which humanity is striving all over the world. But pride, prejudice and greed, are still mighty forces, and it is only by the spread of the higher education that the spiritual development of mankind can be ensured by the adoption of Christ's doctrines—which, alas! go to the wall in all Christian countries at the bidding of expediency. We are in a period of transition, and out of the very danger of giving power to the people may arise the universal peace. Enlightenment may draw closer the bonds of the brotherhood of man, and, guided by it, is it not possible that the workmen of the world will arise in their might and cry, 'We will have no more wars!'"—Sir Herbert Tree, in the "Era Annual."

GUARDING AN EMPEROR.

Few Americans have any idea whatever of the extraordinary steps taken to protect foreign rulers. The following will serve to show how the German Emperor is looked after, even when he travels a very short distance.

During what did not seem to be a very perilous passage from Homburg to Cronberg on the part of the Kaiser, trotting orderlies went up and down the road. Soldiers were stationed at intervals. Pedestrians on the way to Cronberg were turned back. Travellers by carriages were examined, and allowed to proceed if they proved to harbor no nefarious designs.

The Imperial equipage passed at night. First there came a mounted escort, then soldiers on foot. Five minutes later more mounted men appeared; and then what seemed to be intoxicated motorcyclists, swaying from side to side; but these men were merely swooping from one side of the road to the other, and scanning the ground by the light of their vivid acetylene lamps. They were looking for bombs.

Behind the motorcyclists were other mounted soldiers, and then came the royal conveyance. It passed in a flash of light, not only from the speed it was maintaining, but because of a huge electric light hung at the end of the pole. This served a double purpose. It illuminated the way, and also shone so brightly that the eyes of any assassin would have been so dazzled by it that he could hardly have got a correct aim.—The Independent.

Gossip.

H. J. Davis, Woodstock, Ont., breeder and importer of Shorthorns and Yorkshires, is now offering a choice lot of sows in pig, boars ready for service, and young pigs of both sexes. His Yorkshire herd is especially strong at present, and prices are reasonable.

D. C. Flatt & Son, breeders of Holstein cattle and Yorkshire pigs, Hamilton, Ont., state that they are swamped with enquiries and orders for the latter class of stock, and must have a little time to raise more. They report the demand the greatest in the past fifteen years.

A combination sale of Holsteins consigned by various breeders was held at Syracuse, N. Y., June 5th and 6th. On the first day of the sale, 97 head were sold for \$33,030, an average of \$340.52. Of these, 29 cows made an average of \$369. The highest price realized for a bull was \$2,900, for the yearling, King Pontiac Asian. The second highest for a bull was \$2,900, for the yearling, King King Pontiac Premier. The highest price for a female was \$3,000, for the five-year-old, Bloomingdale Hengerveld Palmyra. Nineteen others brought prices ranging from \$1,000 to \$2,050. One hundred and ninety-nine head of the entry sold for \$94,920, an average of \$468.

Dr. D. McEachran, Ormsby Grange Stock Farm, Ormstown, Que., writes that his entries in Clydesdales, Holsteins and Ayrshires at the coming Beauharnois District Sale will be very large. He reports his foaling season over, and says: "I have four exceptionally well-bred ones. Royal Bloom, by Montrave Ronald, 17 hands, and weighing 1,940 lbs., has a fine horse colt by Hiawatha; Lady Hugo, out of Linlithgow Lass, by Sir Hugo, has a splendid stallion foal by Selborne. She is a big four-year-old filly, 16.3, and will come to weigh over 1,800 lbs. Miss Lanark, by Melinside, has a grand horse foal by Scotland's Splendour, by Scotland Yet, and Lady Edward, by Royal Edward, has a filly foal by Star o' Doon, by Everlasting. She is a beautiful filly, coming four. She won first prize as a yearling at the Highland, was champion two-year-old at Kilmarnock, as a two-year-old, first at Dunblane, and second at Crieff. These will form part of my exhibit."

Trade Topic.

Fertilizers bring good results. Joe Mosseau, of Essex County, states that he used Homestead Fertilizers on his potatoes in 1912. Where they were used, every bushel of seed produced 20 bushels of crop. Where no fertilizer was put on, his potatoes were a failure. See the advertisement elsewhere in this issue.

Questions and Answers.

Miscellaneous.

Effect of Salt on Clover Seeding.

Will sowing salt on oats where the ground was seeded with grass seed (clover and timothy), injure the young clover? The oats are going back, and it is time to sow salt.

W. M. B.

Ans.—A moderate dressing of salt should not injuriously affect the clover seeding, but it is problematical whether it will do your oats enough good to be profitable. Sometimes it pays, but often it does not.

Gossip.

Gerald Powell, commission agent and interpreter, Nogent-le-Rotrou, France, writes that Canadian buyers are beginning to arrive in France to make their season's purchases. He lately had a visit from Dr. Hassard, of Markham, Ont., who bought 85 head of Percheron stallions and mares, amongst the bunch being several noted show animals, which are to be shipped as soon as accommodation can be secured on the vessels.

ROYAL ULSTER SHOW.

The Royal Ulster Agricultural Society's Show of 1913 was held at Balmoral, Belfast, the last week in May, and brought together a capital lot of stock. Over fifty per cent. of the cattle shown were Shorthorns. In the aged bull class, A. Roblison's roan three-year-old Rubicon won first over Mr. Small's red bull Garbity Count, which was first at Dublin this year. Rubicon also won the championship at Belfast. The female classes were well represented and full of merit. The champion was W. R. Crawford's ten-year-old Bonnie Queen, Lord Dartrey's two-year-old heifer being reserve.

Aberdeen-Angus cattle made a small show, but the winners were of exceptional merit. In the aged bull section, the Marquis of Ormonde's three-year-old Trogan Erica, by Electric Bell, was first, and finally made champion.

Of Ayrshires, the entry, though small, was eminently gratifying. In the class for bulls, W. R. Cresswell won with Auchinbay Sir Thomas. In the cow class, Mr. Cresswell's Dandy Lass of Crofthead, a grand dairy matron of great scale and substance, was first and champion.

In the class for aged Jersey bulls, Alderman Bewley's Cosmea's Noble, a bull of nice breed type, won. Mrs. Madden was second with her very useful bull,

For These Reasons



To tell all the reasons why we believe your choice of a cream separator should be the **Standard** would be impossible in this space, but here are four:
First—Because the

Standard

Cream Separator under ordinary conditions skims to .01 per cent. or less. It loses but one-tenth of a pound of butter-fat in 1,000 lbs. of milk skimmed. The ordinary separator loses a full pound. *Second*—Because the **Standard** has a wide-open bowl, and no cream or milk tubes to clog up. Everything easy to clean. *Third*—Because the supply-can is more than a foot lower than on ordinary machines. No high or awkward lifting to do with the **Standard**. *Fourth*—Because the **Standard** has a self-oiling system and lubricates its working parts automatically all the time it is running.

The **Standard** will save more time and labor, and make more money for you than any other cream separator. Try one and let the machine prove these facts.

FREE

Write for the Standard Booklet, giving a full description of "The World's Greatest Separator"; also folder entitled "Skimming Results."

The Renfrew Machinery Company, Limited

Head Office and Works: RENFREW, CANADA
Branches: Sussex, N. B. Saskatoon, Sask. Calgary, Alta.
AGENCIES EVERYWHERE IN CANADA

Prompt. The same exhibitor was first with her yearling bull, Nugget, by Prompt. Alderman Bewley was first in the cow class with Lilac, a cow of pleasing type, R. Kirk winning second and third with Belle Rosa and Belle Mona, a pair of great style and symmetry.

Questions and Answers.
Miscellaneous.

Legs Weak—Cow's Skin Yellow.

1. Have a foal five weeks old which had been trembling on the knees for some time, and a few days ago commenced knuckling forward on one of the knees. There is no swelling in joints, and otherwise the colt is apparently healthy.

2. Also, a registered Hereford cow, seven years old, freshened on June 4th. She has given very little milk since, and skin has turned yellow. She is in good condition and has a good appetite.

A. M.

Ans.—1. As long as the colt seems in good health, and no swelling appears, there is little danger. As he grows older the legs will gain strength, and it is more than likely that they will straighten up all right.

2. A yellow skin is believed by some to be an indication of good milking qualities, but such belief does not seem to be substantiated by this cow's performance, although her milk may be very rich. Hereford cows are essentially beef animals, and not generally heavy milkers. As long as she remains in good condition and has a good appetite, her illness will not prove serious.



"Uniformity is a big word, Bud."
"I 'spect it's because it means a lot, Rose."

Steady—Regular—Dependable Quality, there's the FIVE ROSES idea.

No bad dreams bakeday eves — the morning batch "flat" instead of "up."

So very exasperating, you know, to get less loaves this week than last from the same quantities.

FIVE ROSES is the sure flour — reliable, you see.

No wrinkling worries over bread, or cakes, or pies, or anything.

Bake things always up to the mark of your happy expectations.

Disappointment—never.
Four times Uniform—Strength, Color, Flavor, too, and Yield.

FIVE ROSES—trouble-proof flour.
Use FIVE ROSES always.

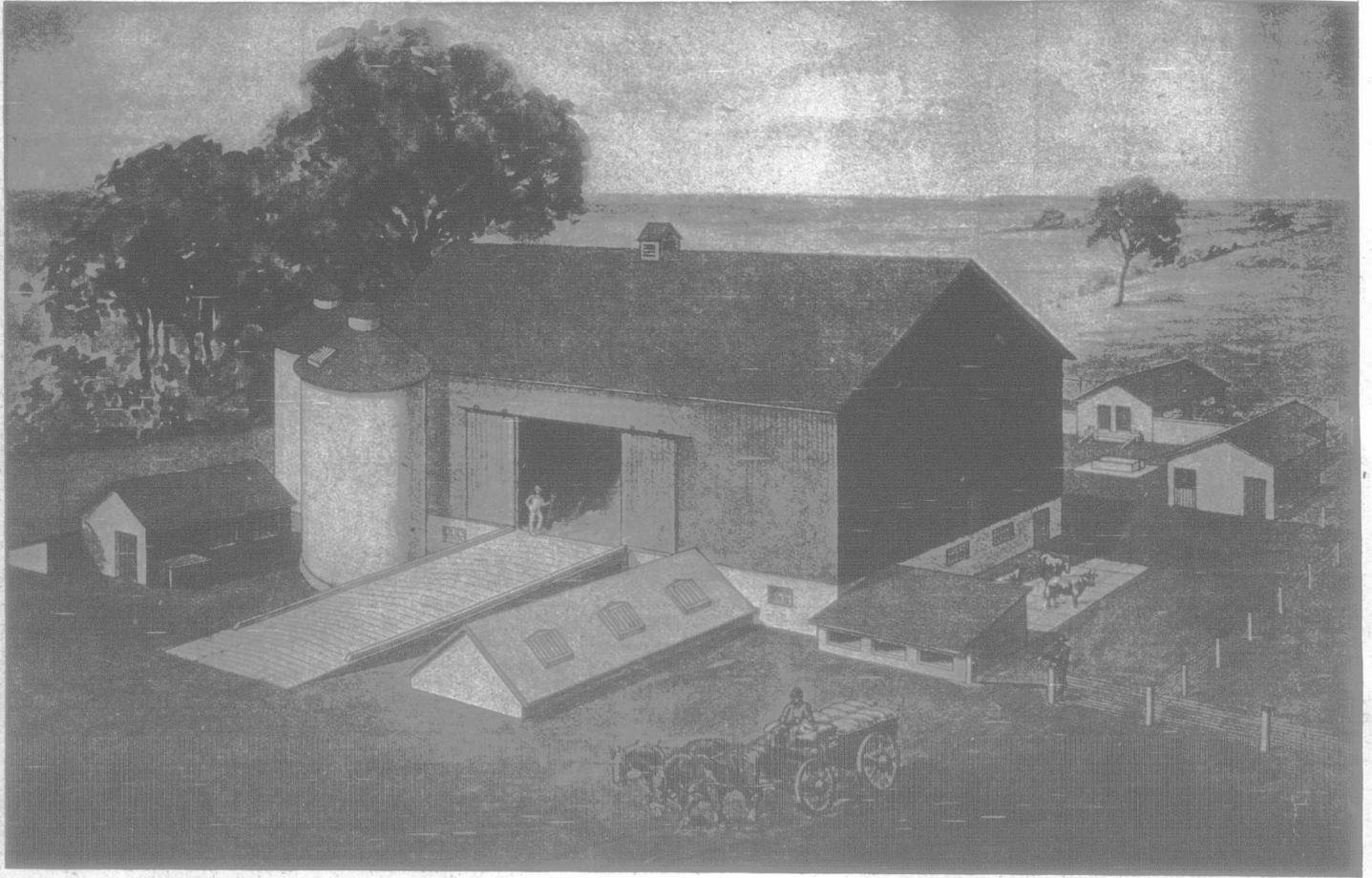
Five Roses Flour

Not Bleached



Not Blended

DO YOUR BUILDINGS LOOK LIKE THESE ?



The buildings illustrated above will last for scores of years. You will ask: "How can they last so long?" The answer is that the concrete used in all these buildings is made from

ROGERS PORTLAND CEMENT

Ask a man who knows, and he will tell you that there is no other cement just as good as ROGERS.

Read what Thomas A. Edison says of "PORTLAND CEMENT CONCRETE"

"Men are lunatics to keep on building in brick and steel. Reinforced concrete is better and cheaper than either. Builders who stick to brick and steel are behind the times.

"Men who put up wooden structures are worse lunatics. It is because we use such building materials that the fire losses in this country amount to almost \$500,000,000 a year. Think what a waste of material and labor this represents. It is all unnecessary. Reinforced concrete is not only cheaper than brick and steel, but it is fireproof.

"A reinforced concrete building will stand practically forever. Within 30 years all construction will be of reinforced concrete, from the finest mansions to the tallest sky-scrapers."—[THOS. A. EDISON, in the *Cosmopolitan*.

We have a valuable book of 128 pages, entitled, "Portland Cement on the Farm," the regular price of which is \$1.00, which you can obtain free in connection with our special offer, as follows: Send us \$1.00 for the Rogers Book, and we will mail you with the book an order for \$1.00 worth of Rogers Cement on the nearest Rogers dealer. If there is no Rogers dealer in your vicinity, send us 50c., and we will send you the book by return mail. The information contained in it is worth hundreds of dollars to you. With the aid of this book you will be able to make all your own cement improvements yourself.

Alfred Rogers, Limited, 28 King St., West, **Toronto**

Canada's Forestry Needs.

The printed programme of the forthcoming Canadian Forestry Convention contains these striking statements:

Canada's forest area is about 800,000,000 acres.

Canada possesses some six hundred billion board feet of merchantable timber, worth perhaps ten billion dollars.

Canadians are cutting off this timber at the rate of about 100 board feet per acre, or eight billion board feet a year.

The fire loss is estimated to be 950 board feet per acre per annum.

We are allowing from fifty million to two hundred million dollars' worth of timber to burn up every year.

Worse than that, we are burning young growth, forest litter and soil fertility, on hundreds of thousands of acres. That means no timber in the future for our children and children's children. Forest fires, continued, make deserts.

With the trees and young growth go the roots and soil cover, with their undoubted powers of holding water and soil together. Floods come from districts where the trees have been removed.

Fifty per cent. of Canada is capable of growing tree crops and nothing else.

Only a fraction of this absolute forest area is growing trees as it might. The rest is comparatively unproductive.

We cannot live without wood. Everything, from the houses we live in to the books we read, is made of the product of the forest. We must have it.

To keep us in timber, pulp, an equable water supply, fish, and game, we must have trees.

On the prairie, shelter belts and woodlots are protecting crops, stock, and houses, from the extremes of climate, and are providing farmers with fence posts and stringers.

The Dominion Government has supplied twenty-five million seedlings to settlers.

Millions are being sent out annually by nursery companies.

There is a demand for millions more.

The experience of tree-planters and far-seeing farmers, indicates that there will be a demand for tens of millions more.

We must have trees, in the forest, on the prairie, on sandy lands, in towns and cities.

It takes years to grow trees—not hours or days.

If we want our trees protected we must care for them now. To-day is fifty years "ago" from the year 1963—and that is not very far away.

All Canada's modern development,—Confederation, the great railways, the growth of the West, most great machines—have come in the last fifty years.

The seedlings of that day are scarcely more than tie timber now.

Fifty years is a very short time in the life of a forest. Most of the timber being cut in British Columbia to-day is over two hundred years old—some of it is over eight hundred.

There is a crisis coming—when the forests which for a century men have thought "inexhaustible," are going to be greatly depleted.

We must prepare for that contingency. Stop the fires.

Stop the waste in logging, milling, and utilization.

Stop the insect and fungus depredations.

Cut timber only when it is "ripe"—when it will produce as much value as possible in usefulness to men.

Plant up the waste places.

Plant the needed shelter belts.

These take time, they take men, they take money, but they are worth it.

France has spent \$35,000,000 in planting trees on watersheds.

Germany spends up to \$13 per acre per annum on some forests, and gets gross returns up to \$24 per acre, thus yielding net profits up to \$11 per acre every year.

As a whole, German forests produce about \$2 net per acre annually.

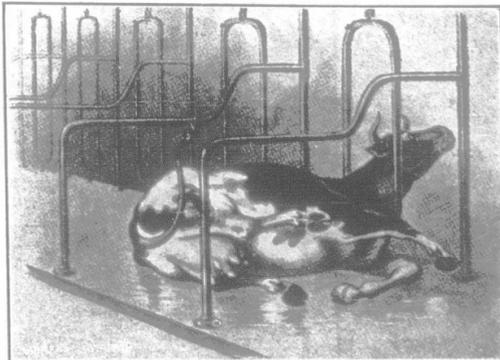
Canada spends much less than one cent per acre per annum on the forest lands under management.

If we set the fire loss against the timber product, Canada's forest balance sheet shows an enormous deficit.

How can Canadians stop the losses, arrest the waste?

There is but one answer.

Public opinion, public interest, public conscience, are the only forces that will ever make for progress.



The Cow Stall Floor Problem

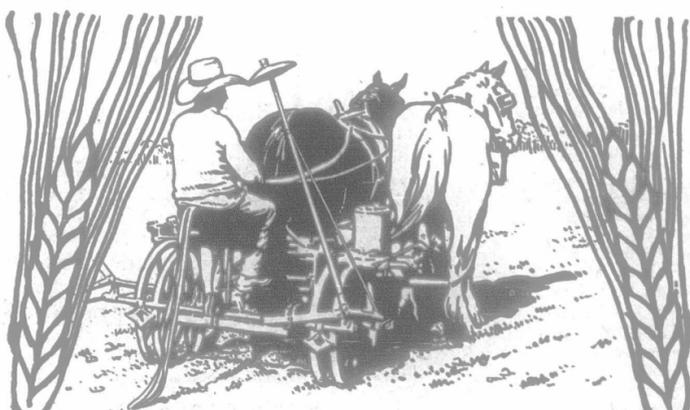
Experience has shown that Cork Paving Brick has solved the problem, and are found to possess all the good features of both wood and cement, with none of their disadvantages. Experience has shown conclusively that:

- First.—They are always warm to the touch summer or winter.
- Second.—They are resilient, because both cork and asphalt (which make Cork Paving Brick) are elastic substances. This removes the danger of hoof trouble and "bunchy" joints.
- Third.—They are never slippery, wet or dry.
- Fourth.—They are thoroughly sanitary.
- Fifth.—They are remarkably durable in service. You see, Cork Brick have no grain like wood, and hence do not splinter and are not rigid and brittle like cement, and therefore do not crumble.
- Sixth.—They are easy to lay in old or new barns.
- Seventh.—They are reasonable in cost, taking into account not merely first cost, but the cost in the long run, and considering their many advantages.

For samples and full information, address the sole selling agents for Canada:

THE KENT CO., LTD., Canadian Express Bldg., Montreal, Que.

No accidents like this on Cork Brick Floors



A Profitable crop of wheat on Homestead Fertilizers puts more money in your pocket and makes more business for us. That is the reason why our factories never shut down. We have spent fifty years and a great deal of money to find out how to make the right kind of fertilizers for wheat and all other crops, and the farmer cannot go wrong when using

HOMESTEAD FERTILIZERS

The best is none too good. About one thousand tons of surface soil is cultivated to the acre, and it is hard for some to understand why an application of a few hundred pounds of good fertilizer will make such a wonderful increase in the crop, but that is science. Our fertilizers are quickly soluble and are so compounded that they thoroughly enrich the soil on the same principle as a few drops of bluing will color a large amount of water.

If all the farmers knew Homestead Fertilizers as they ought to know them, not enough could be manufactured to supply the demand. Write us and we will tell you more about fertilizers and how to use them. We want agents for unoccupied territory under our consignment contract.

The American Agricultural Chemical Co.
Dept. E, Michigan Carbon Works, Detroit, Mich.

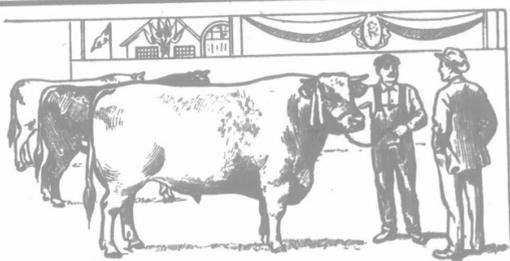


Gossip.

John Elder & Son, breeders of dual-purpose Shorthorn cattle, Hensall, Ont., inform us that they have recently sold a beautiful roan show bull calf to Solomon Reist, Elmira, Ont. He is from a heavy-milking dam, she at present giving two 12-quart pailfuls per day. A very fine two-year-old bull has been sold to Jas. Shobbrook, Londesboro, Ont., this being the third herd-header Mr. Shobbrook has selected from this deep-milking herd. Thos. E. Smith, Phelpsston, selected a very low-set, thick, red bull, after considerable trouble, he not knowing which of two good ones to choose. A sister of the dam of one of them filled a 12-quart pail while he was there, and the dam of the other, Lady Waterloo, in her fourteenth year, was suckling two calves. This old cow has dropped ten calves, and never has milked a shorter period than ten months. She is the dam of Red Baron, now offered in these columns, a large, dark-red bull, in good condition, which can be bought at a reasonable price. Another good, red yearling, is offered, and a beautiful roan just a year old; also several younger calves. Messrs. Elder are not very anxious to dispose of heifers, as they are endeavoring to increase the herd, which is founded on deep-milking strains. See the advertisement elsewhere in this issue.

SIRE DISTRIBUTION COMMENCED.

According to "The Farmer's Advocate and Home Journal," Winnipeg, Man., the work undertaken by the Live-stock Branch of the Dominion Department of Agriculture in placing pure-bred sires in districts where these are scarce, has already begun. It was only last winter that Live-stock Commissioner John Bright announced the policy of the Department in this regard, and it was early spring before a definite system had been outlined whereby pure-bred sires could be secured. Once outlined, applications came in by the score, and the work of placing them is already under way. The work is in charge of H. S. Hamer and C. M. McRae, of the Live-stock Branch. These two men are now in the West organising associations where the sires may be placed. It will, however, be impossible for these men to handle all applications sent in, and only the earlier ones can be dealt with this year. By far the larger number of applications are for bulls, with quite a few for stallions. It was stated by Mr. Hamer that these animals were, in so far as was possible, purchased within the Province where they were placed, but considerable difficulty was experienced in getting a sufficient number of bulls in the Western Provinces to supply the demand. The preference seems to be for dual-purpose sires. The opposite is the case with horses. A great deal of organization work is required as no stallions or bulls are placed in localities already supplied with the breed asked for. This, as well as the organization of local societies to undertake responsibility of care of the sire supplied, required the ground to be gone over carefully before the animal is placed in order to decide whether or not he is required. Messrs. Hamer and McRae will be in Western Canada during most of the summer looking after this work undertaken by the Department of Agriculture.



Bring Home the Ribbons and Get the Money

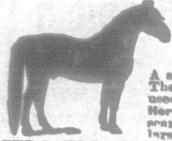
BY USING THE BEST STOCK CONDITIONER Caldwell's Molasses Meal

History repeats itself. Go over the lists of prizewinners at our recent fairs, and you'll find that a surprising number were conditioned on Caldwell's Molasses Meal. An examination of "high-priced" records would point to the same thing.

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

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

HORSE OWNERS! USE COMBAULT'S CAUSTIC BALSAM.



A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all bunches from horses. Impossible to produce scars or blemish. Send for circulars. Special advice free.

THE LAWRENCE-WILLIAMS CO., Toronto, Canada

Veterinary Drugs Pharmacy



Any kind of VETERINARY DRUGS

If you need any, write at once, when we will quote very low and reasonable prices.

Consultation by letter FREE of charge, with our diplomed veterinary doctor. For any diseases, write and consult him now. NATIONAL STOCK FOOD COMPANY Ottawa, Ont.

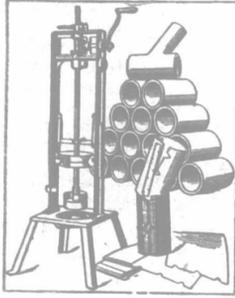
You Can't Cut Out A BOG SPAVIN, PUFF or THOROUGHPIN, but



ABSORBINE

will clean them off permanently, and you work the horse same time. Does not blister or remove the hair. \$2.00 per bottle, delivered. Will tell you more if you write. Book 4 K free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Varicose Veins, Ruptured Muscles or Ligaments, Enlarged Glands, Gout, Wens, Cysts. Always pain quickly. Price \$1.00 and \$2.00 a bottle at druggists or delivered. Manufactured only by W. F. YOUNG, F.D.F. 258 Lyman Bldg., Montreal, Can.

MAKE YOUR OWN TILE



Cost \$4.00 to \$6.00 per 1,000 Hand or Power Send for Catalog

Farmers' Cement Tile Machine Co. Walkerville, Ont.

PRESIDENT SUSPENDER NONE SO EASY

See! what a light! Send for this handy ELECTRIC FLASHLIGHT Every Farmer needs it. Press the Button and get a brilliant Electric Light. \$1.50 by mail, post free. Send to-day. CANADIAN CARBON CO., 66 West King St., TORONTO

When writing mention Advocate

Questions and Answers. Miscellaneous.

Calves Die.

Can you tell me the cause of my calves dying? After two days we give them new milk? A. I.

Ans.—Without some knowledge of the symptoms of the trouble, we would not care to offer any explanation. They may have been in a very low state of vitality when born, due to some condition of their dams, but we cannot say. Are they scoured?

Period of Oestrus.

Please inform me how long a cow is in heat, and at what time of heat it is best to have her served.

A NEW BEGINNER.

Ans.—The period varies somewhat, but usually does not last more than a day. Sometimes, however, it lasts two days. Opinions differ as to the best time for service during the period, and no set rule can be laid down.

Boundary Fences.

1. A and B own a piece of land adjoining each other. There has been a log line fence in six feet on A's land for twenty years. A builds a wire fence in on B's land without B's consent. The wire fence has been up a year. Can B compel A to put the wire fence back where the log fence was? If so, how?

2. Can I obtain the Acts regarding line fences in Ontario? If so, where? Ontario. SUBSCRIBER.

Ans.—1. We think not. 2. The Line Fences Act, Revised Statutes of Ontario, Chapter 284.

Mortgagor and Mortgagee.

1. A bought off B a farm for \$8,000, paid \$1,000 down and, since, has made two yearly payments of \$500 each; also the interest all paid up to date, March 1st, 1912. B now wants farm back, and is trying to cause trouble by refusing A to sell gravel from a gravel-pit that Council opened last year. A wishes to pay the rest of mortgage. B's lawyer says A cannot make the payment until March next. Nothing is in the writings about gravel, but A can pay all of mortgage, or \$500 yearly, as he wishes.

1. If B persists in making trouble about the gravel, can A compel B to accept the rest of mortgage now, and without paying a whole year's interest? 2. Or can B stop A selling gravel? Ontario. A FARMER.

Ans.—1. No. 2. Yes.

Cow Coughs.

I have a grade Holstein cow, ten years old, which has been sick about six weeks. She coughs sometimes, and seems to have trouble to breathe; holds her head out straight, and wheezes and grunts; seems to be able to swallow all right, but eats very little and does not chew her cud. She is very thin, and is due to calve about July 30th. Veterinarian here has been attending to her for about three weeks. He said he thought she had lump jaw, but she has no lump on her jaw. He gave me medicine for her, but she did not show any improvement. W. E.

Ans.—Your veterinarian is probably correct in his diagnosis. Sometimes very little swelling is noticed in lump jaw. However, if you are not satisfied with the treatment, we would advise that you have your veterinarian test her for tuberculosis.

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This preparation, unlike others, acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by Dr. Frederick A. Page & Son, 7 and 9 Yorkshire Road, London, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents:

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Questions and Answers.
Miscellaneous.

Heaves or Roaring.

A 6-year-old mare worked very hard for past year makes a peculiar grating noise when breathing, while doing heavy work or traveling fast; not noticeable when at rest. One veterinary surgeon calls it "thick in the wind."

1. Do the terms "thick in the wind," wind-broken, and a roarer, all mean the same?
2. What is the trouble with my mare, and the probable cause?
3. Is there any cure, and what? A veterinary surgeon recently told me that the trouble could be relieved by an operation, which he called tracheotomy, in which a tube could be placed in windpipe and overcome the trouble.
4. Is there such a remedy, and can it be done by an ordinary veterinary surgeon without danger?
5. Please describe the method of performing such an operation, and what kind of a tube used?
6. A tube properly put in, will it last the life-time of a horse, or have to be replaced occasionally?
7. In what part of the windpipe is the best place to have it inserted?
8. Will the horse have to be laid up for a time after operation?
9. Can the tube be placed so as not to be known to an observer that it is there?
10. Is there any danger of particles of dust entering the lungs through this tube, or of the tube itself getting drawn into the windpipe and causing injury or death to the horse?
11. As the veterinary surgeon here is not familiar with such an operation, the advice you give will be greatly appreciated by me, as mare is getting worse all the time. Do you think such an operation might prove successful?
12. Would an ordinary veterinary surgeon do the job all right, or would it be better for me to drive fifty miles to an old and experienced veterinary surgeon, as the mare is a valuable one?

B. I. W.

Ans.—1. Correctly speaking, no. Thick in the wind and heaves are the same disease, due to emphysema of the lungs, which consists of a dilated condition of the lungs, owing to an excess of air in the air cells, or in the cellular tissue surrounding the lobules. This prevents the inspiration of the necessary amount of air, and the "blowing" of an animal at hard or fast work results.

2. Your veterinarian should be able to diagnose the disease better than we can, as he is familiar with all the symptoms. If the disease is roaring, it is likely due to paralysis or atrophy of the muscles of the left side of the larynx, this condition decreasing the calibre, the noise being made during inspiration. If heaves, it may be hereditary, or brought on by heavy feeding, or dusty hay, or very hard driving when the animal is full of feed or water.

3. Very little can be done for roaring. In the early stages, benefit may be derived from blistering or firing the throat, or giving chlorate of potash. Electricity has been found beneficial. Tracheotomy may be performed in extreme cases. If the disease is heaves, feed lightly on hay, and liberally on grain, both of best quality. Dampen all feed with lime water. Give only a pail of water at a time, and never drive or work hard on a full stomach.

4. A capable veterinarian should be able to perform tracheotomy successfully, but unless the case is severe, and the animal valuable, it would scarcely pay.

5 and 7. The details of the operation are too lengthy to enumerate. The horse is held by a twitch; cocaine is used to reduce the sensibility of the part; his head is held up, and a longitudinal incision 2 to 2½ inches in length is made in the skin of the under-side of the throat, about 5 inches below the larynx; a semi-circular piece is removed from two rings of the windpipe by means of an instrument called a tracheotome; dry the instrument with a disinfected sponge or antiseptic cotton, and the tube is inserted. Tracheotomy tubes may be purchased from dealers in veterinary supplies.

6. The tube should be durable. It is

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ON
Wednesday, June 25th, 1913

At SPRING GROVE FARM, ILBERTON, ONTARIO

This offering of thirty head comprises the entire Spring Grove herd of T. E. & H. C. Robson, Ilderton, Ont., and a choice selection from the Springhurst herd of Harry Smith, Exeter, Ont. Two very high-class bulls, including the herd header, are contained in the sale, all the rest being females of the highest order. Five cows have calves at foot by Imp. Commodore, and the remainder of those of breeding age are bred to the Cruickshank Victoria bull, Victorian. Some of the noted families represented are: Butterflies, Clippers, Mayflowers, Miss Ramsdens, Orange Blossoms, Rosemarys, Rosewoods, Strathallans and others. This is an especially attractive offering, all the cattle being in good breeding condition, and many, when fitted, will be heard from at our large exhibitions. Some of the cows are heavy milkers.

Six months' credit will be given, and six per cent. per annum allowed for cash. Trains will be met at Ilderton the morning of the sale, which will begin at 1.30 p.m. Catalogues on application to

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

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I have for sale a number of choice young bulls, from 8 to 14 months old (pure Scotch); also a number of heifers, 1 to 3 years old, of this level type, and richest breeding. G. M. FORSYTH, North Clarendon, Ont.

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thought by some to be best to have two tubes, one to be in place while the other is being cleansed.

8. A few days' rest should be given.
9. No.
10. Properly done, it works all right.
- 11 and 12. The operation is rather a delicate one. The veterinarian you employ is a matter for your own judgment. Tracheotomy is no good for heaves, but has been successful for roaring. It is not a very common operation, and we would be sure that it is necessary before having it done.

Questions and Answers. Miscellaneous.

Storing Dynamite.

Are there any laws regarding the storing of dynamite, as to the kind of building it should be stored in, what distance it should be from any building, and what quantity may be kept at one time? What steps would one have to take to have the dealer remove same if he should be storing more than is lawful?

Ontario. SUBSCRIBER.
Ans.—We would refer you to The Consolidated Municipal Act (Ontario Statutes, 1908, Chap. 19), Section 542, Sub-sec. 47, and to local municipal by-law, if any, passed in pursuance thereof; also to The Mines Act (Ontario Statutes, 1906, Chap. 11), Sec. 205, Sub-secs. 3, 4, 5.

Sore Teats--Cats Die--Plaster for Land.

1. What is the best thing to do if cows have sores on their teats, and what causes the trouble?

2. I had two cats which were in good condition a year ago. They got thinner and thinner, till finally they died. They did not drink much milk, but caught many mice the time they were sick. Can you inform me what the trouble is, and if it is contagious? Can cats get tuberculosis?

3. Would old plaster put on the land be of any use? INQUIRER.

Ans.—1. Dress three times daily with an ointment made of 4 drams boracic acid, 20 drops carbolic acid, and 2 ounces vaseline. Milk with teats dry. Some cows are far more subject to the trouble than others. Milking with the teats wet causes it on some cows, and in some it is due to cracking of the teats.

2. Too many mice will kill cats. We presume that a form of consumption may attack the feline race.

3. The lime which it contains might do a little good, but its application would, in most cases, scarcely prove profitable. Better use it for the chickens. It is an excellent grit and shell producer.

Horse Stocks--Colic--Lice.

1. Have a driving horse which is stocking slightly in legs. What will cure?

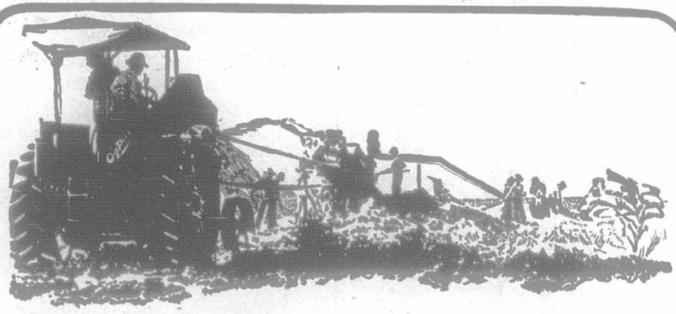
2. What treatment should be used in a case of mare with foal which gets a touch of colic when turned on grass through the day? Would bran be helpful, and in what proportion to oats?

3. What will kill lice on colts?

I. M. L.
Ans.—1. It is good practice to give a purgative of 6 to 10 drams of aloes and 2 drams of ginger. After the bowels have regained their normal condition, a desertspoonful of saltpetre should be given in damp food once daily for three or four days to act upon the kidneys. Hand-rubbing the legs sometimes gives good results, and the application of woollen bandages, slightly elastic, and moderately tight, gives results. Feed lightly on grain. Let the horse have grass, and give a proportion of bran in his grain feed.

2. The attack is likely due to indigestion, caused by the change of feed. Let the mare out for a short time only at first, and better, during the middle of the day. A third of her grain ration composed of bran will do good. Give her in this, night and morning, a desertspoonful of ground ginger. If she has a bad attack, give 4 drams fluid extract of belladonna, and 1½ ounces each of laudanum and sweet spirits of nitre in a pint of cold water as a drench.

3. Try a mixture of cement and insect powder sifted into the hair on the backs of the animals. Insect powder is effective, or any of the proprietary coal-tar sheep and cattle washes.



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Sons of Johanna Concordia Champion, No. 60575, one of the richest bred and best individual bull of the breed. His granddams, Colantha 4th's Johanna 35.22 lbs. butter in seven days, fat 4.32 per cent.; and Johanna Colantha 2nd 32.90 lbs. butter in seven days, fat 5.02 per cent. Average butter in 7 days 30.06 lbs.; average fat 4.67 per cent. If you want to increase the butter fat in your herd, let me sell you one of these bulls. I can spare a few good cows and heifers bred to the "Champion." Write me your wants and I will try and please you.

MAPLE AVENUE STOCK FARM, L. E. Connell, Prop., Fayette, Fulton Co., Ohio, U. S. A.

FAIRVIEW FARMS HERD

REMEMBER:—Pontiac Korndyke sired the bull that sired the new 44-pound cow. Do you want a sire to use that has such transmitting ability? If so secure a son of Pontiac Korndyke, or Rag Apple Korndyke 8th, the strongest bred Korndyke bull in the world.

E. H. DOLLAR, Heuvelton, N. Y. Near Prescott, Ont.

Evergreen Stock Farm High-class Registered Holsteins

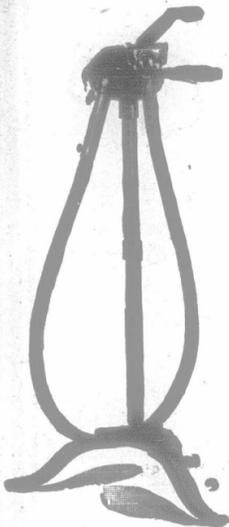
For sale: A few choice young bull calves and females, all ages; good enough for foundation stock
A. E. HULET, Norwich, Ontario.

Woodbine Holsteins Young bulls and bull calves for sale, sired by King Segis Pontiac Lad, a combination of all the greatest sires in the world, and Duke Beauty Pietertje, a grandson of Beauty Pietertje, the only cow in the world which is a 30-lb. cow, and has produced a 30-lb. daughter with a 30-lb. daughter.
A. KENNEDY & SONS, Paris, Ont. R.R. No. 2.

Holsteins Fine 2- and 3-years heifers, bred; also a few YORKSHIRE PIGS, ready to wean.
A. WATSON & SONS, ST. THOMAS, Ontario.
L. D. PHONE FINGAL VIA ST. THOMAS.

Burman's Horse Clipper

Saves Time and Money



Wherever you find well-kept horses, wherever quick, clean work counts — there you will find the "Burman" Horse Clipper. — It works smoothly, quickly and leaves a silk-like finish — it is simple, durable and will last a lifetime without going wrong in adjustment. Comes packed ready for use — clipping plates and shaft hook for holding clipping head supplied. Ask your nearest dealer or write direct.

B. & S. H. Thompson & Co. Ltd.
MONTREAL

THE SHORTEST ROUTE

The map of the St. Lawrence route gratis at any Office or Agency, is an interesting study in distances. The descriptive Booklets and Rate Sheets likewise gratis, are an interesting study in comparative values.

The WHITESTAR-DOMINION Canadian Service in a service of big values.

SAILING TUESDAYS by THE LARGEST CANADIAN LINERS

"LAURENTIC" "MEGANTIC" "TEUTONIC" "CANADA"

Ask the nearest Agent for Particulars.

WHITE STAR DOMINION LINE

Bone Spavin

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

Fleming's Spavin and Ringbone Paste

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

Twenty-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.

FLEMING BROS., Chemists,
75 Church Street, Toronto, Ont.

Lincolndale Pure-breds

Four Registered Ayrshire bulls ready for service, 3 Ayrshire heifer yearlings, 4 Ayrshire bull calves, 10 Registered Holstein calves, 1 two-year-old Registered Jersey bull and one yearling Jersey bull. These are all from very heavy milkers, most of which are in the Advance Registry. For full information address:

LINCOLN AGRICULTURAL SCHOOL,
Lincolndale, New York.

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

D. A. MACFARLANE, Kelso, Que.

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

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

For Sale — Jersey cows and heifers and bulls for exportation. All pedigree and herd-book stock. For further particulars apply to

A. T. SPRINGATE, Breeder and Exporter,
Gorey, Jersey, Europe.

GLEN ROUGE JERSEYS

For sale: A pure St. Lambert bull 15 months old. Solid color, large and vigorous; a splendid animal in every way. Address: **H. M. ROLPH,**
Markham, Ont.

Gossip.

Two yearling Holstein bulls are advertised in these columns by Thos. B. Carlaw & Son, Warkworth, Ont. These bulls are good individuals, and are out of heavy-milking cows of the deepest-milking strains. The price is right. See the advertisement, and write Messrs. Carlaw.

A very successful sale of Shorthorns was that of Thos. Stanton, at Glen Ellyn, Illinois, on June 3rd, when 46 head sold for an average of \$550. The bull, Browndale Sultan, went to James Yule, of Manitoba, at \$2,000, and the same buyer bought Imp. Fair Star 2nd, at \$1,675. Anoka Farms, Waukesha, Wis., took the show heifer, 78th Duchess of Gloster, at \$1,980. Roan Sultan went to R. R. Waid, of Illinois, at \$1,050, and Mitchell Bros., Burlington, Ont., secured Queen Mildred, at \$710.

The Thoroughbred Studbook of France is now to be recognized by the United States, provided that no animal or animals registered in the French Thoroughbred Studbook shall be certified by the Secretary of Agriculture as pure-bred unless such animal or animals trace in all crosses to animals registered in the General Studbook of England, or to animals which are proved to the satisfaction of the Department of Agriculture to be of the Thoroughbred breed, and to have been imported from the country in which the breed originated.

LAST CALL FOR SPRING GROVE SHORTHORN SALE.

A few of the choice animals included in the great Shorthorn sale to be held at Ilderton, Ont., June 25th, have been noted. Four from the Springhurst herd of H. Smith, Exeter, Ont., are worthy of mention. Vanity 19th is a fifteen-months-old red-roan, by the Cargill-bred bull, Royal Commodore, whose breeding was given in some Gossip of the Springhurst herd in our issue of June 5th. This heifer is one of the deep-fleshed sort, is smooth to a turn, and is a well-grown, breezy comer. It might be mentioned that calves by Royal Commodore beat Carpenter & Ross' International winners in 1911. This heifer is the right kind, bred right. Pirene is a big, red two-year-old Pineapple, by Royal Lad sired by Mildred's Royal, a Watt-bred bull, now at the head of the Gier herd, Grand Valley. She is bred and safe in calf to Blarneystone, the grand young bull by Mutineer, junior champion at Toronto in 1910, and winner of many prizes in the West. This is a big, strong, level heifer, and has milking propensities of the highest order. Rose of Strathleven is a grand, deep, wide, straight-topped, fleshy three-year-old, due to calve in July to Blarneystone, a Butterfly bull. She has bred character galore, is low-set, and one of the best of the Springhurst herd. A Rose of Strathallen, by Gold Drop, her breeding is all that could be desired. Erina is a five-year-old red cow, in calf to Ben Wyvis, a former champion, and considered by Mr. Smith to be the best breeding bull ever used in his herd. She is out of Dairymaid, by Missie's Baron, a bull of the old reliable Cruickshank-Mayflower tribe, is a good milker, a very useful cow, and has already produced two very fine calves. Clipper of the Manor 7th is one of the best of the Spring Grove herd, a roan, and a winner at Toronto as a calf. She is a Cruickshank-Clipper, which must not be overlooked. She is by Proud Gift (imp.), sire of the junior champion heifer at Toronto in 1907. She is a level, thick, good-breeding cow. Orange Blossom 6th = 93296 = has for dam a cow which made 25 lbs. of butter in 7 days. She is by Cyclone (imp.), and is a good dual-purpose type, out of an imported dam by the Duthie-bred bull, Scottish Prince. Lady Monarch = 76672 =, with calf at foot, is a fine roan heifer, by the Marr-bred bull, Chief Ruler, and out of Monarch's Lady, by the great breeding bull, Gay Monarch (imp.), which did so much in making the Robbins herd. Those mentioned are representative of the entire offering. Don't forget the date, June 25, at Ilderton.

You won't be a "lucky" dairyman till you get an IDEAL GREEN FEED SILO

The "lucky" dairyman is the man who takes advantage of every opportunity to increase his milk or cream production without increasing his feeding cost, and who leaves no stone unturned to make every cow he owns produce the last cent of possible profit.

That's the kind of "lucky" cow owners you'll find with Ideal Green Feed Silos on their farms. They know that a good silo pays for itself the first year and after that is all clear profit.

If you don't know why send for our free Silo Book which contains much valuable information about the erection of silos and the advantages of silage.

DE LAVAL DAIRY SUPPLY CO., Ltd.
LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA
Exclusive Canadian distributors of the "World Standard" De Laval Cream Separators
MONTREAL PETERBORO WINNIPEG VANCOUVER

\$15.95 AND UPWARD SENT ON TRIAL

AMERICAN SEPARATOR

Thousands in Use giving splendid satisfaction justifies your investigating our wonderful offer to furnish a brand new, well made, easy running, easily cleaned, perfect skimming sipping, thick or thin cream. Different from this picture, which illustrates our low priced large capacity machines. The bowl is a sanitary marvel and embodies all our latest improvements.

Our Twenty-Year Guarantee Protects You

Our wonderfully low prices and high quality on all sizes and generous terms of trial will astonish you. Whether your dairy is large or small, do not fail to get our great offer. Our richly illustrated catalog, sent free of charge on request, is the most complete, elaborate and expensive book on Cream Separators issued by any concern in the world. Shipments made promptly from Winnipeg, Man., St. John, N. B., and Toronto, Ont. Write today for our catalog and see for yourself what a big money saving proposition we will make you. Address:

AMERICAN SEPARATOR CO., Box 1200 Bainbridge, N. Y.

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

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

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

Several imported cows and bulls for sale. **B. H. Bull & Son, Brampton, Ont.**
Canada's Greatest Jersey Herd.

75 Hillcrest Ayrshires Our Ayrshires are selected and bred for big production, and show-ring quality. Many of the heifers we are offering are grand-daughters of the two Ex-World's Champions, Jean Armour, Rec. 20176 lbs., and Primrose of Tangleywid, Rec. 16195 lbs. **F. H. HARRIS,**
Mount Elgin P.O. & Co.

CITY VIEW Record of Performance Ayrshires

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

Ayrshires and Yorkshires Bulls for service, of different ages; females all ages. Calves of both sexes. All bred for production and type. A few pigs of either sex ready to ship.

ALEX HUME & CO., MENIE P. O., ONT.

Stonehouse Ayrshires

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

L.-D. Phone.
HECTOR GORDON, Howick, Que.

WOOL

We pay highest prices for WOOL, HIDES, SKINS, etc. No lot too small. Ship direct to us

Write to-day for prices.

John Hallam, Limited
111 E. Front St., Toronto
The largest in our line in Canada.

Alloway Lodge Stock Farm

ABERDEEN-ANGUS CATTLE SOUTHDOWN SHEEP

Now is the time to select your sire for use this fall. The first choice is guaranteed to those ordering now. Send for circular and prices to

ROBT. McEWEN, Byron, Ontario
R. R. Stn. and Tel., London.

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

Making High-priced Pork While Grinding Their Own Feed



Agents wanted in every town and district.

Shipments made from

Galt, Ont.
and
Winnipeg, Man.
Address to
Head Office

CANADIAN HOG MOTOR CO., LTD
Winnipeg, Manitoba

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

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

Assistant District Attorney Clark was conducting a case in the Criminal Court. A large, rough-shouldered negro was in the witness chair.

"And then," said the witness, "we all went down in the alley, and shot a few craps."

"Ah" exclaimed Mr. Clark, swinging his eyeglass impressively. "Now sir, I want you to address the jury and tell them just how you deal craps."

"Wass that?" asked the witness rolling his eyes.

"Address the jury, sir," thundered Mr. Clark, "and tell them just how you deal craps."

"Lemme outen heah," said the witness, uneasily. "Firs' thing I know this gemman gwine to ask me how to dwink a sandwich."—San Francisco Argonaut.



SNAP CLEANS THE HANDS

No matter how soiled they are. Grease, Ink and all other stains come off with Snap. Leaves the hands soft and white. Antiseptic.

ALL DEALERS SELL SNAP

SNAP COMPANY, LIMITED, Montreal.

Questions and Answers.

Veterinary.

Rupture.

Cow has a soft lump, larger than my fist, on her abdomen in front of her udder. When pressed upon it disappears, but reappears so soon as pressure is released.

W. O. P.

Ans.—The symptoms indicate rupture. A veterinarian might be able to operate successfully. It will probably do no harm. It is not likely to do harm unless she should have difficulty some time in parturition, in which case the opening might become enlarged, and large portions of the intestines escape into the sac. It would not be wise to breed her again unless she be valuable for breeding purposes, in which case you will probably be willing to take the risk.

V.

Partial Dislocation of Patella.

Colt hurt its stifle, and now there is a soft lump on the joint.

B. R. T.

Ans.—The stifle bone becomes partially dislocated when the colt moves. This is very unsatisfactory to treat, as a complete recovery seldom takes place, but the colt should make a useful animal. Get a blister made of 1½ drams biniodide of mercury and cantharides, mixed with 2 ounces vaseline. Clip the hair off the front and inside of the joint. Tie so that he cannot bite the part. Rub the blister well in once daily for two days. On the third day apply sweet oil. Let him loose now, but keep as quiet as possible. Oil every day until the hair has grown again. Repeat the blistering once every four weeks for four or five times.

V.

Fatality in Foal.

Last year my mare foaled at night, and the foal was found dead next morning. The mare's mammary contained no milk, just a liquid that resembled glue in consistency, and almost as clear as water. I milked this out a few times, and in four days she was dry. Yesterday morning she produced a smart foal, but she would not attend to it. She was not cross to it, but simply indifferent. Again her mammary contained no milk, but a liquid like mucilage. The foal nursed her and took this stuff, but about 5 p. m. it lay down and never got up again. It did not seem to suffer much, but was dead before midnight. Would it be wise to breed her again?

S. L. L.

Ans.—The fluid resembling mucilage that you mention, is called "colostrum," and this is a natural condition. It is, or should be, present in all cases where the milk has not escaped before foaling. If the foal had lived and continued to nurse, the mare would have yielded milk in a day or two. It is hard to say what caused the death of the foal. It may not have been able to expel the meconium (the contents of the bowels at birth), which should be removed by the finger and injections when not expelled. The passage for the urine may have been closed, or death may have resulted from weakness of the heart, or other causes, which in some cases are very hard to determine. I think it would be wise to breed her again, and give her regular, light work, during the whole period of pregnancy, and feed on laxative food.

V.

Miscellaneous.

Cows Holding up Milk.

I have fifteen milk cows which I have very much trouble to get the milk from. When I first commence to milk they refuse to give it. They pull up their udders, and it is plain to see there is milk there. I try, and try, and finally, from a cow that gives sixteen pounds, I will get eight or nine pounds, and then, at the next milking, they will give it at first, and all right, and they are all the same. What is the cause, and what should be done?

J. H. D.

Ans.—Do you use a dog to drive your cows, or excite them in any way? Dogging cows will often cause them to hold up their milk. Unskillful milking will have the same effect. Excitement and poor milking are the only two causes we can suggest. Either would account for the trouble.

WERE YOU THINKING OF

ROOFING?

WELL, that's our own particular business. Galt Steel Shingles will make your buildings waterproof, windproof, weatherproof and fireproof.

What's more—they are cheaper in the long run than wood or slate, can be laid for one-half the cost of laying wood shingles, or one-sixth the cost of laying slate.

We have some intensely interesting and valuable information to send you regarding this subject of roofing. A post card request will bring it by return mail.

Simply scribble the one word, "Roofing" on the back of a post card, together with your name and address. If you haven't a post card handy, tie a string around your finger so you'll be sure to remember.

ADDRESS:

The Galt Art Metal Co., Limited
252 Stone Road, Galt, Ont. 14



ABERDEEN-ANGUS AND DORSETS

Now is the time to buy a Young Bull. Every farmer with a herd of cows should have one—an Angus. We are offering two choice ones. The Angus are grand for crossing with grades, both for veal calves and steers. They mature quickly and fatten easily. Our price is low. Write. Large Flocks of Dorset Sheep. Some bargains now in breeding ewes. Orders booked for fall delivery—ram lambs, ewe lambs and breeding ewes. Order right away. Early lambs pay best. Write for prices.

FORSTER FARM, OAKVILLE, ONTARIO

Maple Villa Oxford Downs and Yorkshires

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

J. A. CERSWELL, BOND HEAD P.O., ONTARIO
Bradford or Beeton stations Long-distance 'phone

Prize Chester White Swine-Winner High-class in type and quality, bred from winners and champions. Young stock both sexes, any age, reasonable prices.

W. E. Wright & Son, Glanworth P. O., Ont

HAMPSHIRE SWINE

Both sexes and all ages, from imported stock. Prices reasonable.

C. A. POWELL, ARVA, ONTARIO
Four miles north of London.

Morrison Tamworths and Shorthorns Bred from the prize-winning herds of England; have a choice lot of young pigs, both sexes, pairs not akin; and also the dual-purpose Shorthorns. Satisfaction guaranteed.

C. CURRIE, Morrison, Ont

Poland-China Swine and Shorthorns—Choice young stock, either sex, both breeds, to offer. Pairs not akin. Prices easy.

GEO. G. GOULD, Edgar's Mills, Ont.
Essex Co.

Woodburn Berkshires

are founded on the famous old Sally tribe, noted for big size, length of body and strength of bone. We can supply pairs and trios not akin. Show stock a specialty. Also high-class Cotswolds, ram and ewe lambs, shearlings.

E. BRIEN & SON, RIDGETOWN, ONT.

Cloverdale Berkshires—Present offering: Sows bred and others ready to breed; also younger stock of both sexes. Prices reasonable.

C. J. LANG, Hampton, Ont. Durham Co.

Maple Grove Yorkshires

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

H. S. McDIARMID, Fingal P. O., Ontario
Long-distance 'phone Shedden Stn.

Yorkshires Choice December sows and boar; also fine lot of April pigs from large litters and goods mothers. Price \$10. up, registered, f.o.b. Satisfaction guaranteed. **W. T. Davidson & Son, Meadowvale, Ontario**
Peel Co.

ELMHURST LARGE ENGLISH BERKSHIRES

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

The Call of the North

Do you know of the many advantages that New Ontario, with its millions of fertile acres, offers to the prospective settler? Do you know that these rich agricultural lands, obtainable free, and at a nominal cost, are already producing grain and vegetables second to none in the world?

For literature descriptive of this great territory, and for information as to terms, homestead regulations, settlers' rates, etc., write to

H. A. MACDONELL
Director of Colonization

Parliament Bldg. TORONTO, ONT.

Cunard Line

Canadian Service
Immigration Department

Special Interest to FARMERS' CLUBS

We secure "Help" for Farmers from the country districts of the British Isles. Requisitions must be filled up. Copies sent on application. Average time to get you "Help" about 6 weeks: No fee charged. Only regular fare on Ocean and Rail to pay. You need not be without "Help" this Summer or Fall if you send requirement early. Write for further particulars.

Cunard Steamship Company
LIMITED

114 King Street W, Toronto.



MAIL CONTRACT

SEALED TENDERS ADDRESSED TO the Postmaster-General, will be received at Ottawa until noon, on Friday, the 4th July, 1913, for the conveyance of His Majesty's Mails on a proposed contract for four years, six times per week, over Rural Mail Route No. 1, from Embro (Brookdale Way), Ont., from the 1st October next.

Printed notices containing further information as to conditions of proposed contract may be seen, and blank forms of Tender may be obtained, at the Post Offices of Embro, Youngsville, Brookdale, and at the office of the Post-office Inspector at London.

G. C. ANDERSON,
Superintendent.

Post Office Department,
Mail Service Branch,
Ottawa, May 21st, 1913.



MAIL CONTRACT

SEALED TENDERS ADDRESSED TO the Postmaster-General, will be received at Ottawa until noon, on Friday, the 4th July, 1913, for the conveyance of His Majesty's Mails on a proposed contract for four years, six times per week, over Rural Mail Route from Mitchell special (North) (South Perth), Ont., from the Postmaster-General's pleasure.

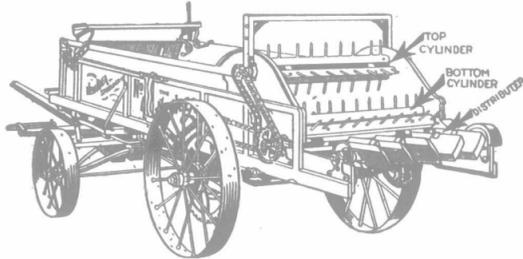
Printed notices containing further information as to conditions of proposed contract may be seen, and blank forms of Tender may be obtained, at the Post Office of Mitchell, and at the office of the Post-office Inspector at London.

G. C. ANDERSON,
Superintendent.

Post Office Department,
Mail Service Branch,
Ottawa, May 17th, 1913.

Its Light Draft Surprises

Those who have owned old-fashioned heavy-draft manure spreaders are always surprised at the light draft of the New Idea. One reason for the New Idea's light draft is because it weighs 500 to 1,000 pounds less than others.



New Idea Manure Spreader

also has straight line of drive through direct connection of front and rear axles—the only spreader that has this draft-reducing feature. It also has two cylinders instead of one. The top one takes the top weight off and prevents lower from getting choked. No ball or roller bearings to break or twist or grind on the axle, but self-aligning bearings that are easily oiled. No "nest of gear wheels" to collect grit, get out of order, and grind to pieces. The New Idea's direct chain-drive is the simplest, most efficient and lightest running on the market. But get the New Idea catalog and learn full particulars about this powerful, steel-wheel, low-down machine.

Tudhope-Anderson Co., Limited

ORILLIA - - CANADA. 24

M. MOODY & SONS CO., Terrebonne, Que.

Selling agents for Province of Quebec.

The Anthony Wire Fence

The Perfect Tie



See That Knot

ANTHONY WIRE FENCE is the cheapest on the market if you value quality and workmanship.

ANTHONY WIRE FENCE is made from all No. 9 hard steel wire thoroughly galvanized.

ANTHONY WIRE FENCE has the stay wires tied to the line wires with the strongest, neatest and most compact lock on any wire fence made.

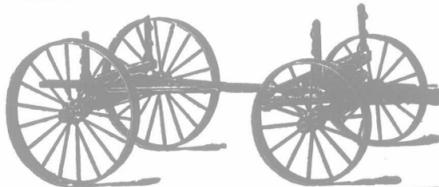
ANTHONY WIRE FENCE is so constructed that it will not bend down at the top nor roll up at the bottom; but stands up straight when erected.

Buy it and try it, and be satisfied.

LIVE AGENTS WANTED IN ALL UNOCCUPIED TERRITORY

The Anthony Wire Fence Co. of Canada, Limited
Walkerville, Ontario.

Electric Steel Wheel Farm Trucks



Saves both labor and horses.
Write for catalogue and prices.

ELECTRIC WHEEL CO.
8 Elm St., Quincy, Ill.

Or NORMAN S. KNOX
47 Wellington Street East
Toronto, Ont.
Eastern Canadian Sales Agent



They Cost Less

and Last Longer

"Clay" Gates

STRONGEST and best farm gate made. 30,000 sold in 1912. Can't sag, bend or break. Can be raised as shown. Good for Winter and Summer. Send for illustrated price list.

The CANADIAN GATE CO. Ltd.
34 Morris St., GUELPH, Ont.



Department of the Naval Service

Tenders for Masts and Buildings for Wireless Telegraph Stations to be erected at

Kingston, Ontario. Toronto Island, Ontario.
Port Burwell, Ontario.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for the erection of Masts and Buildings for Wireless Telegraph Stations," will be received at this office until noon on Wednesday, June 25th, 1913.

Plans and specification and form of contract to be entered into, can be seen on and after the 10th instant, at the office of the General Superintendent of the Wireless Service, Department of the Naval Service, Ottawa, or at the offices of the

Post Master, Kingston, Ontario.
Harbor Master, Toronto, Ontario.
Post Master, Port Burwell, Ontario.

Contractors are at liberty to submit tenders for any or all of the masts or buildings for any of the above stations, but a separate tender must be forwarded for each set of masts and for each set of buildings tendered on. In addition to the above, contractors may, if they so desire, submit a tender for the three complete sets of masts and a tender for the three complete sets of buildings.

Persons tendering are notified that tenders will not be considered unless made on the printed forms supplied, and signed with their actual signatures, stating their occupations and places of residence. In the case of firms, the actual signature, the nature of the occupation, and place of residence of each member of the firm must be given.

Each tender must be accompanied by an accepted cheque on a chartered bank, payable to the order of the Honorable the Minister of the Naval Service, equal to ten per cent. (10 p. c.) of the amount of the tender, which will be forfeited if the person tendering decline to enter into a contract when called upon to do so, or fail to complete the contract. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order

G. J. DESBARATS,
Deputy Minister.

Department of the Naval Service,
—43176. Ottawa, June 5th, 1913.



MAIL CONTRACT

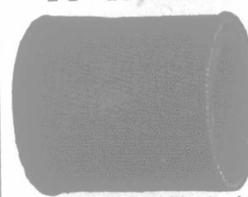
SEALED TENDERS ADDRESSED TO the Postmaster-General, will be received at Ottawa until noon, on Friday, the 11th July, 1913, for the conveyance of His Majesty's Mails on a proposed contract for four years, three times per week each way, over Rural Mail Route No. 1, from Appin (Appin and Inadale), Ont., from the Postmaster-General's pleasure.

Printed notices containing further information as to conditions of proposed contract may be seen, and blank forms of Tender may be obtained, at the Post Offices of Appin, Inadale, and Glen Willow, and at the office of the Post-office Inspector at London.

G. C. ANDERSON,
Superintendent.

Post Office Department,
Mail Service Branch,
Ottawa, May 29th, 1913.

TO THRESHERMEN



Our price for best 2-inch canvas-covered suction hose is only 60c. per ft. We sell the plain 2-inch-wire-lined suction hose at only 37c. per ft. It comes in 15-, 20-, and 25-ft. lengths. We carry a large stock. Write

for large catalogue of Threshers' Supplies.
WINDSOR SUPPLY CO. - Windsor, Ont.

STAMMERERS

can be cured, not merely of the habit, but of its cause. The Arnott Institute has permanently restored natural speech to thousands—is doing it to-day. Write for full information and references to:

The Arnott Institute, Berlin, Ontario.

IF YOU WANT BEST RESULTS
Advertise in the Advocate

The "Empire" Separator will Help Your Farm Profits. Look Into These Figures

WE would like you to own an "Empire" Separator, because it is distinct and separate from all other cream separators. It has achieved a wonderful triumph. As a separator, it has lasted through 3 generations. Grandfathers of present users were "Empire" owners many a long year ago.

This feature of a separator "lasting" is very important. It means more than good material and perfect construction. It means the "Empire" is so made that the wear and tear of use does not spoil its efficiency.

A man can get an "Empire" and run it 6 or 7 or 8 years so easily, and at such high speed, that all the butter fat is separated. He can also select another machine, with apparently equally good talking points. This machine runs easily at first. As it wears, it gets harder and harder. Without knowing it, the user slows it down. At a certain point, easily reached, it spills the valuable butter-fat into the skim milk—only partly separating it. Here is loss in money. The user isn't blind. He sees this loss. His remedy is another make of separator—perhaps an "Empire."

The "Empire" to-day has come through these 3 generations of users in one family. They have bought "Empire" after "Empire," each time getting new models. The "Empire" has kept pace with the times. Its basic and exclusive features of design that make it a perfect machine have been in all these models. Hundreds and hundreds of makes of separators have discontinued and gone out of commercial existence. They have been failures as to basic design. The "Empire" has been a success in basic design. It has lived and grown.

Why should you get a separator? Your separator should be an "Empire," we know, if you regard your future. But why should you have a separator at all?

In the first place a cream separator gets you more butter-fat from your milk, quicker, easier, and with less trouble than you can get from pans or coolers.

If you depend on cream "rising" you only get about 93 lbs. of butter-fat from your milk where you should get 100 lbs.

This is a big loss. It is a very great reduction on your profits. Even then, when you actually get 93 lbs. by skimming, you are doing mighty well. It is easily possible to secure only 60 lbs. of butter-fat by skimming. A little change in the weather, a little neglect—you lose 40 lbs. of butter-fat that is worth \$12.00. You load on the remaining 50 lbs. of butter, the cost of milking 2,800 lbs. of milk, pasturing, etc.

If you get an "Empire," you earn anything from \$2.10 for 7 lbs. gained, to \$12.00 for 40 lbs. of butter-fat saved, according to efficiency.

If you have 12 ordinary milk cows, giving about 6,000 lbs. of milk each during a year, and running 3½% butter-fat, an "Empire" will make savings of at least \$53.22 a year over skimming. It will get you nearly 177 lbs. of butter extra—over 2,500 lbs. instead of 2,300 lbs.

Remember, this comparison is for a pretty low grade of cow—the average every-day milker. If the 12 cows were like Creamelle Vale, the famous Massachusetts Holstein, the milk production would run to 355,092 lbs. for the year, with a butter record of 13,860 lbs. In this case the "Empire" would have secured for such a farm over 970 extra pounds of butter, worth at 30 cents a pound, about \$291.

We have made you two comparisons—one taken from a farm with 12 ordinary cows on it, and another from a farm with 12 Holsteins worth \$180,000 in cold cash. On the everyday farm the "Empire" saves \$53.22 by efficient separating of butter-fat. This might be **your** farm. Also, instead of an "Empire" it might be any separator that gets 100% of the butter-fat while **new**.

In 11 years of service the "Empire" earns its own cost and money up to \$587.42—a profit of \$500, let us say.

The other separator will deteriorate and slow down. If it runs 100% for two years, 98% for two years, 95% for two years, 93% for two years and 91% for two years, it will only **average** about 95 lbs. 6 ozs. of butter-fat over the period, out of every 100 lbs. produced.

It will only earn 2 lbs. 6 ozs. of extra butter in each 100, or 60 lbs. per year, worth \$18, or \$198 in 11 years.

This means a profit of about \$98 in 11 years after paying for a separator, not an "Empire," against about \$500 for an "Empire" at the same cost, and doing the same work.

This comparison shows **why** the "Empire" has been used in single families through three generations, and why it has lasted as a commercial success. It pays about **five times** as well, with ordinary everyday milkers on the ordinary farm, as a separator of good make, but without the lasting qualities of the "Empire."

All separators "pay their way." But the best separator is the "Empire" in its ability to keep high efficiency.

We would like to have you write us a letter regarding the "Empire" machine, if you have several milch cows.

On receipt of post card we will send you our book on the "Empire."

If you want to buy an "Empire," ask us for our **SPECIAL EMPIRE OFFER**.

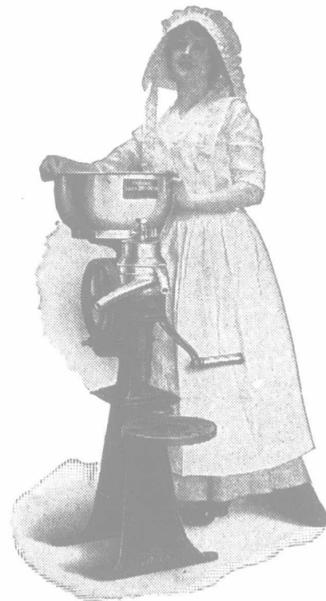
If you want to trade in your present separator for an "Empire," ask for our **SPECIAL EMPIRE EXCHANGE OFFER**.

If you want to try an "Empire," ask for our **EMPIRE TRIAL OFFER**.

We will send each of these offers to you for your consideration.

If you have only **ONE** milch cow, or **BUY** milk in small quantities, we have a small separator, known as the **BALTIC**.

This is a special Swedish machine, adapted for the small mountain farms of Sweden, and at a correspondingly low price, but of high quality.



In certain cases, the "Baltic" Separator is the best machine to use.

If in doubt, write for our **BALTIC OFFER**.

If you have **ONE** cow, write for our **BALTIC OFFER**.

You have a chance to secure cream separators in the above offer which run silently, and run with little vibration. The "Empire" runs so easily that it will spin from the weight of the handle alone. The "Baltic" is in a class by itself.

Write us on a postal, and write immediately while the opportunity in the above offers is held open.

Write us to-day.

The Empire Cream Separator Co. of Canada, Ltd.
77 King St. E., TORONTO