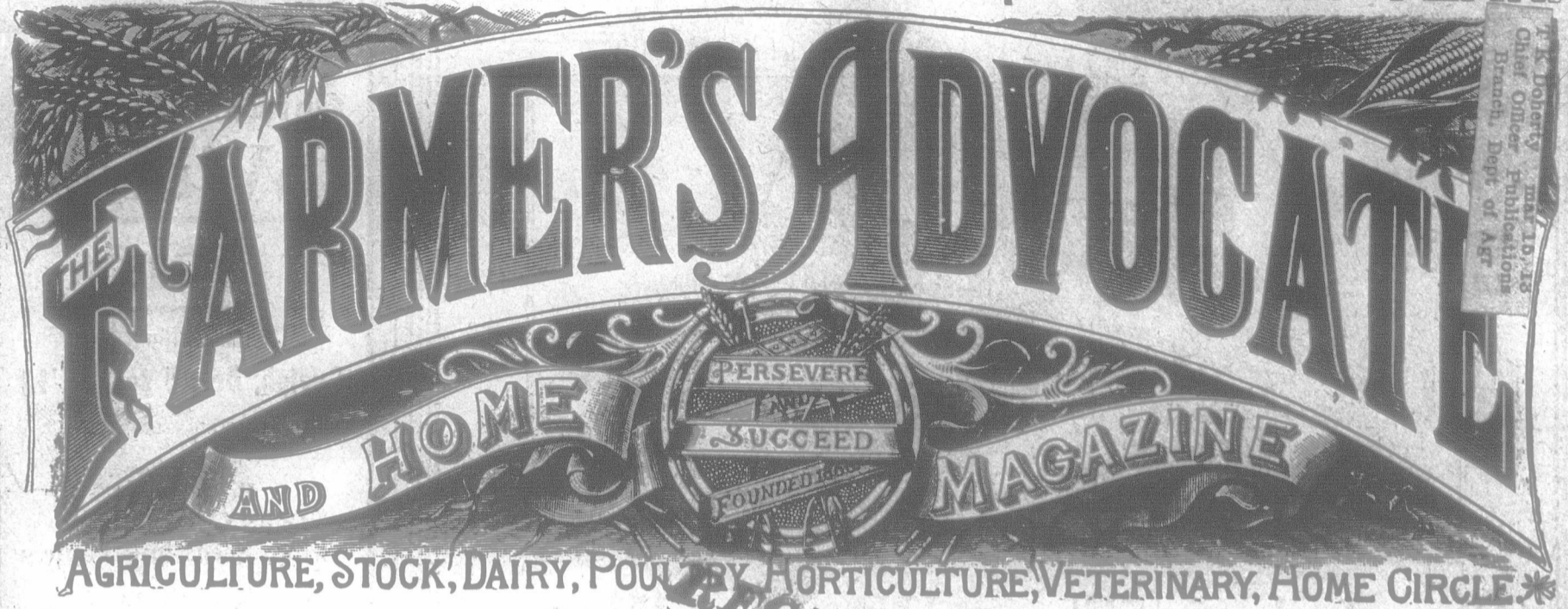


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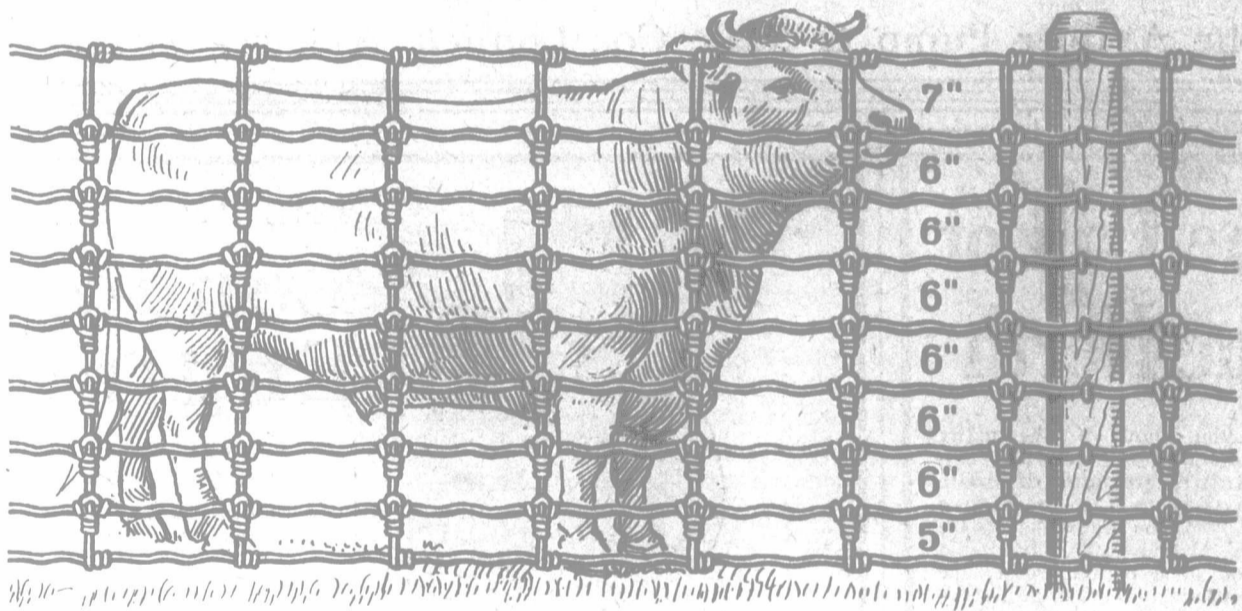
VOL. XLVIII.

LONDON, ONTARIO, OCTOBER 23, 1913.

No. 1073

"Frost" Fence First

Two
Prize
Winners



The prizewinner, whether bull or fence, must be of the best breeding and the highest pedigree.

Frost Fence is the prizewinner; because it is of the best material and has the careful make-up. It is considerably different from the ordinary woven, and it is as much better as it is different. Service is combined with appearance, and we'll tell you how.

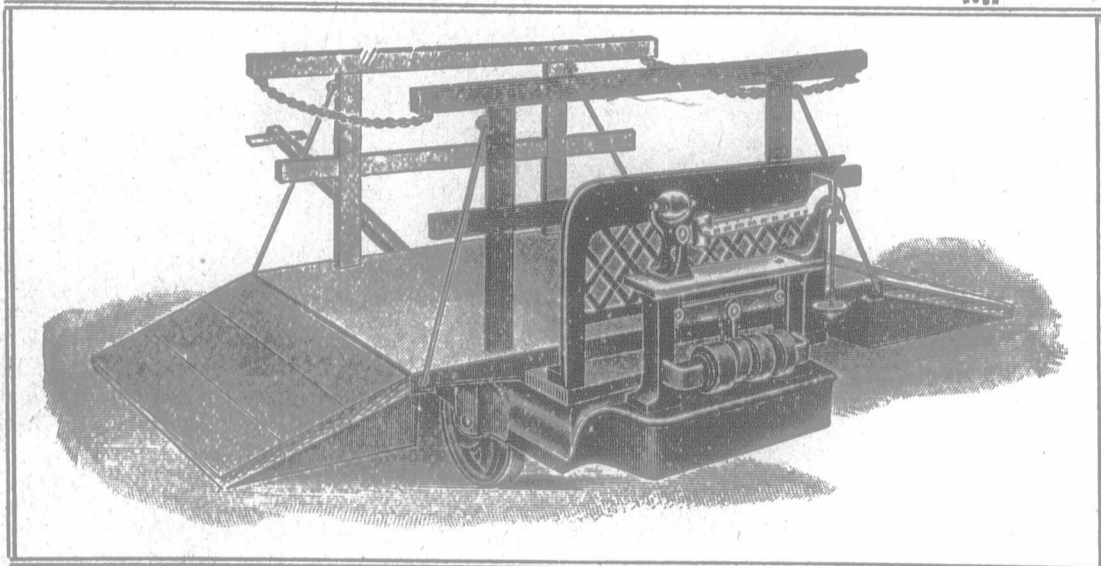
In the first place, we do not aim at any enormous production from one machine. We build a new fence loom when it is needed. The **Frost** system of manufacturing wire and woven fence is not simply drawing and galvanizing wire and weaving it into fence, but it is a process carried out by experts who are skilled at this work. Their instructions are to know positively that **Frost Woven Fence** is the best that can be made, regardless of whether the output is large or small.

You'll get increased service from the **Frost Fence**, simply because it is a better-made fence. Now is the time to think carefully about your fences, compare the quality and price, so that you are posted when you are approached by an agent during the winter or early spring.

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Frost Fence, because of this improved weaving, has that reserved spring, similar to coiled wire. It has laterals of equal length and tension, so that once stretched it stays **TIGHT**. It has stays which stand upright and are evenly spaced. It has a lock or binding which absolutely holds, and does this without giving the lateral wire that weakening kink which so often results in a broken lateral.

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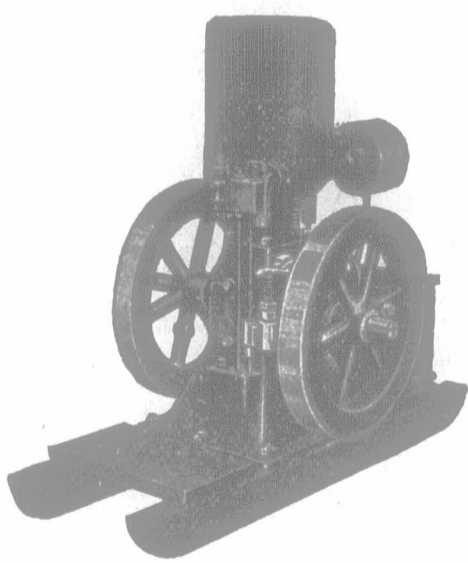
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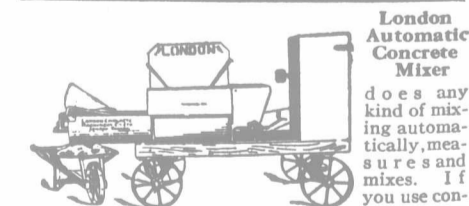
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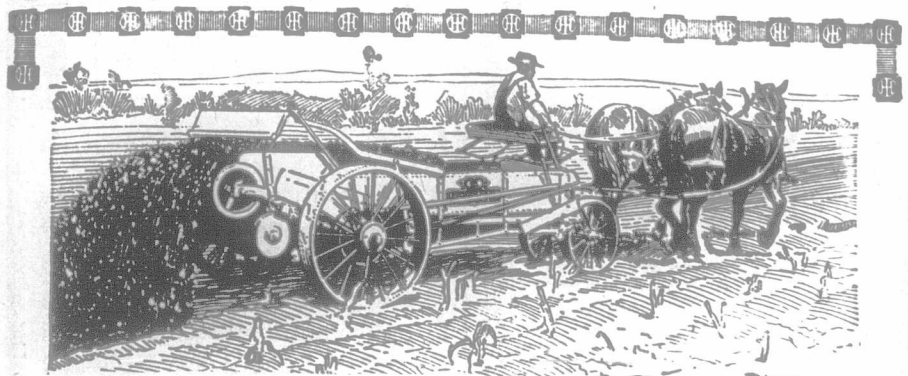
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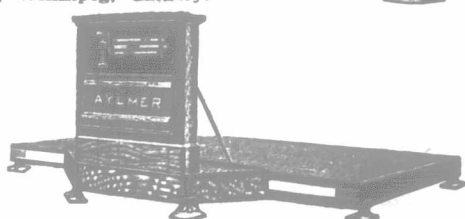
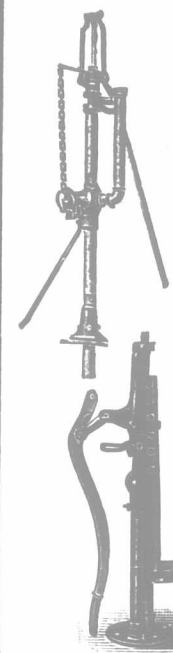
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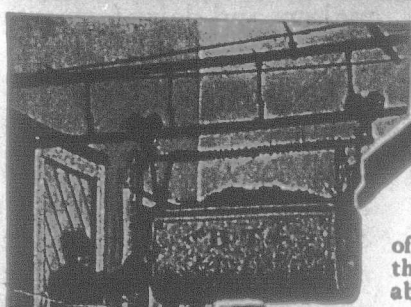
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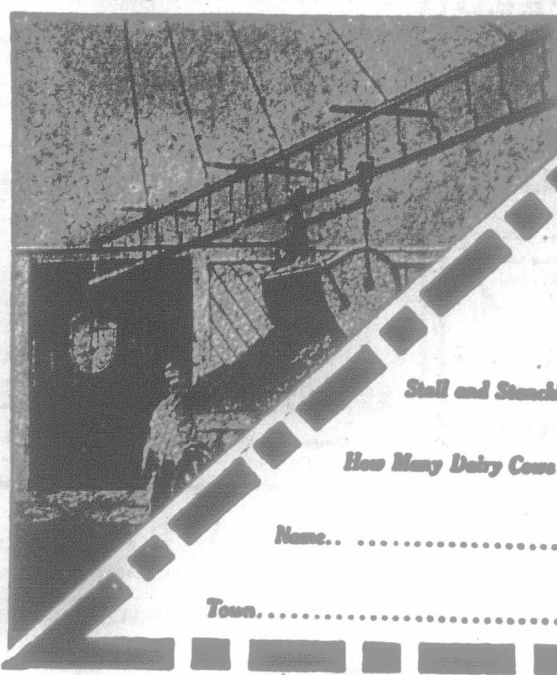
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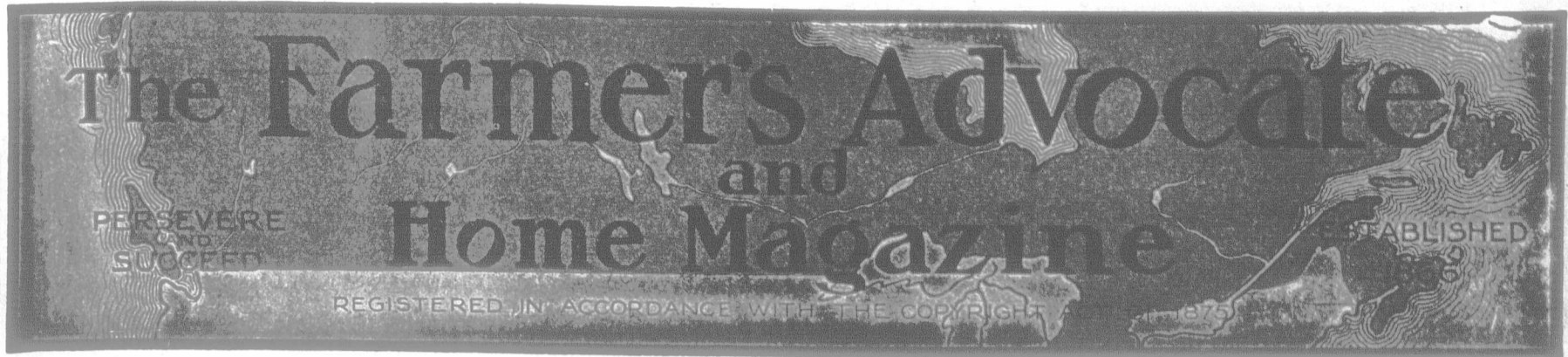
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in detail.

Wm. H. S.

24

dvocate.



Vol. XLVIII.

LONDON, ONTARIO, OCTOBER 23, 1913.

No. 1073

EDITORIAL

Getting ready for winter is the order of the day.

The rustle of the fallen leaves records the footsteps of the retreating year.

Each acre plowed this fall means earlier seeding next spring, and early seeding adds to the chances of a good yield. Keep the plow going.

With the subsidence of international trade walls, neighboring people will see more of each other, and let us hope improve upon closer acquaintance.

The officially appointed Canadian Thanksgiving Day is over for 1913, but Canadians are so blessed with good things that every day brings forth something to be thankful for.

Where are the farm implements and machines not to be used again this season? Fence corners are not very satisfactory summer implement sheds, and are even less protective in winter.

With other animals destined for the packing-houses and abattoirs advancing in price, people have been wondering in recent weeks why the quotations for good bacon hogs, no easier to secure, should have been steadily hammered down.

Who said that autumn is not a busy season? What with silo-filling, threshing, apple-picking, plowing, root harvest, potato-digging, and getting stables ready for the stock, the busy farmer almost forgets to admire the beauties which nature spreads around him.

Stop! You have been offered a long price for a high-class breeding female, perhaps the best one on your farm. Will it be more profitable to sell her and thus lower the standard of your herd or flock than to keep her and improve by her yearly additions to that herd or flock? This is a good time to hold fast to that which is good.

One of the very foremost exponents of English public opinion at the present day, "The Nation," observes that China, long looked upon as hopelessly asleep, has become an example of a great empire, founded not on force or military power, but on local autonomy and a democratic civil service, perhaps without a parallel in the world's history.

A new continent has been discovered north of Siberia, but it is not likely to affect the cost of living very appreciably and the flood of printed matter, much of which is incomprehensible, and the endless harangue from public platforms by those who feel the high prices most, are likely to continue unabated in an effort to educate the man on the land to produce more abundantly the necessities of life that the agitators may live in greater ease and assurance.

Let Us Keep Cool.

We are not referring to the weather, for the hot spells of 1913 are probably past. The idea is rather to encourage steadiness of purpose until the condition of flux attendant upon the inception of the new United States tariff schedules affecting agricultural productions and traffic becomes re-adjusted to regularly dependable currents. The effect on the trade in cattle and animal products has been immediate and stimulating. The comparative facility with which the new measure traversed the rocks and shoals of Congress to the golden signature of President Woodrow Wilson betokens behind it a substantial body of public opinion, sagaciously directed for what is believed to be the best interests of the people as a whole. The general spirit of the legislation appears to have made a favorable impress on the outside world, though primarily it is for the benefit of the American. Its permanence will depend upon the minimum of disturbance which it may occasion to what is designated "prosperity", and the extent to which its expectations are realized. Time will tell what effect it may have upon that wearying theme, the high cost of living. The Canadian farmer is not pining to sell things cheap, because he well knows by the "rule of thumb" or by book-keeping, how his cost of living and the cost of production enter into the value of every hundred weight of steer, every quart of milk, pint of cream, pound of butter, fleece of wool, leg of mutton, live hog ready for the packer, or box of fruit for the consumer. Furthermore, we need not imagine that the distant Argentine or Australian farmers are not feeling also the upward trend of the cost of production despite some favoring conditions, and are probably just as fully alive as we are to the need of realizing all they legitimately can out of their labor and investments.

Those who, without due consideration, go off at a tangent into an alluring line of prospective money-making, often simply provide supplies from which some intermediary gathers the cream. Speaking generally the advantage accrues to those who dispose of the more finely elaborated product, such as reasonably young and well-finished animals, rather than lean feeders to enrich the other fellow's land, high-grade dairy products rather than whole milk (except, of course, at figures sufficiently high to make good the consequent drain on the land), fat fowls rather than bones and feathers for someone else to round out for the top price, and choicely-packed fruits or vegetables rather than lower grades. Changes are in progress, but let us be on the alert, not so much to change our present good plant or relinquish our foundation stock, which, in breeding animals ranks among the world's best, but to produce in superior form that for which there seems reasonable prospect of a steady and substantial demand at returns sufficiently large to pay on our high-priced farming lands. The extra demand for meats, dairy products, etc., seems likely to send prices still higher in the Canadian cities and towns, and if this compels the townward rushing multitude to stop and think of the many advantages they are leaving behind them, it may, in time, lead to a more even distribution of population. For the present, however, the town householder with mouths to fill, bodies to clothe and restless folk to entertain, will likely call on the "captains of industry" for higher wages which he will need, if

as one of the packing-house magnates has foreshadowed, he buys beefsteak at 60 cents a pound. The farmer's share of whatever prices the future has in store may be relatively modest, but live-stock husbandry appears to be more than ever secure. It is a time to press steadily forward.

Real Empire Builders

It is estimated that about 90 per cent. of the farming land of England is worked by tenant farmers for a small class of landlords, by a great mass of wage-earning laborers. For a long time this three-class system seemed to go on fairly well, but at last appears to have broken down. The drift is to the towns, and the land is under cultivated. Whether the state will undertake, by some system of purchase, to transfer the land to the real farmers need not be conjectured, but close students of the situation are assuming as one fundamental, that in order to effect the improvement of agriculture in the Old Land, the lot of the toiling men and women who are living thereby, must be improved. All the social and industrial unrest of the British Isles, and of the world for that matter, points unerringly in the direction of a decent living wage for the laborer. Then, there must come the possibility of independent access to the land, the probable establishment of Land Courts or tribunals for equitable adjustment of the relations of land owners and tenants, and by means of co-operation and improved facilities of transport, an adequate return secured to the producer on the land for his enterprise and effort. The problems of the land, food production and distribution are pressing hard for solution, and the statesmen who successfully grapple with them will take rank among the real makers and conservers of the Empire.

A Bright Future for Live-Stock Breeders.

Canada has a meat shortage, and the United States, a country with its millions upon millions of meat-eating people, has felt the depletion in its supplies even more keenly than has been the case in this country. Their markets have been opened to receive our surplus and that of other countries, but we have no real surplus, and an investigation made by the United States Department of Agriculture has brought this point clearly to the notice of the American people. The Argentine had fewer cattle in 1911 than in 1908, and reports indicate that already that country is drawing upon its reserve. Australia as well as the Argentine is called upon to supply British imports, and cannot be expected to send in enough to very appreciably affect the market.

The removal of the tariff has caused many carloads of Canadian cattle, principally stockers and feeders, and a few lambs to go across the border, but American buyers and live-stock men are working under no illusion. Those familiar with the situation there and here know full well that our markets must rise to the level of American markets, and that very soon the supply of cattle from Canada must dwindle unless more are produced. They are now endeavoring to encourage the small farmer to return to stock-breeding.

All this means much to the breeder of pure-bred live stock in this country. The end of all cattle, sheep and swine is the butcher's block,

The Farmer's Advocate

HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED WEEKLY BY
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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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and the value of breeding stock is really based upon what that stock, in the end, is able to do to improve the animal destined to the slaughter-house, or, in the case of dairy cattle, where production is the basis of value, to increase the flow of milk. As pointed out in an editorial in our last week's issue, dairy cattle and certain dairy products are almost sure to be taken from Canada by the country to the south. This must increase an already keen demand for these cattle and their products. All existing doubts have been cleared away regarding the demand for meats. It must continue unabated, and rising market prices, or at least no slumps, are likely. Was there, then, considering all these things, ever a time when breeders of pure-bred live stock had reason to feel more optimistic? They have every assurance that the future of their work is solid, because the live-stock business now has a double backing—good prices for stock sold for consumption, and a return of plant food to the soil.

Any increased effort to produce more stock for the butchers and more milk and dairy products, if successful, must be based on the breeding of the best class of stock which can only come through the use of high-class, pure-bred sires and a liberal diffusion through all districts of pure-bred females of a high order. Let no one hope, in his hurry, to succeed by breeding scrubs. The demand will be for good stock, and the breeders of pure-breds must benefit. We look for a lively interest and a keen business demand for the right kind of pure-bred breeding stock of all classes, and breeders of these classes of animals deserve the patronage which they are sure to get.

Can Beef Steak and Ham and Eggs be Replaced?

Incident upon the lowering of the barrier on food stuffs entering the United States came a rise in prices of some of the meats and produce of Canadian farms, and even long before this law was enacted the price of beef, lamb, pork, butter, eggs and poultry was blamed, to a large extent, for the high cost of living. This old cry is renewed more vigorously than ever. With every upward tendency of the market new volumes come each with a different solution for the household problems, but nearly all originate with consumers, who lay all the blame at the producer's door. Meats and country produce have soared until at the present we read that consumers are looking around to find staple articles of diet which have not advanced in price, and with a hope of replacing the high-priced produce from the stock farm. Sugar, flour, a cereal or two, and canned fish are the articles of diet favored to replace beef, pork, butter, eggs, etc. In 1890 sugar is said to have sold at \$7.00 per cwt., whereas now it is only \$4.50. Flour is from 65 to 90 cents per bbl. cheaper now than in 1890, and rolled oats are comparatively cheap now. Contrasting this with bacon, which sold at 10 cents per pound in 1890 and upwards of 20 cents in 1913, and a difference of over four cents per pound on foot for hogs, and the prices



Another Plague Coming.

Potato Grower—"Will I never be allowed to grow a crop of spuds in peace?"

for eggs more than double, and butter showing a great advance, while beefsteak has soared to nearly 30 cents per pound, there is food for thought. Canned fish is now thought to be cheap, comparatively speaking, at 15 cents for haddie and 20 cents for salmon.

The question is, will people give up a good, juicy beefsteak, a nice plate of pork or lamb chops, their customary bacon and eggs or ham and eggs, and their potatoes fried in butter for any mixture of flour and fish oil or any cereal and sugar? An extra demand for flour, sugar and fish would soon affect the price of these commodities until they, too, would seem too expensive to eat, and meat, butter and eggs would again come into their own; but such a shifting of tastes cannot be effected in a day or a year. English speaking people are meat eaters no matter where they are, and tastes inherent for generations are not easily displaced. Canned fish is a wholesome and tasty dish when served occasionally, but few would care to eat it day in and day out as they do beef or pork, also butter and eggs. The upshot of the whole matter is most likely to be a demand for higher wages by the workmen to meet the increased cost of life's necessities, for we could not call the meat and produce from the farm anything but necessities, and a continued keen demand for beef, mutton, pork and farm produce. There seems to be little risk in taking a chance in the live stock and poultry end of agriculture at the present.

Nature's Diary.

By A. B. Klugh, M. A.

Just after the fall rains is a good time for obtaining mushrooms, as they are usually abundant then. In the summer we find a host of species in the woods, many of them edible and some of them extremely deadly. But in the late fall we find them in the pastures and on the lawns. There is one species found in pastures and known as "the Mushroom," and which is believed by a great many people to be the only species which is good to eat. This is far from the truth, and a good deal more danger lurks in this idea than is apparent at first sight, for this species is far more like some of the poisonous forms than many other edible species are. It is usually by the mistaking of these poisonous forms for "the mushroom" by people who think they know the latter well that the fatal cases of poisoning occur. It is so hard to give a description of this edible form, which will enable anyone to recognize it with absolute certainty that I shall not even attempt it. There are, however, two species of mushrooms which are far more abundant than "the Mushroom" and which are quite equal to it in esculent qualities, which can be described so that no possible mistake can be made in their identification. These two species are both termed Ink Caps, one being the Common Ink Cap and the other the Shaggy Mane. All that it is necessary to do to determine whether you have an Ink Cap or not is to take it home, place it on a sheet of paper and wait. If it is an Ink Cap the cap will turn black and a fluid resembling ink will run from it as it becomes old. As only these species do this and both are good to eat this test is an absolute one, and can be thoroughly relied upon. Now having recognized the Ink Caps, there is one other important point to remember, and that is to gather only the young specimens for the table, as any mushroom which is too old is likely to upset the human digestive apparatus. This is not due to any poison inherent in the mushroom, but to the products of decay.

Before we describe these two mushrooms it is necessary to give a few terms which are used in the description of fleshy fungi. The expanded part at the top is called the cap, and it bears beneath radiating rows of ribs which are termed gills. The stalk which supports the cap is known as the stipe.

In the Shaggy Mane the cap is cylindrical or barrel-shaped, becoming bell-shaped or expanded when old. Its color in the young "buttons" is dark, but in the older plants is white, flecked with dark patches or scales. The surface is shaggy and the cap is from one and one-half to three inches in length before expansion. The stipe is white, smooth and hollow. The gills are crowded, white, then tinged with pink, and finally black and dripping with an inky fluid.

The cap of the Common Ink Cap is cylindrical at first, broadening by degrees until it is cone-shaped. The color is grayish or grayish-brown, with suggestion of lead color. It is smooth or with a very few scales, and is often covered with a bloom. It is from one to three inches in diameter. The stipe is slender, smooth, whitish and hollow. The gills are crowded, at first whitish, then black and moist and dripping away in inky fluid.

The popular idea is that these two fungi must be extremely deadly because they look so unattractive in their old stages when dripping with the inky fluid, and many times when gathering them passers-by have tried to warn me away from them. "Those are not mushrooms, they're toadstools, if you eat them you'll be poisoned," they say. "Well," I reply, "I ate some of these yesterday and some the day before and have eaten a good many every fall for some years, and I don't look very dead yet, do I?" With a dubious shake of the head they pass on.

There are many ways of cooking these mushrooms, but to my taste the nicest way is to fry them in dripping or butter until they are nearly crisp, and serve on hot buttered toast.

They are also excellent pickled, which may be done as follows: Take a quart of mushrooms, selecting preferably the young "buttons," and place them in brine over night. Take a pint of cider vinegar, place it in a saucepan on the stove, add a tablespoonful of whole allspice, two table-

spoonfuls of sugar, a teaspoon of salt, and a teaspoon of red peppers. Boil for about ten minutes, drain the mushrooms and pour the boiling vinegar and spices over them.

Europe Through Canadian Eyes---IX.

FRENCH ROADS AND AGRICULTURE.

Everywhere in Europe the excellence of the country roads and of the city streets is manifest. Work is done there more leisurely than here—they have more time to do it, having had several centuries to do what had to be done here in less than one—but there is no disputing that it is more thoroughly done. We had the pleasure of seeing repairs made on a macadamized street in Geneva. Now Geneva is, of course, in Switzerland, but it is, except politically, essentially French. French is the language spoken, the people are principally of French origin, and the town is situated at the end of a point of Swiss territory that projects into France far beyond the natural border line between the two countries. The street in question was completely free from loose surface stones and was so hard and smooth that one might have mistaken it for cement concrete. To our eyes it seemed, in no need of repair, accustomed as we are to the rough lumps of our own city pavements except where recently laid. Yet here was a gang of three men quietly but steadily at work repairing it. Some slight depressions had worn on the surface, the very worst not quite an inch deep. These spots the first man broke up with a pick to a depth of about four inches, an average sized spot being in the neighborhood of two feet wide and three feet long, but, of course, varying very much in size and shape. After being picked loose, another workman came with a fork somewhat resembling a manure fork, only wider and heavier and with prongs about an inch and a quarter apart, and forked out into a little heap everything that would not drop through between the prongs. With an ordinary shovel the finer particles were then shovelled out into another heap. The third man then shovelled in again the heap of coarse material, adding to it from a pile of broken stone that had been laid conveniently near, enough to make all level when finished. This was then sprinkled with a watering can and rammed with a heavy iron-faced instrument, watering being done repeatedly and profusely, the ramming also being repeated until all was solid. The finer material was next added on top and also watered and rammed until the water flowed over and everything was firm and smooth. A sprinkling of sand was then sifted on the surface and the job was complete. Except for the sanded spot and the fact that there was a slight crown, instead of a depression, one would never suspect that the smooth surface had been broken into.

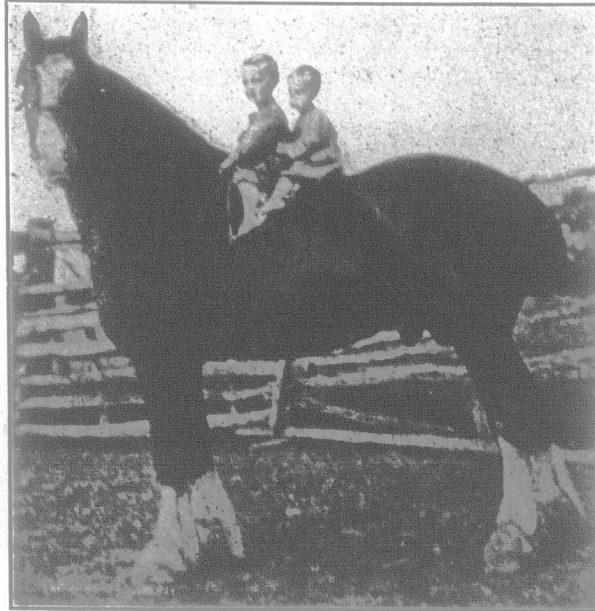
While lingering around to see the whole performance gone through with, we asked in English of the leading workman, pointing with the finger meanwhile to the extra heap of broken stone near, if that was not for the purpose of making up any deficiency of material in the parts repaired. After several futile attempts on his part to comprehend and on ours to help him to, a light broke over his face as he thought he understood, and he answered with one word—"macadam"—the accent on the last syllable. It sounded like swearing.

In travelling by rail from Geneva to Paris, one sees that parts of France are mountainous. For some time after entering French territory, the Alps on either side are visible, and agriculturally the country is much like Switzerland, but as the journey progresses, level land is soon reached, and for the greater part of the way to Paris and from thence to Havre fertile, well-tilled farm lands almost without a break are passed. A smiling, goodly country is France. Fall wheat was being harvested as we went through and spring grain was ripening. Generally speaking, the fields were not large, but the crops were such as to delight a farmer's heart. We saw no self-binders, but self-rake reapers were much in evidence. Here, as in Germany, it seemed to be the fashion for women to do a good deal of work in the fields, but more in conjunction with the men rather than working alone, as in that country. "The Angelus," which pictures a man and woman who had been toiling together in the field standing with bowed heads as the evening bell sounds, is typically French. The sight of harvest work in all its stages being carried on, though in a far country and by another race whose dialect was jargon to us, seemed very natural indeed. It turned our thoughts toward our blessed homeland, Canada, and the work and workers there, and we realized that all parts of the world are after all much alike.

The practice of tethering cows in the fields to forage, which we had not observed elsewhere, is common on many French farms. It was no unusual sight to see a dozen cows in a row lengthwise of a field, each one with her section of a

circle eaten out of the knee-high crop beyond. Much could be said as to the wisdom of such a practice. It was soiling made easy.

The appearance of the French cows themselves was not attractive. Spots of almost every conceivable size, shape and color adorned their outer coats. Doubtless they were good milkers or the thrifty French peasants would have replaced them with others, but to the passing traveller they appeared to be of no distinct breed, but rather a co-mingling of many breeds. Marks of Jersey, Holstein and Swiss blood could be noticed with others for which there was no accounting. Visitors to the Western Fair this year who went through the Art Building will remember the largest painting on exhibition, a herd of cows being driven home at evening. Those cows with their various colors and queer spots about the eyes brought vividly back to our mind the cattle



Exercising the Stallion.

A successful breeding stallion, owned in Lambton Co., Ontario.

of rural France. It was undoubtedly a French scene. Those high-class dairy cows, the Jerseys and Alderneys, are really French breeds of cattle, developed on the Channel Islands, which politically, however, belong to England, but except for these we have been unable to learn of any distinct and typical French breeds.

But when it comes to horses, there is another story to tell. One of the striking sights in Geneva was the magnificent black draft horses to be seen on every hand. One of our party, a rancher from Colorado, who raises both sheep and horses, said in regard to them, "What I would like is to get out to the French farms where they raise these splendid horses. Ain't they beauts?" We never managed to make that expedition. But to see, as we did, a string of six strong, handsome black horses, as alike as peas in a pod, hitched tandem to a cart loaded with a great mass of rock, pulling it up a long, sloping street, and with only one driver, was an object lesson in horsecraft. The driver had a whip and walked alongside the second or third horse from the

front. But though he cracked his whip occasionally, he never struck a horse with it. That can be said of all French or Swiss drivers that we saw. They all carried whips and seemed to take pleasure in the scientific cracking of them, but we never saw a horse struck. Well, these six black beauties with the one driver walked up that slope, not one slinking, not one excited, or struggling, but each horse doing his part steadily, cheerily, ably. The enthusiasm of the Colorado man was justifiable, even inevitable.

By the way, when carts are mentioned, we had thought to find that draft vehicle peculiar to England and Scotland. As for French fashions in this line we knew nothing, but rather expected something antiquated or outlandish. Instead, we found there were in Paris a much greater percentage of carts used for heavy work than we saw in either Glasgow, Edinburgh, or London. Short-box dump carts, such as may be seen on some Canadian farms, or in use in Toronto for coal delivery, are common where heavy material, such as earth or bricks, is being hauled, but besides this ordinary type, carts with boxes of various lengths and shapes may be seen there, some being not less than twenty feet in length.

There was much more opportunity to observe the French horses in Paris than in Geneva, and though greater difference in size was noticeable, and a larger percentage of grays among the blacks, yet the type was the same throughout. Whether you looked upon massive drafters, mountains of flesh and blood, or the size was that of the delivery or coach horse, there was the same smooth, rounded, strong body, the same well-arched neck, and the same freedom from extra hair at the fetlocks, characteristic of the Percherons wherever found. In Paris there seems to be no other breed, though doubtless there must be. But the five coach horses which took us in Parisian style to and from Versailles resembled in almost every way those moving heavy loads, except in size. Not one of them could be called rangy, much less leggy. They were not so nervy and springy, nor, perhaps, so tough as the English blooded horse, but they made satisfactory drivers.

French horses rank high in soundness and temper. Of all the horses that we saw there, only one showed any sign of lameness. He was standing and had one front foot set out. That was all. And in temper, though there is in them somewhat of a lack of responsiveness to attention, yet among all those that we by chance rubbed against or that came under observation in any way there was not a single vicious animal nor even one that showed any signs of bad temper when a stranger came near. T. B.

THE HORSE.

Uhlen lowered the world's trotting record to 1.54 1/2 recently.

Keep the weaned colt out doors in a well-fenced yard during the day. He will do far better than in the close confinement of a stuffy box-stall.

Not all stallions are as quiet as the one illustrated in this issue. Perhaps if they were they would get more exercise during the fall and winter season.



Percheron Stallions—Three Prizewinners at Paris, France.

It generally pays in preparing a horse for sale to begin early in the winter, get on all the fat possible with sufficient exercise to avoid overloading and prevent stocking. Feed regularly, water regularly, exercise regularly, and groom regularly.

It is said that the inroads of the automobile have driven so many horses out of commission in Britain that there is a scarcity of horse manure as fertilizer, and scientists are seeking new substances to supply humus.

If the mare has a fall colt, she requires liberal feeding on nicely-cured hay with plenty of oats and bran and a few roots. Effort must be made to supply at least a part of the succulency which springing grass affords the dam of the spring-dropped colt.

There is often a great rush of work to be done late in the autumn. Then it is that work horses perspire most freely, and then it is that they are often exposed to cold, chilling winds or drafts after the day's work. It is well to get plenty of fresh air into the horse stable, but avoid cold drafts which blow directly upon horses which have their coats wet with sweat. Close doors to avoid drafts.

Horses and Silage.

Now that the silos are full and winter approaching, many will begin to wonder if silage may be fed to horses without bad results. The hay famine in several districts will alter many an old time custom of feeding, and throw the herdsman upon his resources to compound a winter diet for the stock. Only a very judicious feeder should be advised to feed silage to horses, and yet we have seen horses fed on silage throughout the entire open silo period, and only last winter two colts were under our observation which secured nothing but hay and silage all winter long. Fatal results have been reported, however, with silage-fed horses. In one case the veterinarian pronounced it cerebral meningitis, and the animal showed a paralyzed condition and much weakness. It was unable to swallow; it would attempt to drink, but could not; its muscles would twitch and tremble, and it finally became so weak that it could not stand. When down its muscles would move automatically, as if walking or trotting. From four days to a week seems to be the time required for the disease to run its course and cause death to the patient.

In all cases where trouble has resulted from feeding silage, the silage was immature, containing considerable acid, or mouldy and overheated. Some of it came from new silos which had not yet become sealed with small materials and juices from the corn.

Past experience has shown that good, sweet, well-matured silage, not mouldy or otherwise impaired, is excellent fodder for the horse and colt, but any silage not up to this standard will be fed at a risk to the owner and danger to the animal.

When Horses' Legs Swell.

I have a mare five years old, a half-bred Clydesdale. Her hind legs swell while she is in the stable over night. I feed one gallon of oats three times a day, and hay and water, and work her ten hours a day. She is in good health every other way.

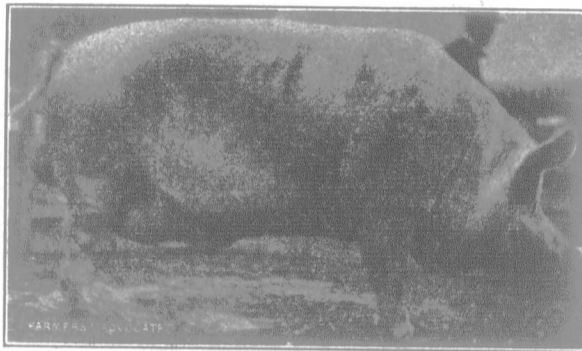
Parry Sound.

J. W.

Ans.—This tendency to swelling is called by some horsemen "filling", but is generally known as "stocking." This tendency is greater in heavy horses than in those of the lighter breeds, and the class of horse with heavy, coarse legs is more predisposed to this swelling than is the horse with the clean, flinty, flat bone so much in demand. Although this subject has been discussed in "The Farmer's Advocate" many times, a little space may be given to it again at this season when horses are just on the verge of a long period of comparative idleness, and are right in the midst of the cool, fall weather with varying temperatures and muddy heels, so likely to develop scratches or cracked heels and consequent swelling.

Stocking is generally attributable to a sluggish circulation in the extremities. Horses inside on dry feed give most trouble from this cause, but some horses are congenitally predisposed because of faulty conformation. High feeding on grain and lack of exercise are two of the commonest causes; but we have seen horses in very low flesh and receiving a small amount of feed shown stocking well marked. As this particular horse is working daily and the swelling shows in the morning after a night's rest, we take it that the swelling disappears when the horse has been worked for a short time. This is sluggish circulation. Exercise increases circulation and stimulates absorption, and all superfluous exudates which really cause the swelling are carried away. This condition may occur with the best of care, but it is usually associated with

poor care or faulty digestion or both. Horses suffering from partial or well-marked constipation commonly develop the symptoms. Grain rations should be reduced when work slackens, if only for a few days. Changes from grass to dry feed, even for horses working hard, should be made gradually, and the grain ration increased slowly. Fall and winter are the seasons when stocking is most common. This is largely due to dry feed, for, during summer, most farm horses get at least an occasional mouthful of grass, which acts as a laxative. The natural thing to do then is to provide a substitute for grass. Roots fill the bill, and, with a liberal percentage of bran in the grain ration, should have a beneficial effect. Scalded bran fed two or three times weekly is often advised, as is also an occasional feed of boiled oats, and sometimes a little linseed meal once daily or even some raw linseed oil mixed with the grain once daily will help greatly. It is generally necessary to feed something other than dry hay and oats to a horse which is troubled with stocking as this one is.



A Big Yorkshire.

Champion boar at Toronto, 1913. Owned by William Manning, Woodville, Ont.

With a horse affected as this one is a purgative is indicated, and 6 to 10 drams of aloes and 2 drams of ginger should be given. After purgation ceases it is a good plan to give a dessert spoonful of saltpetre in damp food once daily for three or four days. Examine his heels to see that he has no "scratches." If he has apply oxide of zinc ointment. Rub his legs well each night after a day's work, and under no circumstances leave them wet and muddy if it is at all possible to get them clean and dry. If necessary the legs might be bandaged tightly at night, but this is scarcely practicable with a heavy horse at daily hard work. Prevention is better than cure, and the best preventive is the breeding of nothing but the cleanest-limbed draft horses.

Back to The Horse.

"Back to the Land" has been the advice often given, but seldom followed by the townsman. "Back to the horse" has not been heard as much but many city people have enjoyed their cars and limousines for a time and now that they have become a common luxury and a business appliance, the afore-time spurner of equine usefulness



Judging Bull Calves at Toronto, 1913.

has returned to the horse for pleasure and profit. Automobiles and trucks have come to stay in towns and cities, but there is still labor where nothing can replace the horse. Construction and excavating work still demand the horse, and country roads, as yet, are not suitable for trucks to do effective work. Electricity will not propel the plow or drill through the soil for many years to come, so we must still retain that useful animal which has been so faithful in the past. In the city of Detroit many families who still have their tonneaus and touring cars are returning to the saddle and carriage horse for real pleasure and enjoyment, and the very fact that it has life and responds to intelligent and skillful, not automatic management, commends it to the lover of nature and nature's animals.

more warm water to make the desired amount. The solution can be applied with spray pumps, sprinkling cans or with a brush.

In the mixing and application of bichloride of mercury, it must be remembered that this disinfectant is extremely poisonous when taken internally, not only to cattle but also to man. The buckets, tubs, spray pumps and sprinkling cans which have been used in applying the solution should be thoroughly scrubbed with soap and rinsed with clean water before using for any other purpose. Bichloride of mercury will corrode metal, so that it is well to use wooden utensils. The mercury solution must be used with caution about the feed boxes, mangers and stanchions for fear of the cattle contracting mercuric poisoning by licking these objects. For this

LIVE STOCK.

This is the stockman's day.

If investigations bring results, the beef industry should soon be on a solid basis.

There is considerable stir in the sheep business this autumn, and this important branch of agriculture seems to be gaining ground quietly while the beef situation monopolizes attention.

Early October generally sees a slump in pork prices, and this year has been no exception to the rule. There is not a greater supply in the country, and prices should soon return to the former level.

If there is any one animal which requires exercise more than another, the large brood sow seems to be that one. We recently saw a litter of pigs, over half of which were farrowed hairless, small and weak, due undoubtedly to the fact that the sow had been confined in a very small pen, and had put on considerable flesh, exercise being precluded entirely. A sow carrying a litter should have a large yard winter or summer.

Human nature is very similar in all things. People like to make large sales at high prices, but it is not good judgment to so deplete the supply by heavy selling that profitable returns are impossible for some time in the future. High prices tempt the stockman to dispose of his good females, something which should be carefully guarded against just now. Good breeding females should be kept to strengthen the herds and flocks.

How to Disinfect a Cattle Barn.

It is always good practice where a contagious disease of any kind has gained access to the herd to disinfect the entire stable. In fact, this is often imperative if it is desired to stamp out the disease. Disinfection is absolutely necessary where tuberculosis has gained access to the herd. Bulletin 123 of the Pennsylvania State College of Agriculture recently published gives a plan for disinfecting the stables which is valuable for this as well as for some other diseases:

1. Remove all manure, litter, loose dirt, loose, rotten boards and scrape the floor clean.
2. Sweep the ceilings and walls free from cobwebs, dust and dirt.
3. Wash the feed boxes, mangers, stanchions and partitions with hot water containing enough lye or washing powder to cut the dirt. Scrub all these objects vigorously with a stiff brush.
4. Spray the walls, ceilings and floors with bichloride of mercury solution (1-1000) or a 5 per cent. carbolic acid solution (not crude).
5. Flush the floors with a saturated solution of iron sulphate or a solution of chloride of lime (1 lb. to 3 gallons of water).
6. Spray interior of feed boxes, mangers, stanchions and partitions with the 5 per cent. solution of carbolic acid. This is done for the reason that there is danger of poisoning the animals if the bichloride of mercury is used for spray upon those structures which the animals can lick with their tongues. The carbolic acid is absolutely harmless if used in a five per cent. solution.

7. A whitewash applied to walls, ceilings and partitions will add to the cleanliness of the stable.

To make a 5 per cent. solution of carbolic acid use one part by weight of pure carbolic acid to twenty parts of water. Add the carbolic acid to a gallon of moderately warm water, stir vigorously, then add enough

more warm water to make the desired amount. The solution can be applied with spray pumps, sprinkling cans or with a brush.

reason, it is advisable to use the carbolic acid on the feed boxes and mangers and the bichloride of mercury for the walls and ceilings. To make up the bichloride of mercury solution (1-1000) use one-eighth of an ounce of corrosive sublimate to a gallon of water or one-half ounce to four gallons. The addition of a small amount of sal ammoniac will cause the corrosive sublimate to dissolve more easily. It is advisable also first to add the corrosive sublimate to about one gallon of moderately warm water containing the sal ammoniac. Stir thoroughly and after all of the particles have been dissolved, add enough clear water to make the required amount.

To make a saturated solution of iron sulphate as much of the sulphate should be dissolved in the water as possible. Put the copperas in a barrel or some solid container, pouring in water and allowing the solution to stand for a day. The liquid above the sulphate of iron will be the saturated solution which is to be used on the floors and gutters.

Chloride of lime solution is used in the proportion of one pound of lime to three gallons of water. It is a very good disinfectant for floors, gutters and partitions and can be applied with brush, sprinkling can, pump or bucket.

Public Abattoirs and the U. S. Meat Situation.

The United States Department of Agriculture has had experts looking into the meat situation in that country, and after a thorough analysis they have concluded that there is no possibility of relief coming from Canada, Mexico, the Argentine, Australia, or other countries, and prices must continue to show an upward trend unless some means are taken by the United States people themselves to remedy matters. The investigators propose the erection of public abattoirs, and the sale of meats on public markets as is done in Europe. Public slaughter houses, they claim, would eliminate many middlemen, and local markets would result in a severe blow at the so-called beef trust. Waste lands, they advise, should be improved, and more economic methods practiced in stock-raising.

It was brought out that meat is scarce, and that the high prices have decreased the per capita consumption of this staple food somewhat. It is estimated that during the past four years this has fallen off ten pounds, or from 162 pounds in 1909 to 152 the present season. Apparently the number of beef cattle has dropped in that country by almost 30 per cent. during the past six years. Other countries from which the United States might draw have a very limited and decreasing supply, not excepting Canada. The only hope, says the bulletin, is in the small farmer again turning his attention to raising stock, as was the case before the advent of the large packing houses, which drove the small local butchers out of business. The Department puts forth the recommendation so often advised through "The Farmer's Advocate," viz., community breeding or district live-stock co-operation, which consists in raising the same kind of animals in especially suitable districts, so that there might be a uniformity of output, making it possible to market co-operatively in carload lots at highest prices.

THE FARM.

Galvanized Fencing.

Editor "The Farmer's Advocate":

The old rail fence is disappearing rapidly and giving place to the much more handsome wire fence, in some of its various forms.

This is as it should be, as there is less harbor for weeds, and no breeding ground for the wire worm and other injurious insects.

With a little extra care, and a single horse to finish at the fence, the weeds and grass may be destroyed almost entirely with the plow, and leave very little hand labor to aid in the war of extermination. This is one of the great advantages of the wire fence, and another is, the few posts required.

The barbed-wire fence is seldom seen now, owing to the many accidents to horses and cattle. The smooth, woven fence, either put on the posts in the web, as it comes from the manufacturer's hands, or the single wires stretched on the posts, at suitable distances apart, has taken its place.

Unless some stiff wire can be used for the uprights, I would undoubtedly prefer slats.

One great drawback in the use of the wire fence is the poorly-galvanized wire that is being used now, compared with the earlier wire. For this I blame the farmer, who has been buying the cheapest, in place of enquiring if the galvanizing is well done, until manufacturers are putting on as little zinc as can be carried, and in a year or two, in place of a galvanized steel wire fence, as it was to be, it is found to be a rusty fence, fast going to decay. Rust soon weakens the

fence that would turn a team of horses, when new.

Galvanized wire may be easily tested by scraping a small part with a knife, and finding the thickness of the zinc coating, but this is not all, for properly-galvanized wire should be iron and zinc, which at the point of union is really an alloy of these two metals, and should be perfectly rust proof.

Another drawback is the danger of cattle being killed by an overcharge of electricity in the wires at the time of thunderstorms, when miles of wire may be charged to a very high voltage and be discharged instantly whenever a conducting material comes in contact; or the charge may be so great as to leap over an intervening space, often



Two Champions.

Lincoln ram and ewe, winners at Toronto, 1913. Owned by H. Lee, Highgate, Ont.

killing many cattle at the one discharge. This can be easily remedied by inserting wires, shoved into moist earth, and attaching to the fence, thus conveying to the earth in many places what would be a very dangerous charge of electricity. Bruce Co., Ont. WM. WELSH,

A Lover of the Farm.

Editor "The Farmer's Advocate":

My father was a farmer in my boyhood days, but unfortunately an unsuccessful one. The old homestead was naturally a beautiful farm consisting of two hundred acres, ninety acres under cultivation, the balance in valuable timber land.



A Foster Mother.

The litter of pigs were successfully raised by placing nipples over plugs with small holes through them and leading to the trough.

The cultivated land was just gently sloping, and well watered by a large brook and living springs. I was the youngest of the family and the only one who evinced any love for farming. When I had reached the age of twelve years I was enthusiastic in the care of stock, poultry, etc., and my chief delight was to feed them and keep an account of the profits and losses. I often said I was going to be a farmer, but my parents, by their attitude for thirty years, and the old farm yearly producing less and the buildings going to rack, were condemning farming, so I was kept regularly to school as my brothers and sisters were before me. However, my chief delight before and

after school and holidays was to look after the care of the farm stock and other light work, and when by chance I would have to be kept home for a few days to assist in the general farm work my pleasure knew no bounds, but my father would hate to begin school again. At the age of seventeen I declared my intention of abandoning school entirely and going into farming, taking the management of the old farm, which was looking very shabby by this time, with its rude fences tumbling down and overgrown with bushes and the broad meadows covered with loose stones and producing about half what they should. At my request to leave school and manage the farm my parents would not listen. "Get an education, my boy," father would say, "and by all means

leave farming alone, or you'll be poor all your life." So I was persuaded to continue to school, though I did not care for it at all, though I was considered very clever (I don't mean this in boasting). However, I must have had some brains, for shortly before I was nineteen I returned from the Provincial Normal School, where I had passed the examinations with "flying colors," now holding a license of first-class. I was rather elated over my success, but the prospect of teaching was not very agreeable to me. From the time I came home until I took my first school I assisted with haying. I took a school in the southern part of the Province at a good yearly salary, and that fall my father rented the farm, implements and stock, and moved into the city, where he engaged in other business. When I learned that strangers resided on the old homestead I loved so well, I was very homesick, and still more so eighteen months later when I went on a visit to the old home, where I found a good-for-nothing, shiftless fellow was renting it just for a place to live, and to get all possible out of the place with the least work or improvement. I saw at a glance that the machinery was never housed, and the cows and sheep and the horses (our horses), one a beautiful old horse nearly as old as myself, and the beautiful bay colt always my pet, now five years old, in very poor condition, the renter selling all the grain and good hay, feeding them only the poorest of fodder. I visited my parents in the city and notified them of conditions at the farm, and had the satisfaction of seeing father start for the old place determined to find a new renter. About this time I fell in love with a beautiful dark-eyed maiden, a pupil in my school, four years my junior, and a farmer's daughter. She returned my regard. The following vacation I again visited my parents, told them of my engagement, and that I was now determined to buy a farm, and asked them to sell me the old homestead. After vainly trying to dissuade me, they at last consented, and I was soon the owner of the old farm, at a very reasonable price. In October the renter's lease expired, and I took possession. The schools had re-opened, but as luck had it the district where I reside, and where I had attended school in my boyhood, could not get a teacher, so I offered my services for a small salary for the sake of being home, an offer they gladly accepted. My mother, who never cared for city life, came to keep house for me. I used to rise at five o'clock or earlier, milk my cows and do all necessary work before school; at noon I could just walk home, do the work, eat a hasty dinner, or more often finish eating as I hurried back to school. I tried to do a little plowing after school that fall, but could not accomplish much. My neighbors and old friends were delighted to have me back to take up farming among them and realized how hard I was working. One bright Saturday, the first of November, a welcome surprise was given me. Eighteen

men with their teams and plows came and before night a large scope of my long-neglected fields were turned over. By tea time the good wives or daughters came with baskets of provisions, and a regular feast was enjoyed. As the whole affair was a surprise, the women knew my mother would not be prepared to feed so many men. After tea a pleasant social party was enjoyed for a few hours. I taught the school until the spring following, then resigned, visited my lady love, married and returned home, beginning farming in real earnest. For the next ten years we had a struggle, markets were not half as good as they are now, and with the improvements I was determined to make in both farm and buildings, kept us poor. Father used to come to visit us and often he would say, "How you have wasted your opportunities; you were given a good education and could have been a lawyer or doctor by this time." However, that's many, many years ago and I think if father could see my farm to-day he would scarcely believe it to be the once barren, deserted one with the old, tumble-down buildings, that he left in disgust so many years ago. He would surely change his ideas. I shall not relate the improvements I have made during these years, but I hope in the near future to send a photograph of my buildings for "The Farmer's Advocate." However, I will add that I spared neither labor nor money to make them comfortable and up-to-date. I have also all necessary farm equipment and a large well-kept stock. Beside a young orchard just nicely bearing, I have the old orchard of father's time, and since pruning, spraying and cultivation, have been practised the yield of fruit is immense, and many of them as good and as valuable for shipment, if not more hardy than some of the newer varieties. I never for a moment regret the education I got in my younger days, for I believe it is essential in any vocation, farming included. My sons, who are farmers now, each attended an agricultural college a few years ago. In looking around me, I feel that my life is a success. Young men, yes, and young women too, train to regard farming as one of the highest callings on God's beautiful earth, and success will surely attend you.

New Brunswick.

OLD FARMER.

Farm Work.

By Peter McArthur.

The beautiful October weather has meant more to me this year than golden sunshine, gorgeously colored leaves, and hazy, lazy outdoor life. It was the finishing touch of about the most consistent piece of good luck I have ever enjoyed. Before we got the young apple trees planted and the ground in proper condition, it was almost too late to plant corn between the rows. But we thought we might have fodder anyway, and on the tenth of June I commenced to plant. It must have been at least the fifteenth before the whole eight acres was planted. During the summer the young trees and the corn were kept well cultivated and hoed, and by August there was such a fine showing of corn that it seemed altogether too bad to think that it might not ripen. In September it was still green when forehanded people were beginning to cut corn they had put in early in May. When September frosts came, because the land was high and well drained, or for some other reason, our field escaped with only an occasional touch on the leaves in a couple of low places. Then the fine weather began, and it ripened perfectly. While it is by no means a bumper crop it is still very good, and seems especially good when we would have been satisfied with much less. Even the pumpkins that were planted in the last week in June are ripening, and the cows are living high. A few days more of this weather and we shall have enough ripe pumpkins to last them till Christmas. Cutting the corn, however, was still the same old job. Because of the little trees it was impossible to have it cut with the machine, and we went at it with hoes. Some of you may remember that a couple of years ago I made grievous lamentations about some corn I had to cut. This year I did not mind the job—very much. Now that the whole eight acres are cut and shocked, it is a real pleasure to fill my pipe and sit in the hammock and look at it. Of course there is the husking to come, but I am hopeful that I shall get out of it. There is a gang of Indians husking in the neighborhood, and every day or two I go and hire them again to husk that corn. I am told that if I hire them often enough I may get them to do at least part of it. Before leaving the subject I may as well give the public

the advantage of a little trick in handling corn that is new to this neighborhood. A neighbor, for whom the Indians are husking, was hauling home the ears, and having the usual trouble getting started at shoveling the corn into the crib. The only way he could do it was to pick out a few bushels by hand until he reached the bottom of the box. After he had taken in a couple of loads in this way, one of the Indians went and got a wide board about four feet long. He rested one end on the bottom of the box and the other on the top of the tail board. "Leave that there," he said, "when you are pouring in your corn, and after you have your load on, you can begin with your shovel on top of it. You will find that you can work just as easily as if you were starting at the bottom of the box." My neighbor assured me that it works like a charm, and I intend to try it when we come to the job of hauling in.

* * * * *

Now that the corn is cut, the apple and cherry trees are making a fine showing. Most of the apple trees put out a strong new growth that should give me a chance to prune them for good shapely heads next spring. Of the cherry trees only forty out of the hundred lived, but they were in such a state when I got them it is a surprise that any survived. However, the nursery did not charge for the trees that did not grow, so I am only out the labor of planting. As might be expected in those troublous times, I found a new pest on the apple trees. Some of the trunks and little branches were white with a kind of insect that I have never seen except in the woods, and I have not seen them in the woods for many years. I suspect that the creatures are a kind of aphid. They used to be plentiful on beech trees, where they clustered in most evil and leprous-looking masses. On their backs they have a white cottony down. I remember that as a boy I used to be afraid of them, because I had been told that if they got on my clothes they would eat holes in them. I do not know what these insects are or whether they are particularly harmful, but I never before saw them on orchard trees. The leaves on the trees infested with them have turned a blackish-purple, and they look anything but healthy. As the insects are now falling off I do not suppose it will be necessary to do anything about them this fall, and probably spraying with lime sulphur next spring will put them out of business. I find that quite a number of the trees have been badly infested with green aphids, and on some of them the little creatures are still crawling around. I feel somewhat bothered about this, because they were plentiful in the old orchard in the spring, and two sprayings of kerosene and soap did not seem to affect them much. As soon as the fall work is over I shall begin to pester the scientists about these matters, so that I shall be ready for them next spring.

* * * * *

Apple picking is now in full swing, and I guess swing is about the right word to use. To get some of the apples I have to swing out on the ends of the limbs in a way that makes me thankful for a certain surefootedness inherited from ancestors who used to climb the cliffs of Scotland for the eggs of Solan geese. Somehow the finest apples seem to grow on the ends of the longest and slimmest branches. While at this work I learned that the best thing to wear on the feet is shoes with the stiffest possible soles. On the first day I wore light, thin-soled shoes, and that night I think I had a pretty clear idea of what enemies of the Turkish Sultan feel like after they have been bastinadoed. When standing on the ladder or on the limbs my whole weight rested on one spot, and my feet were so sore that I could hardly bear to touch them.

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The apples this year are gloriously colored, doubtless owing to the fine sunny weather we have been having during the past few weeks. The Baldwins in particular look very beautiful from a short distance. The dark red apples among the green leaves make a picture to delight an artist, but, alas, and alack! when we go to pick them we find that altogether too many of them are scabby and defective. Still, they are good apples, and I do not think that there will be any difficulty in disposing of them as thirds. Speaking of selling apples reminds me that since writing my last letter I have received two more requests for carload lots. Surely those who want to buy will learn from this year's experience that they must make up their minds early in the season if they wish to buy from associations. Even the orchards outside of the associations are now sold. I am keeping all the letters I am getting, and next year if we have a good crop it is my intention to stir up these people along in July and try to get them to talk business at the proper time.

Cider Making and Cider Vinegar

What kind of apples are most suitable for cider, how can it be kept sweet and how made into vinegar?
ENQUIRER.

There is a general opinion that any kind of apples will do for cider and many sell all the good apples and use only a very inferior grade for cider—small, green, wormy, half-rotten apples, anything which contains juice which may be squeezed out is called a cider apple. A really good cider apple should be comparatively firm and in all cases sound and should contain a rich juice with a slightly acid flavor. Some take the precaution to cut each apple through with a knife to make sure that no worms are incorporated with the finished product. Any codling larvae thus found are cut out with their cavities and discarded, the good remaining portion being used for cider. It is a good plan to leave the cider-making as late as possible, as the product keeps much better when made after cold weather is here to stay.

Cider should stand in open casks or barrels for a half a day or more after making to allow the scum to rise on it. This is dipped or skimmed off. There is always a large amount of settlings and care must be taken in dipping not to disturb this material. Cider should be stored in a cool cellar or storage, and the barrels or casks should be tightly corked or bunged.

Many use different materials to keep cider sweet. We have seen it kept for several years by heating it after first allowing it to settle and after skimming off all scum place it in ordinary fruit jars, or tightly corked bottles. It must be put in the jars hot and the jars or bottles should be full. Put it away in the cellar where it is dark and the temperature is comparatively low and uniform. It will soon ferment after being opened in warm weather and is best for drinking as soon as the cork is removed from the bottle. Some use salicylic acid and we have heard of grated horse-radish, about a pint to a barrel, keeping the cider in very good condition. Mustard seed, one pint to a barrel, is also recommended by some, but of all the methods none seems more successful than heating up to boiling point, skimming and bottling immediately.

Many make cider in order to have a supply of vinegar, and it is possible to get very good vinegar from cider rightly handled. A few years ago Prof. Van Slyke, of Cornell Experiment Station, outlined a method from which we give a few details. He cautioned those attempting to make cider vinegar to use nothing but sound, ripe, clean apples, preferably those which did not require to be washed.

The fruit should possess a sugar content of not less than 7.5 to 8.5 per cent. If convenient, it is well to store the fresh-pressed apple juice in a large covered receptacle, and allow it to stand a few days before putting it into barrels. This allows considerable solid matter, held in suspension, to settle. The casks or barrels should be well cleaned, thoroughly treated with live steam or boiling water, and should not be over two-thirds or three-fourths filled with the cider. The bungs should be left out until the vinegar is made, but a loose plug of cotton may be inserted to decrease evaporation and keep out dirt and flies. When the freshly-pressed apple juice is placed in ordinary cellars, where the temperature does not go below 44 or 50 degrees F. during the winter, the alcoholic fermentation is complete in about six months, though 80 to 90 per cent. of the alcohol is formed in half that time, or less. By having the fermentation take place at 65 to 75 degrees F., the time can be considerably reduced. A temperature much above 70 degrees is not desirable. By the addition of yeast to the fresh apple juice (say one ordinary compressed yeast cake for five gallons apple juice), the fermentation can be completed in three months, or less, especially at a temperature of 65 to 75 degrees. The yeast should be stirred in a cup of water, and, after complete disintegration, added to the apple juice. Vinegar or "mother" should never be added before the alcoholic fermentation has taken place.

When the alcoholic fermentation is completed, it is well to draw off the clear portion of liquid, rinse out the cask, replace the clear liquid, filling the barrel one-half full, and then adding one-fourth volume of old vinegar. On the surface of this is carefully placed some "mother," prepared as follows: Expose in a shallow, uncovered crock or wooden pail a mixture of one-half old vinegar and one-half hard cider, at 80 degrees F. In three or four days the surface should be covered with a gelatinous coating, which is "mother" of vinegar. A little of this, carefully removed with a wooden spoon or flat stick, should be laid gently on the surface of the mixture of cider and vinegar, prepared as described above. Do not stir it in, because the acetic ferment grows only on the surface, where it can have an abundant air supply. In three or four days the coating should spread itself over the entire surface. The coating should not be broken or disturbed as long as the

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acetic fermentation is going along satisfactorily.

The acetic fermentation occupies from three to eighteen months, or more, according to the conditions under which the fermentation is carried on. When the apple juice is stored in cool cellars, and left there until it becomes vinegar of legal standard, it requires from 21 to 24 months, or even more. When the alcoholic fermentation is allowed to take place in a cool cellar, and the casks then removed to a warmer place, the time of vinegar formation may be reduced from that given above to fifteen or eighteen months. Where the alcoholic fermentation is hastened by the use of yeast, and the acetic fermentation favored by the proper temperature and addition of vinegar "starter," it is possible to produce good, merchantable vinegar in casks in six to twelve months.

When the acetic fermentation has gone far enough to produce 4.5 to 5 per cent. of acetic acid, then the barrels should be made as full as possible with vinegar, and tightly corked, in order to prevent destructive fermentation of acetic acid, and consequent deterioration of the vinegar.

A word of caution is in order as to keeping cider in tins. When it is allowed to come in contact with either iron or tin, the acids, particularly tannic acid, react on the metal, forming dark-colored substances. It should be boiled, therefore, in granite or copper dishes, tin giving it a very bad flavor.

Liming the Soil.

The practice of liming soils is as old as any operation in primitive or modern agriculture, yet the fundamental principles underlying its use are not known to many, neither are the conditions of soil easily recognized where lime would be a direct advantage.

M. A. Bachtell, of the Ohio State University, has compiled some practical information in a bulletin called "Liming the Soil," and it should be read by all who are ambitious to increase their yield and maintain withal the fertility of the soil and good mechanical condition.

Lime itself is not a direct fertilizer. It does not, of itself, nourish the plant, but it severs the bonds and manacles which hold genuine plant food a prisoner in the soil; it renders them available to the plant, increases the yield and takes the credit. Potash, phosphoric acid and nitrogen are the three ingredients that constitute the important part of the diet of plants. They sometimes are not in the soil, sometimes they are combined with other minerals and cannot be utilized. In the former case lime would not show results at all, in the latter case a chemical reaction would convert the compounds into food acceptable to the plant.

Clay soils are often rich in potash, but too often they lose their lime supply, and the potash remains unassailable by the small rootlets.

The nitrogen, so necessary in the vigorous growth of foliage, is housed in organic matter, such as manure, stems or leaves of plants. In order that it may join with some substance to become a nitrate, a form of plant food most acceptable to vegetation, little underground helpers called bacteria work day and night, causing this transformation to take place. All they ask in return for their efforts is a neutral or alkaline soil, some heat, a little air and moisture. They will not work in a sour soil. This often accounts for black soils, bearing every resemblance to fertility, being quite indifferent to crop production. It is seldom the condition in limestone soils, but it often occurs in muck lands or clay belts.

Too much lime will ultimately so deplete the land that little food will be left for subsequent crops. It attacks the organic matter with such vengeance and is so enthusiastic over the liberation of other foods that the crops flourish luxuriantly for a time, but a few years will see them suffer from a depleted soil unless green manures have been plowed down or barn-yard manure liberally added. The Scotch used to say "Lime enriches the father and impoverishes the son." They learned the truth of the saying only too well, because in their eagerness for heavy crops, lack of judicious rotations and failure to return some recompense to the soil for crops received, they saw the land weaken, crops diminish and fertility go.

Many ways and means of diagnosing the soil are prescribed. Litmus paper will turn from blue to red in a sour soil, but this test is more applicable in the laboratory. Mosses and sorrel will sometimes indicate a lack of lime, but to demonstrate in a practical way the husbandman can apply lime to a small area and leave a similar area unlimed. Grow clover or potatoes or grain on both plots, and if lime is beneficial it will show beyond a doubt. Lime is available in many forms, and one's location and local conditions would largely influence him in his choice. Quick lime or burnt lime is procurable almost everywhere at nominal figures and is conveniently applied. The slaked lime is good as well, but, in a slight breeze, the neighbors get a large percentage of the benefit. Ground

limestone and hydrated lime are now being manufactured, but limestone is only a little more than half as strong, and hydrated lime three-quarters as strong in the lime element as the burnt lime or quick lime. This characteristic of the two latter forms is not unfavorable; it is cheaper and more can be applied.

The most convenient way of applying the quick lime, we have ever found, is to put it in small piles in the field, and throw a little dirt up against it. The air, dew and rain will slake it in a few days, and then it can be spread with a spade or shovel, allowing a little soil to mingle with each shovelful to prevent it blowing away.

Fall or spring are convenient times for application. Before the spring working of the land, prior to the hoe crop in the rotation, is preferable, but another season in the crop rotation is alright and so is early fall for putting on the lime. Spreaders for applying lime are made, but every farmer has some home-made device or ingenuity enough to apply his lime in the experimental stages, at least, without additional expense.

It is generally recommended that one ton of quick lime or two tons of ground limestone be applied per acre where the soil is very acid in character. There are those, however, who favor only half that quantity, and repeat it every four or five years. Too generous a quantity of lime might liberate more plant food than was necessary for the immediate use of the crop, and, as the nitrates are soluble, they would leach from the soil and be wasted entirely.

Bear in mind that lime is a medicine, not a food. Your soil may require it and it may not. If your land has suffered from lack of judicious rotations; if it has been improperly or insufficiently manured and fertilized; if it requires another system of cultivation, then lime will only cause it to rally for a short period, like a sick person before the fatal moment. Ascertain by experiment if the land is sour, or, in case of clay soils, close in texture, under these conditions lime will repay the user.

March, one cow till grass, and had one-quarter ton of timothy left. He is a good feeder. This drain was not near any trees or anything but the alfalfa.

Huron Co., Ont.

R. C. MCGOWAN.

Peat for Organic Manure.

A cheap method of obtaining organic artificial manure has been discovered in England. It has been found that by the treatment of ordinary moss litter with bacteria, an organic manure is formed, a ton of which, it is claimed, is worth more than 80 tons of ordinary farm manure. It has been found that the insoluble humic acid present in large quantities in peat can be readily converted into soluble humate by the action of certain aerobic bacteria.

Peat, after treatment with these organisms, is sterilized, and then inoculated with a culture of nitrogen-fixing organisms. This prepared peat can then be used for soil inoculation, either by direct application to the soil, or preparing from it a culture solution.

Experiments made demonstrate the remarkable effect which this peat has on plant growth. A plot of radishes watered once with an extract of prepared peat gave an increase of 54 per cent. over another untreated plot. It has been tried in competition with farmyard manure, and it gave the following increases: Lettuce, 27 per cent.; turnips, 23 per cent., and potatoes, 41 per cent. Ordinary organic manure is getting scarcer in England, owing to the substitution of horses by motor-drawn vehicles, and peat, it was stated, may become a marketable substitute.

THE DAIRY.

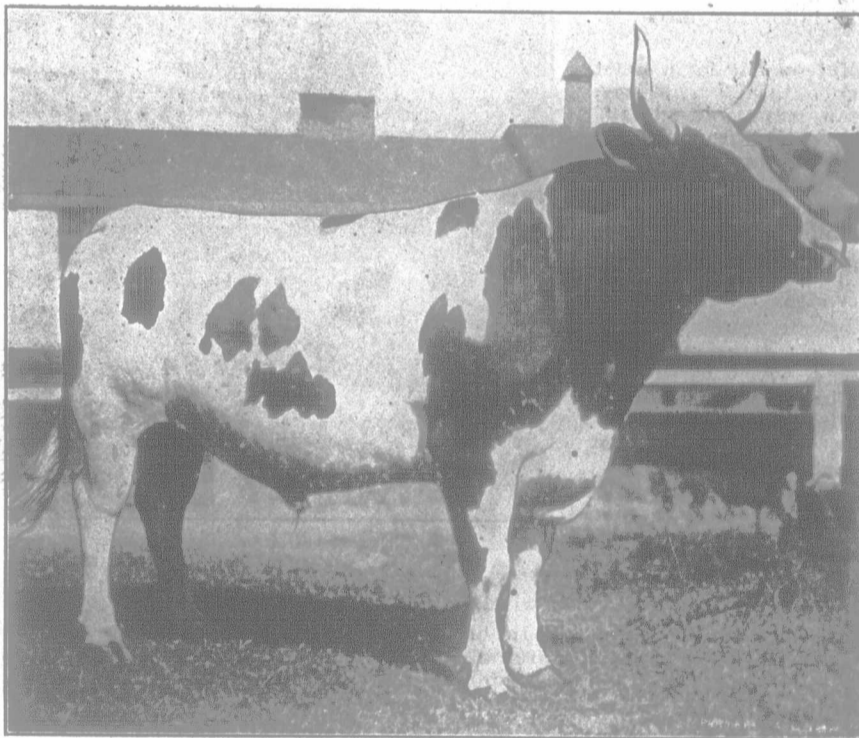
Farmers and the Milk Question.

Editor "The Farmer's Advocate":

The vexing milk question seems to again be disturbing the harmony of the retail milk dealers in Toronto. The president of the Retail Milk Dealers' Association made a statement recently to the effect that he could obtain all the milk that he desired at \$1.60 per eight-gallon can. If the Retail Milk Dealers' Association is able to do so, surely this is scarcely leaving a fair margin of profit for the farmer or producer, who has hard and long hours for the mere pittance let him from his sale of milk at \$1.60 per eight-gallon can after paying expenses, such as cost of cows, hay, ensilage, roots, meal, stabling, labor and cartage to the retail dealers' depot. Taking the president at his own word, the retail dealer gets \$3.20 per eight-gallon can. Certainly he has his own expenses to meet out of this, but they cannot be as heavy as those which the farmer or producer has to meet.

It therefore behooves the farmer to protect his interests. Now, how is he to do this? Why cannot the farmers of Ontario, not only the dairy farmers but all the farmers, get together to meet this situation? It is a well-known fact that all the retailers of milk are combined against the farmers to beat them down in price, and they can only be met and argued with successfully by the farmers co-operating as a strong body with common cause of complaint, instead of allowing one or two of the more energetic to fight out a losing battle from the commencement for the rest.

In England a few years ago, a farmers' protection society was inaugurated which has now reached enormous proportions. For a certain subscription yearly the farmer is allowed to participate in the benefits to be obtained by belonging to such a society. The society is governed by a committee chosen annually from among the members, one man from each district, or branch society, as the case may be. Each branch society manages affairs in its own particular district, but anything of more than ordinary importance, such as the question under discussion, is referred to the head committee, which is thus in a position to deal with the purchaser. Besides taking up matters of this kind, this society also undertakes to protect the interests of its farmer members at all times, and employs a barrister



Lessnessock Forest King Imp.

Champion Ayrshire bull, Western Fair, London, 1913. Exhibited by A. S. Turner & Sons, Ryckman's Corners, Ont.

Alfalfa and Tile Drains.

Editor of "The Farmer's Advocate":

In reply to the question "will alfalfa roots block tile drains?" I may report a little experience. We have been growing alfalfa for some years on one field that is tile-drained; cut four years yielding heavy crops, and have noticed no harm to the drains yet. The soil is clay loam. Drains are three feet deep, four rods apart, with a good fall. I chanced to meet the man recently who dug those drains and said "say that is a fine field of alfalfa your brother has up there, but do you know I am feared for the drains." I have a lot seeded with alfalfa for three years. Last spring my neighbor complained that his cellar drain was blocked; as it passed across this lot they thought it must be the alfalfa roots, so they dug it up and found it more or less blocked all the way across, some places completely filled. Previous to seeding, this lot was cropped with liberal application of manure each year, eight to twelve loads to the three-quarter-acre. The soil is a free loam, the drain is about two and a half feet deep. It was a good catch and made rapid growth from the first, but still the owner says that he would not be without it, for on this three-quarter acre of alfalfa and one-quarter acre of timothy he fed one horse and colt, two milch cows until

ter, who receives a certain retainer in consideration of his acting in any cases for members where legal aid is necessary. Now, would not something of this kind be beneficial to the farming community of Ontario, and especially would it not have been of great use in an instance like the present—Dairyman versus Retail Milk Dealers?

As far as one can see, with perhaps a few exceptions, there are no great fortunes being made in Ontario out of farming. How many farmers find after marketing their produce that if they had only waited a week or two longer they could have got as much again for their sales, or perhaps vice versa, they should have sold out earlier? How can farmers individually fight against the prices offered by purchasers for their milk or beef or any other farm produce when these middlemen are united in their intention of pulling the farmers' price down? Is it possible, for them to do so? Have they not, in a sense, to take what the middlemen care to offer? There is one answer to all this, the farmer in all cases is entirely in the hands of the purchaser of his commodities, who very often as a member of a certain organization has him in the palm of his hand, as in the case of the recent milk situation. How much better the farmers would be if they were united in one society and that society took hold of the matter, and if unable to come to an amicable settlement, shipped the milk to other cities, where the chance of the farmer getting a fair price for it was more favorable.

York Co., Ont.

WM. HOGLE.

Beginning the Dairy Business.

Editor "The Farmer's Advocate":

All successful farms are individual in their systems of management, usually because the men who have wrought success out of them have been men of enthusiasm, brains, and hard work with an eye clear to see every opening. In almost every instance chance governed the choice of location, and the kind of farming that they followed. Yet they had learned to utilize the full possibilities of their farms, and made their work go hand in hand with their laborious days of toll.

Every man, to be successful on the farm must have an idea that will work out under his surrounding conditions. "See a want and fill it" is the maxim of commerce. A farmer can ill afford to scatter his forces. He must know his opportunity when it comes to him. He must follow it until he has supplied the wants it furnishes. This is the solution of why some men are successful milk producers, and others are noted growers of swine; why some go into the horse industry, and others into the raising of beef-producing cattle.

The old adage, "Be sure you're right, then go ahead" is directly applicable to the case of the man who is going to start into dairying on a more or less extensive scale. To get a good start means that success is at least well assured in almost any undertaking, and I shall completely ignore another old saw which suggests anything different about endings under opposite conditions.

In the first place, starting a dairy should be well considered before laying definite plans. The project should be talked over in the family. The wife ought to have a chance to express her opinion, and her ideas may usually be depended on to be not far out of the way on any question of importance. If there are growing boys in the family talk it over with them also, for their assistance will be needed in the milking and the care of the cows. If there are no boys is there other help which can be relied upon by hiring, or will the owner have to do most of the work himself?

Is there a shipping station conveniently located, or is there a good market other ways, or is there a cheese factory or creamery within a reasonable distance, so that long hauls may be avoided? Are the roads reasonably good between the farm and the place where the milk will have to be hauled? In spring and fall when frosts make the roads bad, this means much to the man who must travel them every day rain or shine. If there are others on the route, and they combine to hire a man to do the hauling or take turns in doing it themselves this means heavier loads to handle, all of which works into the convenience or inconvenience of shipping milk.

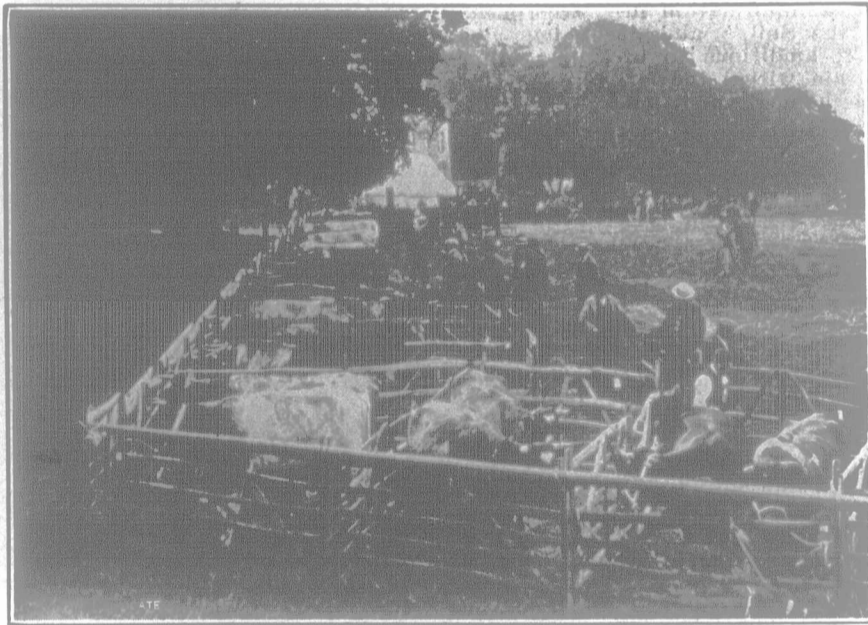
These things having been favorably passed upon, let us see what suggestions will help the man who is just starting in the dairy industry. He must not forget that upon himself individually rests the responsibility to a very large extent, and his must be the brain to run the business end of it. Moreover he must be a man with a keen interest in cows, a student of cow nature, and something of a scientist to boot, for the day of scientific farming is here and will not, cannot, be ignored. To attain success he must know or be willing to learn how to formulate a balanced ration. He must be familiar with such subjects as deal with carbohydrates and proteid, and know where to find them in the various foods

grown upon the farm, as well as purchased, and how best to combine them as a ration for his animals.

Yet to the man of ordinary intelligence there is nothing of a scientific nature connected with the undertaking that need deter him from entering upon it. It will sharpen his wits, it will get him to thinking as will no other feature of agriculture with which I am familiar, and that is exactly what farmers need to do.

The next step is to decide upon the breed of cattle to keep. If he is a poor man, buying high-priced stock may be out of the question, although if it can be in any way managed, the purchase of one or two such animals will prove a good investment. A good way is to buy a young calf or two of the breed selected. These quickly grow to maturity and money also. A chance to get a calf cheaply may sometimes be found through people in town who keep but one cow for family use. Another way is to buy an aged cow of good breeding, which can usually be gotten cheaply. This plan is not always satisfactory, however, as such are apt to be shy breeders. Having tried both plans, I would recommend the purchase of well-bred heifer calves which may be had at moderate prices, considering their value.

The matter of breed is one worthy of much careful thought. What breed to select depends something upon what disposal is to be made of the milk, also upon the personal preference of the individual. If milk is to be sent to a condensary, the Holstein breed is all right, as these cows give a large volume of milk. For the production of butter-fat or where cream is to be sold, there is no question of the supremacy of the Jersey or the Guernsey. The man who decides upon either of these breeds with which to go into the dairy business will make no mistake if that is what he wants.



At An English Fair.

Dairy cattle yarded in open pens.

In breeding the cows the best pure-bred sire obtainable is, of course, the only kind to use. He should be retained in the herd as long as possible. Frequent changes are not to be recommended. Worst of all is the practice of using a Jersey one year, a Holstein the next, with a Shorthorn or Red Poll the third. And one should not try his hand at improving his herd by crossbreeding. Violent crosses are very undesirable. There are enough good animals to be had in any breed, and nothing will be gained by mixing them. It may be thought that by securing a Jersey-Shorthorn cross or a Jersey-Holstein that the result would be a larger yield of rich milk, but this is not the case. The breed selected is the one to stick to, and this should, in every case, be a pronounced, acknowledged dairy breed. It is very important that the cows be tested from the very beginning. The ribbon cows are thus detected and the best producers determined. I would keep no cow that does not show better than a four per cent. test in a butter or cream dairy.

Johnson Co., Ill.

W. H. UNDERWOOD.

Two patrons of a noted Ontario creamery, both members of a cow-testing association, at the end of last year had these records to study. A., milking eight cows, sent a total of only 1,360 pounds of fat; B., with only five cows, sent 1,777 pounds. Dairyman in other sections are invited to consider what this means. A. had three cows more than B. to milk and feed all year, but received a smaller income than B. by quite ninety dollars. Nor is that all, for the three extra cows consumed feed worth at least ninety dollars more, making another ninety dollars that he was "out." But one step further: A. worked hard milking those three extra cows,

spending probably 200 hours more than B. on a thankless and profitless job. The cows were worth something as an investment, but it is doubtful if they returned any interest on it; some allowance should be made for depreciation, even of this wonderfully inefficient cow "plant"; then stable accommodation had to be provided for them; and the general care of the herd called for some expenditure of thought and skill on the part of A. as general manager of his establishment. The deductions are plain; however comforting a "guess" may be as to whether a cow, or a herd, "pays," there is nothing to take the place of actual dairy records. Further, whatever the production of a herd may be, comparisons with other annual records should be made in order to see if improvement is possible. C. F. W.

HORTICULTURE.

Ontario First.

Ontario has won the diploma for best Provincial exhibit of fruit at the Canada Land and Apple Show held recently in Winnipeg. Readers will remember that Ontario invaded the Cleveland show and carried off the sweepstakes against all other States and Provinces. Now, like Alexander, she will sit down and weep because she has no other lands to conquer and no other fields to win.

Rash Courage.

We have heard it intimated that it was not as profitable to sell through an association as it is through a local buyer because the executive of the association are too cowardly to pack scabby and wormy apples in their No. 1's and No. 2's. No grosser mistake comes to our attention than this. The executive of the association have in mind the future of their members. The local buyer says, as we have heard him say, "Let every year stand on its own bottom," not altogether a very intelligent saying, but it expresses exactly his attitude regarding the apple market. A lenient prosecution or a letter from the fruit inspector does not affect the buyer very materially, if he can, by unlawful grading, dispose of a large quantity of defective apples. Ontario has almost lost her Western market to British Columbia and the United States through this very injudicious practice on the part of apple packers. Now while Ontario is entrenching herself in this lucrative market in the West, it would be very unwise in a courageous moment to pour a quantity of inferior apples into the barrel and lose ultimately the market which honest packers are working so hard to establish. Most buyers are honest and conscientious in their dealings, but there are a few of the old school who deserve the most scathing rebukes that are cast upon them.

Stick by the association. Your own intuition will tell you that "Honesty is the best policy," and when the different grades are better understood and the market and consumer have confidence in your pack you will be glad that you stood by the association through disturbed and troubled times.

Stick By the Standard.

Apple-packers should not think because fruit, generally speaking, is this year somewhat inferior in quality, that a No. 1 or No. 2 barrel may contain more scabby or wormy apples than it could in previous years. The quality of these grades is established by law and applies one year after another. Many people amongst the consumers are willing to pay the price for a good barrel of apples, and it is abusing their confidence when we put inferior apples into a No. 1 or No. 2 barrel and brand it up to the standard. These grades have been established in order that a buyer may understand what he is getting. The future of the apple market depends upon the packer's honesty in filling the barrels, and it would be unwise under these abnormal conditions to destroy the name and reputations which apple-growers have been working so hard to establish.

Better Baskets Imperative.

Under the heading of "Bad Baskets," a correspondent gives voice to a condition that has existed in divers districts this fall. Baskets have been hurriedly manufactured and the result has been bad baskets. In order to pack a large quantity of baskets in a car the veneer must be strong enough to sustain the weight of a quantity piled above them. In many cases, they have not been able to do it this year, owing to carelessness and haste in their construction. It will be detrimental to the shipping end of peach-growing, as well as other small fruits, if baskets will not unfold from cars satisfactorily. The selling point of the basket, as we have it now, is the convenience with which it may be conveyed from the store or dealer's stand to the consumer's home. This is the only point they have superior to other forms of package which would be much better containers for small fruits. It was not an uncommon thing this fall to see covers warp up when the hand was released from the top of the basket. The ends of the covers were so weak and sides so frail that they would not hold the sides of the baskets apart as they should do. Either double ends or much stronger ends for the covers would be far more acceptable to the growers. Six-quart baskets landed on the Winnipeg market in very good condition, because the package was compact enough to carry the layers piled above them. The matter of buying with or without handles rests with the user. A reduction is usually made when baskets are sold "unhandled," but the character of the basket itself will stand much comment. Better quality of veneer and more careful workmanship are prime requisites if the basket is to remain the standard package for small fruits in Ontario.

Packing Number Threes.

What effect the packing of thirds will have upon the market is somewhat problematical. In previous years a quantity of No. 3's have spoiled the market for good No. 1's and 2's. It might be possible that an indiscriminate pack of thirds would have a like result this year, but it appears that, with so many good Spies, Kings, Baldwins and Russets on the trees with only a scab or some slight defect to debar them from the No. 1 or No. 2 barrel, that some other pack could be devised for them. There is without doubt a place for them on the market, but the trouble with packing thirds is, that there is no standard established by law and one grower will not put up the good quality that another will. So when the consumer purchases a barrel of No. 3's he is not sure whether he is getting a good barrel of apples, almost tree run, with a few scabs and wormy apples, or whether he is getting windfalls and such inferior apples that they are not even fit for cooking. If thirds are packed it would be very wise, indeed, to pack so that the consumer would not be sorry that he had taken a chance on them.

Bad Baskets.

Editor "The Farmer's Advocate": Under the heading, "Damage to Baskets," I read in your issue of 9th inst. an article showing that a large quantity of fruit baskets had arrived in Montreal in a damaged state, and the writer suggests it is due to the packing in cars. I think it is much more likely due to the inferior make of basket the fruit growers had to put up with from the basket factories. There was a very large demand for baskets this year, owing to the heavy peach crop and the canning factories not taking peaches. The basket factories had to make baskets as fast as possible, consequently they turned out a very inferior article, made of green wood, and in many cases the growers had to put the handles on themselves. I have seen baskets literally fall to pieces in one's hand before they ever got into the car.
Lincoln Co., Ont. M. TEESDALE.

Fancy Fixings.

A pulp paper placed next to the head of the barrel when the apples are being faced in and another on the tail end before the head is placed on would add considerably to the attractiveness of the fruit when opened up. One could go further and place a lace-paper head on the face of the barrel just inside the pulp paper. When the head comes out and the pulp paper comes off the apples are found encircled around by a nice lace paper. They are comparatively cheap when you consider the improvement in your package, and in a time when competition is strong they will repay you many times.

Repair The Raspberries.

Past observations will show you that the raspberry crop next summer will be produced on the canes that grew during the season which has just passed. In order to keep the patch clean and free from disease and insects it is wise to have the old canes taken out and burned. This should be done shortly after the crop is harvested, for in that way the diseases which have become established on the old canes do not have the same chance to spread to the new canes that will be standing next year. Anthracnose, a disease which does considerable injury to raspberry canes, must be controlled largely in this way. The young canes will require some cutting back, but it is well to leave them until the winter's cold has done its worst, and you will be able to see what winter injury has occurred, and what lengths of the canes will have to be cut off. The work of the cane-borer, an insect which makes two girdles near the end of the cane and deposits its egg between the two, must be watched for when the clipping is being done. Fall plowing is not advisable in the raspberry patch. Late cultivation forces new growth which will suffer during the winter months. The cultivation should be most intense during the spring and summer weeks and one should depend upon that time to keep down the weeds and conserve moisture.

At the annual meeting of the New York Fruit Growers' Association, to be held in Convention Hall, Rochester, N. Y., January 7, 8, 9, 1914, some excellent prizes are offered for fruit exhibits, including a grand sweepstakes prize open to the world. This prize is \$50.00 for the best three boxes of apples. Canadian growers should go after this premium. Cold storage will be furnished. E. C. Gillett, Penn Yan, N. Y., is secretary.

Co-operative Egg Marketing in Dundas County.

Editor "The Farmer's Advocate":

Dundas County was one of the first in the Province of Ontario to accept the improved method of marketing eggs, namely, by means of egg circles, or selling on a co-operative basis. In 1911 this movement was started by the then district representative, A. D. Campbell, assisted by local poultrymen, among whom were R. H. Ashton, Samuel Smith, W. G. Robertson, Edwin Thompson, Charles Hansom, John W. Marcellus and others, who were alive to the need of better care of eggs, and an improved method of marketing the products of the poultry industry, which about this time was beginning to interest the farmers in the county. The result of the effort was the forming of an association, to be known as "The Dundas Co-operative Egg and Poultry Association," with headquarters at Morrisburg.

The following is a partial outline of the constitution under which the Association works. The objects of the Association are to develop the poultry industry; to improve breeds and encourage better methods; to distribute information on egg production and the marketing of eggs and poultry; to promote lectures and practical instruction; and generally to meet the growing demand for eggs and poultry, especially in winter. The officers consist of a President, Vice-President, Secretary-Treasurer, a Central Executive Committee with Branches and Candling Stations. Members subscribe 25 cents per annum to the Executive Committee or any of its branches. The Central Executive Committee is composed of the President, Vice-President and Secretary-Treasurer of the Association, and the President, Vice-President and Secretary-Treasurer of the different Branches. These are vested with the control of the work of the Association. The Executive Committee of each Branch consists of a President, Vice-President, Secretary-Treasurer and a Committee of three, all elected annually, and each Branch is required to pay an application fee of ten cents per member per annum to the Association. Each Branch has the power to transact its own business in the marketing of eggs and such business as does not conflict with that of the Association. Branches are established where sufficient support is warranted. The Association meets annually in February. All Branches are named and operated to further a systematic collection of eggs, to secure the best qualities of table poultry, and to obtain the best possible for both classes of produce. Any member found guilty of unfair practices may be expelled by a confirmed two-thirds majority of the Committee. Members deliver all eggs produced by their hens with the exception of those needed for home consumption, those accidentally found, small, or ill-shaped eggs. Eggs must be perfectly clean and not over seven days old. The current local price is paid to producers when marketing, and the margin between this and the sale price is held, and, after payment of expenses, is divided among the members monthly in accordance with the quantity and the quality of the eggs supplied. All members are supplied with a rubber stamp bearing their registered number so that they may mark their eggs, the cost price being paid by the member. Arrangements are made with those members willing to keep pens of pure-bred birds and first crosses to supply eggs for hatching or stock birds at reasonable prices; and arrangements are made by the central or parent association with large manufacturers of poultry foods and appliances to supply all members at a low rate.

During the first year of operation four circles were organized, and the eggs marketed through the Association amounted to \$3,000.00. The second year six circles marketed over \$8,000.00, and in the present year there are twelve circles which will market a total of about \$30,000.00 worth of eggs.

It is not difficult to see the benefits derived from an organization of this kind, as evidenced by its growth from year to year. What was once considered a necessary side line for household use is now looked upon as a weekly revenue of the farm. And the farmers are building larger and better poultry houses, greater care is taken in producing a good, clean, fresh egg, and, as a result, more money is paid for the eggs. The circles ship direct to Montreal produce merchants and sell on a quality basis, taking Montreal grading, which averaged about 85 per cent.



Well Protected.

POULTRY.

The Canadian Hen to the Front.

Readers of "The Farmer's Advocate" will be interested to learn that Canada will be represented at the third National Egg-Laying Contest, to be held under State supervision at the Missouri Poultry Experiment Station, Mountain Grove, Mo. The splendid record made by Canadian White Wyandottes in the first International Egg-Laying Contest, held at Storrs College, Conn., where they beat 35 pens of Leghorns, and all Rocks, Rhode Island Reds, Orpingtons and other breeds entered, has caused the Missouri State Board, to send an invitation to the McLeod Bros., Beulah Farm, Stoney Creek, Ont., for one pen of their "Snow-White" Wyandottes to compete with the world's best layers for one year, beginning December 1st, 1913, and ending November 30th, 1914. This invitation has been accepted and this contest is looked forward to as being most interesting, as Beulah Farm holds the pen record for White Wyandottes, with an average of 214 eggs per hen in one year, and also the high individual record by their "Snow-White Queen" of 247 eggs in one year. These totals taken from the official reports at Storrs College, Conn., show what an advance has been made as compared with the Government report, which states that the average hen only lays 80 eggs per year.

fresh eggs. Firms handling our eggs are all reliable.

In the year 1912 the members of the Association realized a profit of 12 per cent. above local store prices, which were higher than they would have been had our circles not been in existence. At the same time the quality of the eggs put on the market was of high standard; bad eggs were practically done away with, as in the whole year only 17 dozen bad eggs were shipped, and the year's business amounted to over \$8,000,000.

Egg circles as yet are only in their infancy, and, in the opinion of the writer, this method of marketing eggs is the best as yet brought forward for improving quality and increasing quantity, and if the producers of eggs all over Canada would adopt this method of marketing, a great national waste, which is considered to be about 17 per cent. of the eggs produced, would be saved, and as we are not producing enough eggs for home consumption it is very important that we should be anxious to do all in our power to build up the poultry industry.

Dundas Co., Ont.

JOHN MARCELLUS.

FARM BULLETIN.

Crop Estimates Lower.

A bulletin issued Oct. 13th by the Census and Statistics Office of the Department of Trade and Commerce gives a provisional estimate of the yield of the principal grain crops and also the average quality of these crops at harvest time.

During the month ended September 30 ideal weather for the ingathering of the grain crops prevailed all over Canada. In the greater part of Ontario and in the Western Provinces harvesting operations were well completed by the middle of September, and only in parts of Quebec and the Maritime Provinces, where the spring comes later, was harvesting carried on during the latter end of the month.

The estimates given a month ago are slightly greater than those now issued, which may be presumed to be based more or less on results of threshing. The final estimates, based on threshing results and calculated on corrected areas, will be issued as usual on December 15.

For spring wheat the estimate for the end of September is 188,468,000 bushels, as compared with 182,840,000 bushels last year. For fall wheat the estimate is 19,107,000 bushels as against 18,396,000 bushels last year and 18,481,000 bushels in the preliminary estimate this year. The total estimated wheat production this year is therefore 207,575,000 bushels as compared with 199,236,000 bushels last year, an increase of 8,339,000 bushels, or 4½ per cent. The yield per acre for all wheat is 21.15 bushels, as compared with 20.42 bushels last year. Oats show a total yield of 391,418,000 bushels and an average yield of 40.57 bushels, as compared with 361,733,000 bushels and an average yield of 39.25 bushels. Barley gives an estimated total yield of 44,348,000 bushels and an average of 31.00 bushels per acre, as compared with 41,011,000 bushels and an average of 31.10 bushels in 1912. For this year the total production of rye is 2,559,000 bushels, of peas 3,974,000 bushels, of buckwheat 7,600,000 bushels, of flax 14,912,000 bushels, of mixed grains 17,178,000 bushels, of corn for husking 14,086,000 bushels, of beans 989,500 bushels, as compared with a total yield last year for rye of 2,593,000 bushels, for peas of 3,773,500 bushels, for buckwheat of 10,193,000 bushels, for flax of 21,681,500 bushels, for mixed grains of 17,952,000 bushels, for corn for husking of 16,569,800 bushels, for beans of 1,040,800 bushels.

For the three Northwest Provinces the total yield of spring wheat is estimated at 183,852,000 bushels, of fall wheat at 5,264,000 bushels, of oats at 239,595,000 bushels, of barley at 27,904,000 bushels, of rye at 686,000 bushels, of flax at 14,808,000 bushels.

The average quality of these crops measured upon a per cent. basis of 100 as representing grain well headed, well filled, well saved and unaffected to any appreciable extent by frost, rust, smut, etc., is as follows: Spring wheat 89.17, oats 90.52, barley 88.25, rye 85.41, peas 81.71, beans 78.48, buckwheat 73.40, mixed grains 90.59, flax 82.68, corn for husking 75.16. Of these, wheat, oats, barley and rye are above the average quality for either of the last two years.

The potato and root crops continue to show good figures, as representing average condition during growth. The condition of potatoes is 83.59, turnips 82.62, mangolds 83.64, sugar beets 82.63.

ARCHIBALD BLUE.

Chief Officer.

Prince Edward Island Notes.

Editor "The Farmer's Advocate":

The weather the first two weeks in October was very warm for the time of year, the temperature averaging about 65. There has been considerable rainfall. Harvesting in the lower-lying sections was not yet completed by the middle of October. There was a lot of grain out and some yet to cut. The pastures are particularly good and the amount of milk received at the factories and creameries is larger than it ever was this time of year. The potato crop is turning out much better than was expected. In some sections the yields are very heavy. The starch factories are paying 35c. per 100 lbs. The market price for shipping is 30c. to 35c. a bushel.

The exhibitions are over, and were a very big success, all being favored with fine weather. A few local shows are yet to be held.

R. Robertson and W. J. Reid, of the Provincial Department of Agriculture, have been addressing meetings in several parts of the Province, soliciting members for the Stock Breeders' Association. Dr. MacMillan has been engaged as veterinarian for the Department. He will conduct some tests for tuberculosis for the different Breeders' Associations.

On Friday, October 10th, a Beef Breeders' Association was formed with the following officers: T. P. Cass, North River, president; G. W. W. Cameron, Augustine Cove, and George Wright, of Lower Montague, as vice-presidents; Alex. MacBeath, of Marshfield, and James MacDonald, North Bedeque, directors.

The addition to the Agricultural Hall is well under way, and will be ready when the School of Agriculture opens in November.

Already there have been quite a number of applications for the Long Course, and it is expected that upwards of twenty will be in attendance.

T. R.

Weldwood Work.

Autumn is a busy season on any farm, and Weldwood is no exception to the rule. The fine warm weather during the latter part of September and the first two weeks of October made the big corn harvest a pleasure, but the absence of rain made plowing rather difficult in places. However, as soon as the grain was off, the oat and barley ground not seeded down was skimmed over lightly with the plow, and the cultivator and harrows used to work the top down fine. This land has just been cross-plowed and it worked up very well indeed. The land being of the heavy order, this last plowing has been done in lands two rods wide and water furrows run through to carry off surface water and hasten spring drying. Land plowed or cultivated early after harvest seldom gets so hard that the plow will not take hold, the finely-worked top soil preventing evaporation.

The early September frosts did not whiten the corn to such an extent as was noticeable on many fields in the neighborhood. For this we cannot account, unless it was that the corn was on fairly high ground. This was the only point in its favor, and we noticed that in low spots the injury was most marked, but on the greater portion of twenty-eight acres of corn, including six varieties, viz., Bailey, Leaming, White Cap, Wisconsin No. 7, Stowell's Evergreen, and Longfellow, only the tips of the leaves were "burnt," there remaining sufficient sap in the uninjured green portions of the leaves and the stocks to ripen up the corn very well. Of the six varieties, Longfellow, as would be expected, was farthest advanced toward maturity when cutting commenced, September 22nd. Stowell's Evergreen was, as its name implies, the greenest. Bailey was second in line of maturity, with Leaming following closely. White Cap and Wisconsin No. 7 were not so ripe and about equal. All varieties were well cobbed up, no marked difference being noticeable, but the greater number of stalks had only one good ear, with a second of less value. Leaming perhaps showed the heaviest yield of stalks, but Bailey was good, and in fact there was little difference in the varieties in this respect, with the exception of Longfellow, which gave a lighter crop of stalks. The Longfellow and Bailey are being husked, as the silo, 14 feet by 40 feet, was filled from the other varieties, requiring about 15 acres to do it. This would seem as though the crop was light, but not so. It was a very heavy yield indeed, but the silo was filled, well tramped, allowed to settle and refilled. All told, the filling took about one and

one-half days, the last being put in Monday, October 6th.

Eight acres and one-half of winter wheat were sown September 12th. It has come on fairly well, but the weather has been very dry here. A portion of the land had a dressing of farmyard manure and several kinds of artificial fertilizer are being tried.

A plot of alfalfa was left for seed and also two strips of red clover. A very profuse second growth came on in the former, and after careful examination it was decided to pasture it, as the seed did not seem plentiful enough to warrant harvesting for threshing and it was too far advanced to make good hay. Much the same conditions were found in the red clover. A little seed was present in the heads ripened from the early blossoms, but there was such a large proportion of aftergrowth with no seed present that it was thought advisable to turn the cows in. Neither of these fields will be pastured too closely and more seed will undoubtedly go back on the soil and the clover tramped down should be a help to next year's crop.

A few roots are yet to harvest, but the main fall work now left is plowing, which is being done at the rate of about three acres daily with two single, walking plows.

The old house on the farm has been moved and remodelled into a very good granary, and the pig pen and old granary has been moved and is being reconstructed inside. Details of these operations will be given later.

Cows Sell Well in British Columbia.

A British Columbia correspondent writes to say that grade dairy cattle are selling well in the Western Province. Graner Bros. held a sale of grade dairy animals on Oct. 9th. This is said to be one of the best herds in that Province. Eighty-five head were sold, individual animals going as high as \$217.00, several selling for over \$200 each and many above \$150. Fifty-five of the eighty-five head sold made over one hundred dollars each and the average for the total eighty-five was over \$120 each.

The correspondent also reports that the consignment of grade cattle bought in Ontario and shipped to British Columbia by the Government to improve the dairy stock already there was composed of an inferior lot of animals. The British Columbia Live Stock Branch had these cattle purchased in Ontario and shipped to New Westminster, where they were sold by auction, the highest price being \$155 for a Holstein grade, a Shorthorn grade making the second highest price at \$135. Fourteen head made over \$100 each, but the greater number of them sold at prices ranging from \$70 to \$90 each.

Highways Investigation.

The Ontario Provincial Highways Commission, now investigating road matters in the United States, plan to hold several meetings at various centres in this Province during the coming winter. County and municipal representatives will be asked to be present and state their opinions on road construction and maintenance, as these questions apply to their particular districts. The first meeting will be held in Ottawa October 28th, when representatives from surrounding counties will be present. The second meeting is to be held in Belleville November 4th and another will be held in Hamilton November 11th, a fourth held at London December 16th, a fifth at the Parliament Buildings, Toronto, January 13th, and the following week the final meeting will be held at Guelph. These meetings will cover the Province thoroughly, and each county will have a chance to voice its ideas.

The number of young men taking the regular course at the Ontario Agricultural College this year is greater than ever before. There are now 430 students in the four classes, with about half the number freshmen. When the register was last gone over it showed 321 students from Ontario, four from Quebec, three from New Brunswick, eight from Nova Scotia, three from Manitoba, 11 from Alberta, four from Saskatchewan, 22 from British Columbia, 21 from England, one from Scotland, one from Ireland, 11 from the United States, three from South Africa, two from South America, one from Spain, and one each from Mexico, India, Germany, British West India and Russia. Truly this is a cosmopolitan aggregation of young agriculturists. The fame of Ontario's great agricultural college is worldwide.

A Potato Experiment.

Editor "The Farmer's Advocate":

In the spring of 1913 we determined to try an experiment as to the best method of planting potatoes. It was a maximum of yield at the least expense we were looking for. An acre of good loam was selected and this was divided into four equal portions. Each plot was numbered and received different treatment. The variety used was pink called Chili Garnet. It usually gives good returns and is a first-class potato. The seed was sown at the rate of twenty bushels per acre.

Plot A was plowed in the spring and received a dressing of a special potato fertilizer at the rate of eight hundred pounds per acre. Plot B was also plowed and received barnyard manure at the rate of twelve tons per acre. Plot C was treated exactly as plot B, except that with the grain sown on the land the previous spring, clover seed at the rate of sixteen pounds per acre was sown and this formed a luxurious growth, which was plowed under in the spring. Plot D was given a dressing of artificial fertilizers in the following combinations at the rate of six hundredweight per acre—37.5 pounds nitrate of soda, 75 pounds acid phosphate and 37.5 pounds sulphate of potash. This land raised a crop of oats in 1912 which yielded 40 bushels per acre. The land previous to the oat crop received a dressing of ten tons stable manure. The portion known as plot C was sown with four pounds clover seed. So far as could be learned without actual measurement the part of oats where the clover was sown appeared to be fully as good as that where no clover grew.

The seed used consisted of sets each cut with at least two good eyes. They were planted in rows thirty inches apart and about twelve inches apart in the row, each set being planted singly and not in hills. The furrows were opened and the fertilizer put in, a little earth being placed over the manure before putting in the sets. The ground was rolled with a light roller and then harrowed with smoothing harrow till a fine mulch was obtained. Cultivation was continued at in-

tervals of ten days till the tops grew so large as to be injured by the tramping of horses. They were also troubled with the beetles, but two sprayings of Paris green prevented any damage being done. As the cultivation and spraying was the same on all the plots it was not taken into account.

At the time of digging plot A yielded at the rate of 280 bushels per acre, plot B 290 bushels, plot C 325 bushels and plot D 300 bushels per acre.

From the foregoing it will be seen that the lowest yield was from the plot treated with the ready-mixed fertilizer. This might be due to several reasons—first, the fertilizer itself may have been inferior or improperly mixed or it may not have been suitable for this soil.

The highest yield was from the plot fertilized with clover and manure. The difference between the two plots which were dressed with barnyard manure showed in favor of the clover-treated plot to the extent of 45 bushels per acre. The next highest yield was from the plot treated with home-mixed artificial manure containing the proper amounts of fertilizing elements.

The profit from the different plots was as follows: Plot A, 70 bushels at 50c. per bushel, \$35.00; cost of 200 lbs. special fertilizer at \$30.00 per ton, \$3.00; profit on plot A \$32.00.

Plot B, 72½ bushels at 50c., \$36.25; 3 tons barnyard manure at \$1.00 per ton, \$3.00; profit on plot B equals \$33.25.

Plot C, 72½ bushels at 50c., \$36.25; 3 tons manure and 4 lbs. clover seed totalled \$3.80; profit on plot C, \$36.95.

Plot D, 75 bushels at 50c., \$37.50; cost of 37.5 lbs. nitrate soda, \$1.15; 75 lbs. acid phosphate, 75c.; 37.5 lbs. sulphate of potash, \$1.20; total cost of fertilizers, \$3.10; profit on plot D, \$34.40.

From these figures it is apparent that the use of clover raised the net profit of a quarter-acre plot from \$33.25 to \$36.95. On an acre of ground the sowing of sixteen pounds of clover would thus result in a profit of \$14.80 over and above the cost of seed. The results obtained by the use of home-mixed fertilizers were also very good.

JOHN H. MACDONALD.
Cape Breton, N. S.

John Bright's Shorthorn Dispersion

A fitting climax to long years of successful breeding of Shorthorn cattle was the dispersion sale of John Bright's herd at Myrtle, Ontario, October 16th. A great crowd of over one thousand breeders and interested admirers gathered at the splendid farm to witness the end of one of Canada's oldest and best herds. The stock offered was in good field condition, and, while the average price of the offering was not high, it must be remembered that a number of the cattle were under one-year-old and others were getting along in years, having been retained in the herd because of superior breeding qualities. Twenty-eight head sold, including three bulls, and twenty-five females brought a total of \$3,900, an average of \$139.20, the highest price being \$375. Ten head of the offering brought \$150 or over. The following is a list of those selling for \$100 or over, with the names of the purchasers:

Huntlywood Vanora, T. Hall, Brooklin.....	\$180
Myrtle Vanora, G. H. Linton, Toronto.....	270
Miss Ramsden 141st, G. Christie, Manchester 140	
Miss Ramsden 142nd, Arthur Howden, Columbus	160
Rosemary of the Manor, F. Richardson, Columbus	200
Canadian Duchess of Gloster 42nd, D. Birrell, Greenwood	125
Duchess of Gloster D. Canadian Farm, Pickering	130
Canadian Duchess of Gloster 34th, F. Halladay, Brooklin	115
Duchess of Gloster A. 4th, F. Richardson.....	975
Duchess of Gloster B., G. H. Linton.....	120
Jubilee Jilt, Robt. Miller, Stouffville.....	100
Rose (imp.), F. W. Hodgson, North Battleford, Sask.	170
Jilt of Ontario, Arthur Howden.....	100
Counsellor, James Cook, Myrtle.....	105
Sunshine, John Miller, jr., Ashburn.....	130
Sunny Queen, F. W. Hodgson.....	100
Sunbeam, Wm. Bright, Myrtle.....	175
Oakwood Maid, S. Slack, Claremont.....	115
Bessie's Queen, Geo. Ormiston, Enfield.....	165
Fashion's Best, Thos. Hall	120
Crimson Maud, F. W. Hodgson	180
Crimson Maud 13th, F. W. Hodgson.....	150
Captain T. E. Robson, London Ontario, welded the hammer in his usual style.	

Two Live-stock Markets at Montreal.

BRITISH EXPORTS DWINDLE.

Montreal shippers of live stock state that the export business from Canada to Great Britain has, practically ceased. A few years ago a flourishing trade in the export of beef cattle was done at Montreal, but for a variety of reasons very few cattle are now carried from Canada to the other side of the Atlantic. This means that the attention of the local markets is pretty well centred on supplies for domestic use, export to the United States and to the West for finishing. Montreal has two cattle markets. One is located at Montreal East and is fed by the Canadian Pacific. It occupies an area of twenty acres and is a mile or more from the water front. It is easily reached from the downtown district by car. The second market is at Point St. Charles and is fed by the Grand Trunk. It occupies twenty-five acres. It also can be easily reached from the central business district by car. There are two market days. On Monday the market is held at the East End Yards and on Wednesday at Point St. Charles.

A number of years ago Canada was an important raiser and exporter of live stock, especially of beef cattle. Only ten years ago thousands of fine cattle were brought into the Montreal market from the Eastern Townships of Quebec, although the bulk of the receipts at this market were then, as now, from Western Ontario and the Prairie Provinces, especially Alberta. A few years ago the Dominion Government adopted a policy to encourage the dairying industry, and a good deal of the attention of the Department of Agriculture was devoted to this line. Cold storage vessels were provided for shipping dairy products across the ocean, and in consequence Canada made a big advance in the dairying industry. The result was, however, that an increasing number of farmers went into this business to the neglect of the beef-cattle branch.

WESTERN CATTLE IN THE SUPPLY.

If a vertical line were drawn across the map of Canada at Belleville, it would be found that the section lying east of this line no longer raises sufficient cattle to supply its own requirements. In other words, Western Ontario, Southern Alberta and a portion of Northern Alberta not only supply the beef cattle required for the Western half of Canada but also supply Eastern Canada with as many cattle as they require and, in addition, are responsible for what exportable surplus the country may have in any year. Cattle raised in Eastern Ontario and Quebec are al-

most entirely for dairying purposes and when they have served their purpose as milk-producing machines they are fit for nothing but the canners.

TRANSPORTATION CHARGES HEAVIER.

Shippers blame the transportation companies for a good part of the falling off in the Montreal cattle-export business. They claim that the steamship companies have never encouraged this branch of export and have charged rates that rarely enable the local shippers to compete with the exporter from Portland. They claim that cattle can be bought at Toronto, shipped to Buffalo and thence by rail to Portland, and across to Great Britain for less money than if the shipment were made from Toronto to Liverpool via Montreal. The transportation companies on the other hand state that their rates are justified by the high premiums they are compelled to pay the insurance companies and also by the fact that they are, as a rule, compelled to return light from Liverpool, whereas vessels leaving American ports stand better chances of bringing return cargoes. As the local market has now become almost purely a domestic market, there is no variation in sales from month to month. In the days when big shipments of live stock were made from here to Liverpool the open season of navigation was naturally the big one, but after the close of navigation the export market was transferred to Halifax and St. John.

WHERE CATTLE GO.

A good deal of live stock is shipped to Montreal from various points and then sent away to be finished, principally to Western Ontario. Part of it, however, is sent to the United States. Under the new American tariff live stock is now admitted free into the United States. Montreal cattle dealers think this will have important results for Canadian breeders of cattle. There will be a big immediate increase in the exports of live stock from Canada, as prices in the States have been so high of late that American buyers have been doing a fairly large business for some months on the Montreal markets, even in the face of a protective tariff. Prices will naturally soar and Canadians will be obliged to pay more for their meat this winter. Gradually, however, matters will right themselves as the high prices for live stock will encourage more farmers to go in for this branch, and as the number of breeders increase the trend of prices will be downward. Moreover, not only Canada but every country in the world is now free to ship live stock into the

United States and the opinion prevails in Montreal that the high prices likely to be offering this winter for Canadian live stock will come down within two or three years. For the present, however, prices will be high as Great Britain will now have to bid up in order to get adequate meat supplies.

OPERATORS AND YARD CHARGES.

The East End Cattle Market is owned and operated by the Canadian Pacific Railway. The market at Point St. Charles is owned by the Montreal Stock Yards Co., and the controlling interest in this company is held by the William Strachan estate. Commission men operating on these markets buy as well as sell and all stock is bought and sold through them. All the consignor has to do is to send his carload or smaller shipments to one of these firms, whose men look after the selling, and after deducting their commission and paying yardage and feed charges, send him the net proceeds. However, as is the case with most markets, many shippers accompany their stock.

The selling charges are as follows: Cattle, per carload, \$12.00; sheep, lambs and hogs, \$11.00 for double deck; \$7.00 for single deck; calves, \$12.00.

The stock yards charge a uniform rate for feeding all classes of animals. This amounts to \$30 per ton. In addition there is a municipal tax of 20c. per head for yardage, and if the stock are weighed here there is a charge of 10c. per head for this. These charges are said to be about double the charges in Toronto.

Some idea may be gained of the receipts of live stock at the Montreal markets in the course of a year from the following figures: During September 13,800 cattle, 12,769 sheep and lambs, 6,166 calves and 10,285 hogs were received at the C. P. R. cattle market. Approximately, the same number were received at the Point St. Charles market.

Some of the larger commission houses operating in the live stock markets of Montreal are: Price & Coughlin, W. W. Craig, D. A. Campbell, A. Lauzon, C. A. Dohan, J. C. Marx, Z. Senecal, Fred. Montreuil.

The largest buyers for local consumption are the big packing houses, viz., Matthews-Laing, William Davies Co., Montreal Abattoirs, Masterman Packing & Provision Co.

P. F. Gow is manager of the C. P. R. live stock market and Frank H. Carling is manager of the Montreal Stock Yards Co.

Autumn in Oxford County.

Autumn everywhere appeared to have a contented countenance. The trees that all summer gave shade to the languid animals and tired people have burst forth in a profusion of colors that defies reproduction by the most skillful of artists. Then the leaves fall to protect the roots of the parent tree, which gave them birth, and nourish them through another year. In the towns the children are romping through the rustling leaves or making bonfires of them, while the old tree stands unconcerned and confident that another year it will be young and green again and even live to see the little ones grow old and gray while it still is clothed with verdure.

Harvest is now completed on the farm. Those belated with silo-filling are watching it settle in the silo, while the cattle are cleaning up the fragmentary remains on the stubble. Dry as it has been after-tillage has been practiced and some fall plowing has commenced. Fall wheat, a patchy stand in the western counties of Ontario, is tolerably good in Oxford county.

A striking scene which meets the eye is the number of individuals driving their milk to the creameries or factories. Many people refrain from going too heavily into dairying on account of the improvement required in their buildings, but Oxford farmers have the improvements and apparently a surplus to the good. Milking machines are being installed in some few stables to save the family from what is considered the arduous task of milking twenty or thirty cows. These machines are operated with gasoline engines or electric power, and are giving satisfaction. The farmers of Oxford county consider it profitable to have the cows freshen in the fall. They can, with silage, roots and clover, maintain a good flow of milk throughout the winter, and when the cows go on fresh pasture they increase their flow again. Beginning the month of November the condensers will pay \$1.60 per hundred for good milk, but in summer months it diminishes considerably. This circumstance adds much to the profit of the winter's heavy flow. Further from the towns the customary route handling is still in vogue, but what impresses one most is the up-to-date appearance of the farms and buildings where a herd of milkers in the fields show their owners to be dairymen. In the vicinity of Ingersoll and Woodstock "hydro" is being thoroughly tested this fall. Threshing, filling silos, grinding and operations requiring less power have been done with electricity. The labor problem has been serious here, but from the inventions and improvements that are making their appearance in rural and farm operations the solution will eventually come and conditions will be alleviated.

Autumn and Winter Care of Cows.

Just now, when cows are about to begin their long season in the stable, the advice on autumn and winter care, as given in the new bulletin, "Milk Production in Canada," is timely. Prof. Grisdale points out that cows are fed in the stable during one-half of the year or more, and feeding during this period may through ignorance or on account of using unsuitable forage, voluntarily, be made very expensive. The profits from the herd will of course, depend to a large extent on the economy of the methods of winter feeding followed. Economical feeding does not mean scant supplies, but the using of the kinds of feeds and feed combinations that will be likely to produce the best results at the lowest cost.

As the milk produced depends upon the quantity and quality of the food consumed, every effort should be made to supply the cow with all she will eat of a ration combining palatability, easy digestibility, and suitability in composition for the milk flow.

Observation and experimental work at the Central Experimental Farm, Ottawa, during the past twelve or thirteen years lead Prof. Grisdale to consider succulence, variety, and regularity in hours of feeding as the most important factors making for palatability and high digestibility of a ration.

By succulence is meant juiciness or a high percentage of water in the feed. Giving an abundant supply of water for use along with a dry feed will not have the same effect as causing the cow to take the water as a part of her food. To illustrate: 100 lbs. of fresh pasture grass may include as much as 85 lbs. or more of water and only 15 lbs. or less of dry matter. This 100 lbs. of pasture grass fed green is, however, as proven by experiment, worth considerably more than the same 15 lbs. dry matter fed in the shape of 15 lbs. dry grass and the cow allowed to drink all she will of water along with the dry grass. Further, the cow will take considerably more of almost any kind of dry matter, and digest it more readily and more completely when fed as a succulent than when fed as a dry food.

Succulence in the winter ration may be secured in several ways. The most common, and the most advantageous from the standpoints of low cost of ration and convenience of handling, is the use of ensilage. Roots of various kinds are, however, largely used, and are very valuable for the purpose. Where both the above are lacking, succulence may be secured by cutting the straw or hay and sprinkling freely with water a few hours or even a couple of days before feeding. Adding about 20 per cent. of feed molasses to the water used for sprinkling improves the palatability and effectiveness of such a ration very greatly. Where ensilage is available, it is well to mix from 8 to 12 lbs. chaff with each 100 lbs. ensilage. This should be done some little time before feeding to insure the chaff being moistened.

Variety in the ration fed the dairy cow adds greatly to its effectiveness by rendering it more palatable. Variety in this connection, however, must not be taken to mean feeding one kind of feed to-day, a different feed or combination of feeds to-morrow and still another ration the next day. Variety in feeding the dairy cow must be secured by combining in the ration, which should be the same or practically the same from day to day, as many different kinds of roughage and meals or concentrates as it is found convenient or possible to include. Feeding a meal mixture made up of oats, barley, bran, oil-cake meal and corn is likely to give better results than a meal mixture of similar feeding value from a chemical standpoint including, say, only bran and barley and much better results than feeding bran alone. The mixture of meals improves the flavor thus rendering the meal more palatable and hence more digestible. Palatability in a ration adds greatly to digestibility. Improved digestibility means increased effectiveness. The value of variety in the feed is thus apparent.

These remarks must not be taken to mean, however, that a mixture of roughages or a meal mixture once compounded, no other may be fed. It is possible to have two or three quite different mixtures on the go at the same time, provided always that the same feed be fed at the same hour each day. That is, one might feed silage, straw and meal in the morning, and roots, straw, hay and bran in the evening or vice versa. It will not do, however, to feed ensilage in the morning one day and in the evening of the next. It or any other feed should always be fed at the same hour.

The stage at which the various forage crops are harvested has much to do with their flavor and aroma. Early-cut hay is not only superior in composition to the late-cut article, but is much more pleasant in aroma and more acceptable in flavor. The same may be said of most forage crops, the early-cut, well-cured forage plant of practically every description is much superior to the late-cut badly-cured plant of the same species.

Freshly-ground grain is always more palatable than long-ground material, and will give better results.

Feed the best feeds, that is, the most palatable feeds, in the morning. Give less acceptable feeds at night or outside in racks or in some such way as will leave the eating of the same a matter of amusement or a pastime, as it were, rather than a duty or a necessity. The cow eats such things best when she really does not need to eat them, and what is more, shows re-

sults for the extra feed consumed even though it be inferior in quality.

Some feeders claim it to be necessary to feed several times each day. A common practice is to feed morning, noon, and night. A satisfactory method as tried at Ottawa has been to feed as follows: Succulent roughage mixture and meal mixture first thing in the morning, hay after that is cleaned up. This is repeated for the ensilage and meal mixture about 3 p.m. The hay is fed after the cows are all milked about 5.30 p.m.

Experiments extending over some years to determine the relative merits of dividing the ration into two or into three or more portions seemed to indicate that when the same amount of the same kinds of feed was fed in two portions it gave just as good results as when fed in three or more portions.

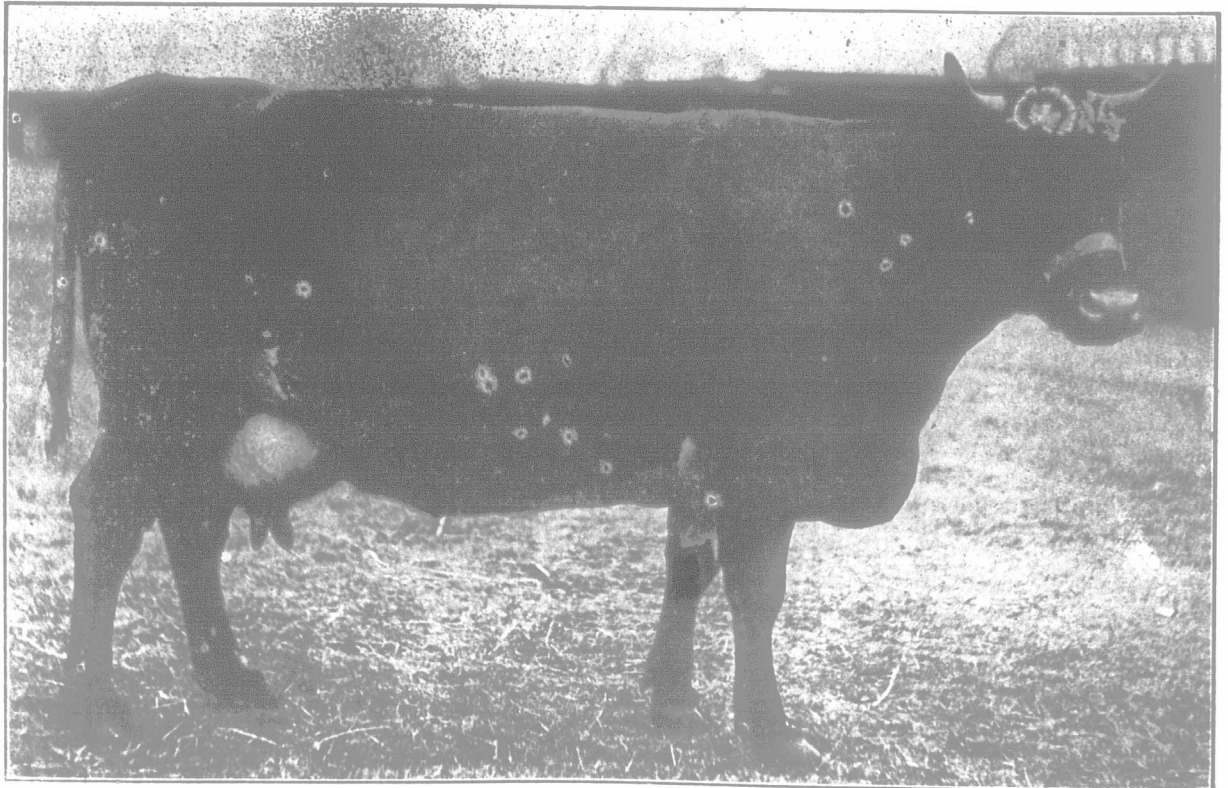
A certain hour should be chosen as the time to feed each portion, and that hour should be adhered to most strictly. Any temporary variation is sure to result in a falling off in milk. Anything likely to irritate the cow or render her uneasy is almost certain to injuriously affect the milk flow.

The requirements of the milch cow in the way of water are very considerable. The more milk produced and the more feed consumed, the greater is likely to be the amount of water required. This amount may vary from, say, 75 pounds up to even 800 pounds water in a single 24-hour period. The problems of how to water, when to water and how much water to give, can best be solved by allowing the cow free access to water at all times. The water had better be warmed in winter, but, if it is not convenient to store it in a warm place, it will not pay to warm it artificially.

The individual drinking fountain is probably the best method, but the trough filled periodically and washed out frequently has many advocates. The using of the manger for watering purposes after feeding is practiced in some stables, but our experience would lead us to condemn the system as troublesome and less satisfactory from the standpoint of comfort to the animals than the individual bucket. But of one thing care should be taken, no matter what the system adopted, that is, to keep the cups or troughs or water supply clean and sweet.

Salt is necessary to the comfort and health of the dairy cow. The quantity to feed will vary from an ounce to three or four ounces a day. It might, as in the case of the calf, be given in the form of rock salt in the manger, but had better be fed daily in the food. It adds to the palatability of a food, hence is valuable as an appetizer, as a food and as a stomachic.

Exercise when taken by the dairy cow is not immediately conducive to milk production. On the contrary, anything that might be called exertion is practically certain to lower the milk flow temporarily. It would, however, be unwise to say that the dairy cow should have no exercise while producing milk. It is probable that the allowing of a moderate amount of exercise will have a beneficial effect upon the health of the animal, and almost certain that such exercise will advantageously effect the offspring. Turning the cow out in cold winter weather, however, to shiver, if only for half an hour a day, in the winter winds, is likely to prove anything but healthful to the cow, economical to the farmer or advantageous to the breeder.



Ringlet 9th.

Champion Shorthorn dairy cow, at the Royal. Owned by Captain A. Willis.

Corn Growing on the Prairie.

We go down into the United States and we hear, "You can't grow corn in Canada." But we know we can. Farmers in Eastern Canada say to the Westerner, "You cannot grow corn in Manitoba, Alberta or Saskatchewan," but the following taken from The Farmer's Advocate and Home Journal, Winnipeg, Manitoba, is proof of the fact that corn as a crop is increasing in favor in the West. Here is what our contemporary says:

Is corn a desirable crop for Western Canada? Does corn fill a gap now empty in stock farming? Is corn possible under our climatic conditions?

These three questions may be asked in all seriousness and the first two especially may be answered in the affirmative, but in the minds of many the third question is shrouded with doubt. There may be some districts of the West where the corn plant is not at the present time suitable. This may be in the very alkali parts or in dry districts. Outside of some special sections of the country there is no good reason why the crop should not become more popular. We have seen this crop grown successfully on the Alberta Government Demonstration Farm at Medicine Hat, in which district rainfall is very light. It is a popular crop on several farms in Saskatchewan, including the Dominion Experimental Farm at Indian Head and in Manitoba the people are becoming convinced of its great possibilities.

An editorial representative of The Farmer's Advocate visited H. L. Emmert's stock farm some miles east of Winnipeg, where the owner grew nearly 60 acres of corn this season. It was in the milk stage in the forepart of September, stood an average of eight feet high and gave indications of yielding at least 12 or 15 tons to the acre. This was seeded at 12 quarts per acre in rows. It was cut with a corn binder. Part of the crop was made into silage and the remainder shocked in the field. The owner of the farm could not be induced to carry his large amount of stock without this fodder crop.

On the Van Horne farm, where 15 acres of corn had also been sown 12 quarts per acre in rows, the yield would be almost as much. This field was not as mature as was Mr. Emmert's, but it would give a nice lot of palatable roughage. On account of not having a silo, the manager stooks the fodder and hauls it to the barn in winter as needed. It is fed to the young stock and fattening cattle. On Jas. Duthie's farm, in the Hartney district, the corn crop receives considerable attention on account of the enormous amount of palatable roughage that it yields for fall and winter feeding. His crop, not quite so heavy as the other crops, was cut with the binder and allowed to partially dry before being stooked, and when completely dry in the stook it is stacked, using alternate layers of corn and straw. The cobs were well developed, being almost in the milk stage, although some were much farther advanced. The variety grown is Northwestern Dent. The owner was highly elated with the crop and would not farm without it. A field of about 20 acres of this fodder crop has been grown by J. R. Hume, in the Souris district, each year for several years. This stockman has not been so fortunate in getting large cobs well on to maturity, but has secured a very heavy yield per acre. His corn is allowed to dry somewhat before stooking and is hauled to the barn as needed for the stock.

Besides these few growers of corn there are many others who are highly satisfied with it. It is raised at the Manitoba Agricultural College and also at the Brandon Experimental Farm, where it is cut and put into a silo.

In Saskatchewan, the Indian Head Experimental Farm and the Agricultural College Farm at Saskatoon, are both growing corn for silage satisfactorily. B. H. Thomson, of the Boharm district, grows corn for his dairy cattle, and cuts it with the grain binder. Even as far north as

Prince Albert good crops of this cereal fodder can be produced. On the Mossom-Boyd farm, a few miles south of that city, this year there was a good stand of corn on a small area. The stalks were fully seven feet high and the cobs well into the milk stage in early August, clearly indicating the possibility of producing it in the north country for fodder purposes.

The prospect of fodder corn in the province of Alberta is not so clearly known. It is perhaps still in the experimental stage, but there is no doubt but that it can be grown successfully. At the Medicine Hat Demonstration Farm last year a very fine crop was produced. The plants were not as tall and stalky as one would like, but the field furnished an excellent lot of choice, palatable roughage.

These examples are sufficient to indicate that corn has great possibilities in Western Canada, and are a satisfactory feed for young stock dairy and beef cattle, the growers of this crop speak in no uncertain terms. They have tried, at first, with some uncertainty as to results, but it has quickly grown in popularity wherever used.

In the past years stock raising on limited areas has not been popular, the grain farmer predominating. As stock farming or diversified agriculture draws its ever-increasing trail of supporters, some crop palatable and of good food value must be produced for winter roughage. The corn plant fully answers the purpose, and perhaps to better advantage than other crops.

The great rivals of corn fodder as winter roughage are green sheaves and clovers with roots to supply succulence. None of these foods can be produced in as large quantities, and with the same labor per acre as the corn crop. The fodder per acre of green sheaves is comparatively light and as feed it is not as palatable. Clovers also require a larger acreage and are perhaps not quite as reliable, although of a higher food value. Roots are useful and palatable but they require a large amount of labor and should be employed in conjunction with other roughages. The corn plant can be fed alone as silage, but is much better supplemented by hay or by hay and roots. Many feeders, however, supply dairy and beef cattle with corn silage, hay and meal with excellent results. It is due to its palatability, its heavy yield per acre, and its excellent food value that this crop is so highly esteemed as a winter roughage. It takes the place to a large extent of the green nourishing pastures that are the basis of growth and production during the summer months.

The corn plant has other uses and valuable ones. As a supplement to late summer and fall pastures there is nothing better. In this Western country the hot weather during July and August generally causes a material depreciation of our grasses as pasture. About that time the corn plants are fairly well developed and if cut daily as needed and given to the cattle, especially dairy cattle, they will greatly increase milk production. Even on into the fall corn may be taken with good results from the stook and supplied daily to the stock. Besides being the great feed that it is, corn is a cleaning crop of no mean value if it is properly looked after during the growing season.

The Executive of the National Live-Stock Horticultural and Dairy Exhibition, to be held in Toronto November 17th to 22nd, is said to be meeting with considerable opposition from the Board of the Canadian National Exhibition, some members of which claim that the new show is in too many lines similar to the annual September event, and, under terms of the lease, these buildings may not be used for any show similar to it. Matters will, no doubt, be righted soon, and the new show open under the most favorable circumstances.

The British South Africa Company is said to be taking steps to make Rhodesia a great cattle-ranching country, the source of Europe's outside beef supply.

Crown Lands to Be Grazed in British Columbia.

Hon. W. R. Ross, Minister of Lands for British Columbia, has announced a new "grazing policy" for that Province. It is designed to utilize the forage now going to waste on unoccupied crown lands, and to encourage the live-stock industry of the Western Province.

The range areas of the Province are to be divided into natural grazing districts suitable for cattle, for sheep, or for both. On each district stock will be allowed to graze in numbers up to the quantity the range can carry without suffering injury from over-grazing. This privilege will be granted by means of annual grazing permits, which will specify, among other things, the kind and quantity of stock, and the locality on which they are to graze. Settlers may range a reasonable number free of charge. For large herds the fees will be at first only ten cents per head per annum for cattle and two cents for sheep.

These charges are merely nominal, and are to be the intention of the Government to promote the industry until it is well established before requiring payment to the full value of the privilege. Naturally the actual settler, and rancher, must be ensured the use of the range, and will, therefore, receive first consideration in the issuance of permits. But the area of land is so great that there will be enough and to spare for a long time for both settler and stockman.

Pig Shortage in Ireland.

The scarcity of pigs in Ireland in recent months has sent up the price of bacon abnormally. In 1912 Ireland received \$22,500,000 for its exports of manufactured bacon, and \$6,500,000 for its pigs, shipped from several ports. These figures are lower than those for previous years. But the strange anomaly about the Irish pig trade, like the Irish butter trade, is that while the country sent out nearly \$80,000,000 worth, it spent \$10,000,000 of that money on foreign-cured bacon, hams, and pork. In the old days it was not uncommon to find the small farmer selling his fattened pigs in the local market and out of the proceeds bringing home foreign-cured bacon for himself and his family. A despatch from Dublin says: The Irish bacon industry needs development sadly. The essentials of any profitable trade in bacon-curing include a regular supply of reliable pigs, and this can only be obtained in Ireland by encouraging the pig-rearing side of the industry on proper lines.

Bean Crop Light in Kent County.

A Kent County Ontario correspondent writes that the yield of beans this year will not average over ten bushels per acre. The cause, he lays to an over abundance of rainfall early in the season which drowned them out. The sample is said to be good.

Fire destroyed the large barn at the Central Experimental Farm, Ottawa, October 11th. The barn contained some \$10,000 worth of feed, including meal of many kinds, straw, hay, silage, etc., put in for use during the winter. A small quantity of machinery was also stored in it, worth probably from \$4,000 to \$5,000. The cause of the fire is unknown.

The barn will be rebuilt at once. Two ells are to be up before the severe winter weather comes on. Young stock is to be wintered in sheds.

Toronto live-stock market experienced the heaviest single day's run in its history last week. Montreal live-stock receipts were also heavy, and Canadian cattle were reported as glutting the market in Chicago, over 1,000 head from this country being disposed of in a single day over there. Canadian bacon hogs were also selling well at Chicago.

Markets.

Toronto.

Receipts at the Union Stock-yards, West Toronto, on Monday, October 20th, numbered 201 cars, comprising 4,581 cattle, 208 hogs, 1,681 sheep and lambs, 396 calves, and 18 horses. Trade was slow; quality of cattle medium to good. No exporters. Choice butchers', \$7.25 to \$7.50; good, \$7 to \$7.25; medium, \$6.25 to \$6.75; common, \$5 to \$5.50; cows, \$3.75 to \$6.50; heavy feeders, \$6 to \$6.50; light feeders, \$6 to \$6.25; stockers, \$5.25 to \$5.75; calves, \$5 to \$10. Sheep, \$3 to \$5.25; lambs, \$7.25 to \$7.60. Hogs, \$8.75 fed and watered; \$8.40 f. o. b. cars.

REVIEW OF LAST WEEK'S MARKETS
The total receipts of live stock at the

City and Union Stock-yards last week were as follows:

	City.	Union.	Total.
Cars	86	842	928
Cattle	2,177	16,758	18,935
Hogs	145	6,225	6,370
Sheep	1,156	6,572	7,528
Calves	104	1,841	1,945
Horses	40	47	87

The total receipts of live stock at the two markets for the corresponding week of 1912 were:

	City.	Union.	Total.
Cars	69	355	424
Cattle	975	5,401	6,376
Hogs	1,247	4,918	6,165
Sheep	1,315	6,180	7,495
Calves	33	729	762
Horses	—	35	35

The combined receipts of live stock at the two yards, show an increase of 504 cars, 12,559 cattle, 205 hogs, 83 sheep and lambs, 1,183 calves, and 52 horses, compared with the corresponding week of 1912.

For some time previous to the removal of the duty upon cattle entering the United States from Canada, the receipts were much larger than other years at the Toronto live-stock markets, but since the removal of the duty they have just about doubled. Prices, which advanced about 40c. per cwt. for the previous week, have just about held steady during the past week. Dealers inform us that cattle are selling on the Toronto market at as high prices as on the Buffalo market, excepting for feeders and stockers, and this is on account of Ontario farmers not being willing to pay as much as the Americans. Fat cattle of all classes are quite as high in Toronto as in Buffalo, quality con-

sidered. Prices in all classes of fat stock during the past week have changed very little, excepting for hogs, which were 25c. lower at the beginning of the week, but at the close they had nearly regained all that they had lost.

Export Cattle.—Swift & Company, of Chicago, bought 100 export steers, averaging 1,312 lbs. each, at \$7.38 average price. There were four choice steers bought for the Buffalo market at \$8 per cwt., and there were two two-year-old steers, 1,510 lbs. each, sold at \$8.25 per cwt. These were bought for show purposes this coming Christmas. Export prices, as a rule, ranged from \$7.25 to \$7.65.

Butchers'.—Good to choice butchers' sold at \$6.80 to \$7.20; medium butchers', \$6 to \$6.60; common butchers', \$5.50 to \$6; choice cows, \$5 to \$5.65; common to medium cows, \$4.50 to \$4.80; canners, \$3.50 to \$4; bulls, \$4.50 to \$6.25.

Stockers and Feeders.—Good to choice, heavy steers, 1,000 to 1,150 lbs., were firm, at \$6.40 to \$6.65; steers, 900 to 1,000 lbs., at \$5.80 to \$6.25; steers, 700 to \$10 per cwt.; good calves, at \$8 to stock heifers, \$4.35 to \$4.80.

Milkers and Springers.—Receipts were liberal, demand was equal, and prices very firm, at \$55 to \$90, and the highest price reported last week was \$110, and one at \$95. The bulk of the cows sold from \$65 to \$75 each.

Veal Calves.—There was little change in the prices of veal calves, the market being active for them all week. On Wednesday, on account of a liberal run, the market was a little easier, but prices did not decline. Choice calves sold at \$9 to \$10 per cwt.; good calves, at \$8 to \$9; medium calves, at \$7 to \$8; common, at \$5.50 to \$6.75, and rough, Eastern calves, sold at \$4 to \$5.

Sheep and Lambs.—Sheep sold at \$3.50 to \$5.25; rams and culls, \$3 to \$4. Lambs sold at \$7 to \$7.75; bucks 75c. per head less.

Hogs.—Selects, fed and watered, sold at \$8.75; and f. o. b. cars at \$8.40; and \$9 weighed off cars.

BREADSTUFFS.

Wheat.—Ontario, No. 2 red, white or mixed, 82c. to 88c., outside, and 85c., track, Toronto; Manitoba, new, for October shipments, from Fort William, No. 1 northern, 88½c.; No. 2 northern, 87½c.

Oats.—Ontario, new, white, 38c. to 34c., outside; 35c. to 36c., track, Toronto; Manitoba, No. 2, 40c.; No. 3, 34c., lake ports.

Rye.—No. 2, 61c. to 62c., outside.
Peas.—No. 2, 85c., outside.

Buckwheat.—No. 2, 52c. to 53c., outside.

Barley.—For malting, 56c. to 58c.; for feed, 43c. to 46c., outside.

Corn.—American, No. 2 yellow, 75½c., Midland; 80½c., track, Toronto.

Flour.—Ontario, ninety-per-cent, winter-wheat flour, new, \$3.60 to \$3.70; bulk, seaboard. Manitoba flour—Prices at Toronto are: First patents, \$5.50; second patents, \$5; in cotton, 10c. more; strong bakers', \$4.80 in jute.

HAY AND MILLFEED.

Hay.—Baled, car lots, track, Toronto, \$18 to \$18.50 for No. 1; No. 2, \$11 to \$12 per ton.

Straw.—Baled, car lots, track, Toronto, \$6.50 to \$9.50 per ton.

Bran.—Manitoba, \$22 to \$23 in bags, track, Toronto; shorts, \$24 to \$25; Ontario bran, \$22 to \$23 in bags; shorts, \$24 to \$25; middlings, \$25 to \$26.

HIDES AND SKINS.

No. 1 inspected steers and cows, 13c.; No. 2 inspected steers and cows, 12c.; city hides, 14½c.; country hides, cured, 13½c.; calf skins, per lb., 16c.; lamb skins and pelts, 65c.; horse hair, 35c. to 37c.; horse hides, No. 1, \$3.50 to \$4; tallow, No. 1, per lb., 5½c. to 7c.

COUNTRY PRODUCE.

Butter.—Market firm. Creamery pound rolls, 28c. to 29c.; creamery solids, 27c. to 28c.; separator dairy, 25c. to 27c.; store lots, 23c. to 25c.

Eggs.—New-laid, 85c., in case lots; selects, 33c.; cold storage, 29c.

Cheese.—Old, large, 15c.; twins, 15½c.; new, large, 14c.; twins, 14½c.

Honey.—Extracted, 10c. to 11c.; combs, per dozen sections, \$2.50 to \$3.

Beans.—Imported, hand-picked, \$2.25; Canadian, 1912 crop, hand-picked, \$1.75 to \$1.90; primes, \$1.65; Canadian, 1913 crop, hand-picked, \$2.10 to \$2.25.

Poultry.—Receipts last week were liberal, and prices easier. Chickens, alive, 13c. to 14c. per lb.; ducks, 12c. to 13c.; hens, 10c. to 11c. per lb.

Potatoes.—Car lots of Ontario potatoes, on track, Toronto, 70c. to 80c.

TORONTO SEED MARKET.

Alsike. No. 1, per bushel, \$7.75 to \$8.00; alsike, No. 2, per bushel, \$6.50 to \$7.50; alsike, No. 3, per bushel, \$5.00 to \$5.50.

FRUITS AND VEGETABLES.

Receipts of fruits and vegetables in season have been liberal, and prices ranged as follows: Peaches, 25c. to 50c.; plums, 40c. to 60c.; cantaloupes, crate, \$1.50 to \$2; 35c. to 50c. per basket; apples, 30c. to 40c., and \$1.75 to \$3 per barrel; pears, 30c. to 60c.; green corn, per dozen, 12c. to 15c.; green peppers, 25c. to 35c.; vegetable marrow, 30c. to 40c. per basket; grapes, 25c. to

35c.; quinces, basket, 40c. to 60c.; cucumbers, 25c. to 40c.; gherkins, \$1 to \$1.50 per basket.

TORONTO HORSE MARKET.

Trade last week was a little more active, a few car lots having been disposed of. The sales made were principally heavy horses for the lumber woods, one load having been shipped to Ottawa and one to Quebec, and another of lighter weights to Detroit, Michigan. There was also a fair local trade reported. Drafters sold at \$225 to \$275; general purpose horses, \$175 to \$225; expressers, \$150 to \$225; drivers, \$100 to \$175; serviceably sound, \$30 to \$75.

Montreal.

Live Stock.—Supplies of cattle were very large. This was attributed both to the active demand from American buyers and to the expense of feeding, there having been a failure in the crops in certain portions of Ontario owing to the drought. Common stock was in larger supply than the finer qualities. Common bulls sold at 4½c. to 4¾c. per lb., and cows at 3c. to 4c. Choice butcher stock held firm, at 7½c. per lb.; fine at 7c., while good was 6½c. to 6¾c., and medium 5½c. to 6½c., with common at 4½c. to 5½c. per lb. Lower grades ranged down to 3c. per lb. Lambs were firm, and prices ranged from 6½c. to 6¾c. per lb., while sheep were about 4c. for straight lots. American buyers were still taking calves, and stock was being cleaned up at \$8 to \$8 each for common, while butchers were paying \$10 to \$15 each for the better qualities. Hogs were steady, at 9c. per lb. for selects, but advanced 25c. per cwt. Oct. 20th.

Horses.—The feed problem is doubtless inducing many farmers to sell their horses, and as a consequence the tone of the market was easy. There has been some fair buying. Heavy draft horses, weighing from 1,500 to 1,700 lbs., \$300 to \$350 each; light draft, 1,400 to 1,500 lbs., \$225 to \$300 each; light horses, 1,000 to 1,100 lbs., \$125 to \$200 each; broken-down, old animals, \$75 to \$125, and choicest saddle and carriage animals, \$350 to \$500 each.

Dressed Hogs.—The demand for fresh-killed, abattoir-dressed hogs was only fair, and prices were a little on the easy side, being 13c. to 13½c. per lb.

Potatoes.—The market was steady, under a good demand. Green Mountains were 70c. to 75c. per bag, ex track, jobbing prices being about 20c. higher, ex store. Bags weigh 90 lbs.

Honey and Syrup.—The market was unchanged. White-clover comb was 15c. to 16c. per lb.; extracted, 10½c. to 11½c.; dark comb, 13c. to 14c., and strained, 7½c. to 8½c. Tins of maple syrup sold at 9c. to 10c. per lb., while syrup in wood was 7c. to 8c., and maple sugar was 9c. to 10c. per lb.

Eggs.—Prices were steady, and demand continued active. Strictly fresh eggs were quoted at 38c. to 40c. per dozen. Selected eggs were 30c. to 31c. per dozen, and No. 1 candied 27c. to 28c., while No. 2 were 21c. to 22c. per dozen.

Butter.—Prices were steady, though in the country they were lower. Choice creamery was quoted here at 27½c. to 28c. per lb., in a wholesale way, and fine at 27c. to 27½c., while second grades were 26½c. to 26¾c. Dairy butter was steady, at 22c. to 23c. per lb.

Cheese.—The market for cheese showed almost no change, being, however, a little lower, at 13½c. to 13¾c. per lb. for Western, white or colored, and 12½c. to 13c. for Eastern, colored, white being about ½c. lower than colored.

Grain.—Oats were firmer in price. No. 2 Western Canada, 41c. to 41½c. per bushel, ex store; No. 1 extra feed, 40½c. to 40¾c., and No. 1, 39½c. to 40c.

Flour.—Flour was steady. Manitoba first patents were quoted at \$5.40 per barrel, in bags; seconds, \$4.90, and strong bakers', \$4.70. Ontario winter-wheat flour was unchanged, at \$4.60 to \$4.75 per barrel, in wood, for straight rollers.

Millfeed.—The market for millfeed was quite firm. Bran was \$22 per ton, and shorts \$21, in bags, while middlings were \$27, including bags. Mouille was \$30 to \$32 per ton for pure, and \$28 to \$29 for mixed.

Hides.—Hides were unchanged. Beef hides were 12c., 13c., and 14c. per lb. for Nos. 3, 2 and 1, respectively. Calf skins, 15c. and 17c. per lb., for Nos. 2 and 1, and lamb skins, 60c. each, with

horse hides ranging from \$1.75 for No. 2, and \$2.50 each for No. 1. Tallow sold at 1½c. to 3c. per lb. for rough, and 5c. to 6½c. for rendered.

Buffalo.

Cattle receipts last week totalled around 11,275 head, 5,650 head of which were Canadians. It was generally a Canadian supply after Monday. On Monday a few scattering loads of Canadians were on offer, the best load of weighty, shipping steers, seen here so far from the Dominion being among the offerings, and sold for the highest price so far this year for grassers—the price being \$8.60, for a load averaging 1,438 lbs., and going to New York demand. They were the thickest, fat, weighty steers off the grass seen on the Buffalo market for many months. A load of grain-fed Ohio steers, averaging a hundred pounds less, but of harder flesh, sold at \$8.70, and a couple of loads of handy-weight steers, averaging between 1,100 and 1,200 lbs., making \$8.65. Handy-weight steers of less desirability and under eleven hundred, sold around \$7.75 to \$8, medium, commoner, and very light ones, ranging on down to \$6.50 to \$7. In the heifer line, there has been little of the better class, Monday, \$7 taking the best in this line, a load of good weight Canadians, averaging 875 lbs., reached \$6.90. Light and medium butchering heifers sold from \$5.50 to \$5.75, a pretty good kind fetching \$6 to \$6.25. About the best in the bull line in straight loads were Canadians, averaging 1,480 lbs., and bringing \$6.65. Little, light, stock bulls, sold from around \$4.75 to \$5.25, with some medium kinds of grassy sausage bulls bringing from \$5.40 to \$5.75. Canada has supplied the larger numbers of stockers and feeders. A few Michigans, dehorned, and of good breeding, sold last week up to \$7.25 to \$7.50, with the best Canadians, in loads that were mostly dehorned, at \$7.25; other sales of best Canadian feeders, \$6.75 to \$7. Quite a few loads of these better quality feeders came in the past week from across the border. Supply of fresh cows and springers, not large enough to meet the demand, sold generally from \$60 to \$100 each. The market last week was satisfactory, considering liberal numbers of about the same kinds of stuff. Good kinds in all divisions sold to better advantage than the less desirable ones. Strong outlet for well-bred stockers and feeders—reds and roans—but some of the little, "monkey" kinds of stock heifers and steers, have been slow and dull sale. Trading in the fat-cattle line has been about the same, best kinds showing good sale; others weak. On fat cattle, some little, scimpy, heifer stuff, for killing purposes, sold lower by a quarter, and little, commonish bulls, showed as much of a take-off. Week closed up stronger on good butchering heifers of the handy order, and desirable, fat cows, medium kinds of bulls showing about a quarter decline over last week.

Hogs.—Hog supply for the week ending Friday last, 44,000. Market, compared with the previous week, showed higher trade Monday and Tuesday, with lower prices since, winding up for the week the lowest of the season, bulk of packers selling Friday at \$8.50, a few decks carrying quite a bit of weight, \$8.60.

Sheep and Lambs.—Runs for week ending the 17th, 37,000; no Canadians included. Market lower, showing weakness nearly every day during the week on lambs, while sheep were steady for the first four days, and lower on Friday. Best lambs, \$7.15 to \$7.30; cull lambs, \$6.50 down; skips, \$5.50 to \$6; wethers, \$5.25 to \$5.35; mixed sheep, \$4.75 to \$5.15; ewes, \$4 to \$4.50 generally; cull sheep, from \$3.50 down.

Calves.—Seventeen hundred and twenty-five calves for last week. Trade was active nearly all week. Tops, \$11.50 to \$12, the latter figure being reached on Friday. Culls, \$10 down; Canadians, \$4 to \$5.50 for grassers.

Cheese Markets.

Madoc, Ont., 12 11-16c.; Campbellford, Ont., 12½c.; Brockville, Ont., bidding 12½c., no sales; Kingston, Ont., 12½c.; Vankleek Hill, Ont., 12½c.; Listowel, Ont., 12½c.; Cornwall, Ont., 12½c.; Iroquois, Ont., 12½c.; Napanee, Ont., 12 11-16c. to 12½c.; Picton, Ont., 12 11-16c., 12½c., 12 13-16c.; Ottawa, Ont., 12½c.

Chicago.

Cattle.—Beeves, \$6.80 to \$9.55; Texas steers, \$6.80 to \$7.90; stockers and feeders, \$5.25 to \$7.65; cows and heifers, \$8.50 to \$8.80; calves, \$7 to \$10.75.

Hogs.—Light, \$7.75 to \$8.35; mixed, \$7.80 to \$8.45; heavy, \$7.70 to \$8.45; rough, \$7.70 to \$7.85; pigs, \$4.75 to \$7.75.

Sheep and Lambs.—Sheep, native, \$3.55 to \$5; yearlings, \$5 to \$6; lambs, native, \$5.75 to \$7.10.

Gossip.

Our readers are reminded that entries for the great International Live-stock Exhibition, to be held at the Union Stockyards, Chicago, November 29 to December 6, inclusive, close November 1st.

Clydesdales for Canada were shipped the first week in October to G. A. Brodie, Newmarket, Ont.; John Fisher, Ringwood, Ont.; G. M. Boyd, Owen Sound, Ont.; Robert Sinton, Regina, Sask., and Michael Ryan, Toronto.

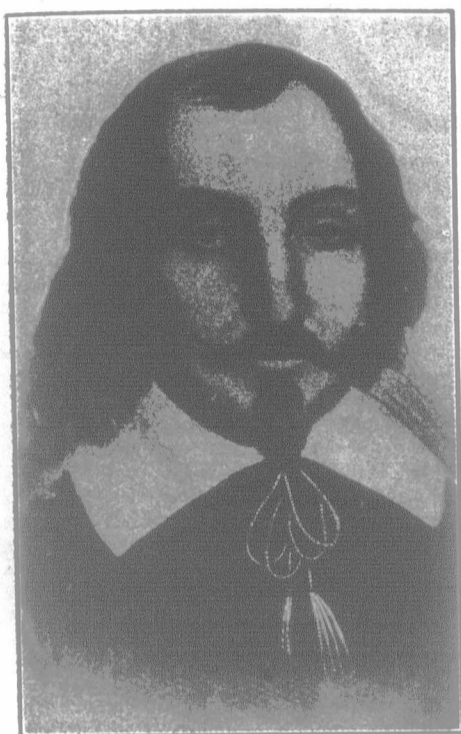
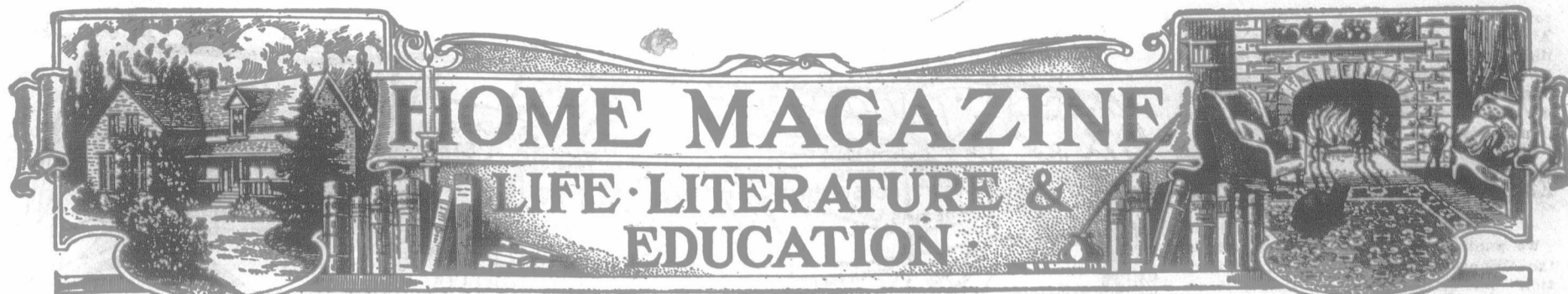
A. Watson & Sons, St. Thomas, Ont., inform us that they intend holding a dispersion sale in the near future, full announcement of which will be made later through the columns of "The Farmer's Advocate." Watch for it.

Complete prize lists for the National Live Stock, Horticultural and Dairy Show, are now ready and being mailed to horsemen, live-stock breeders, horticulturalists and poultry fanciers all over Canada. Owing to some slight delay in getting the lists printed, the closing date for entries has been extended to November 5th. Since the preliminary list was issued some time ago, inquiries for the complete list have been more than encouraging, with prospective exhibitors from Halifax to Vancouver. The organization of the show is ample to take care of the largest number of exhibitors that have ever participated in a live stock, horticultural and dairy exhibition. The prizes are valuable, and worthy of keen competition. Embracing as it does every branch of the great agricultural industry, the show will attract an unusual clientele of those who hitherto have not been able to interest themselves in all branches.

SCOTTISH SHORTHORN SALES.

The annual auction sale of Shorthorns from the herds of Wm. Duthie, Collynie, and John Marr, Uppermill, took place on October 7th, and were quite successful, the average for the 25 Collynie bull calves being £233, and the top price of the day was 900 guineas, approximately \$4,750, for the roan April calf, Collynie Knight Victor, by Knight of Collynie, purchased by Mr. Cazalet, Kent. The second highest price was 720 guineas, for the red calf, Collynie Goldsmith, also by Knight of Collynie, to Henry Milnthorpe. A third calf, by the same sire, sold for 650 guineas. He is Collynie Grand Knight, a red calf, taken by Mr. Law, Mains of Sanquhar. The average for 14 bull calves from the Uppermill herd was £84, 15s., the highest price being 210 guineas, for the red, Bride's Favorite, and 14 heifer calves from the same herd averaged £39 3s., the highest price being 110 guineas, for the red-roan, Lady Dorothy.

At the dispersion sale the following day of the herd of Captain A. T. Gordon, of Newton, the highest price for a bull was 250 guineas, for the red four-year-old, Astronomer, to J. D. Fletcher, of Rosehaugh. The top price for a female was 520 guineas, for the roan three-year-old, Charity XIV, taken by Hon. Mr. Lewis, Hean Castle. Four hundred guineas was the price, paid by Captain Ogilby, for the roan five-year-old, Newton Clipper III. The average for 100 head sold, was £115. The yearling heifer, Jealousy 9th, brought 300 guineas. At the Aberdeen Joint Sale the same week, 253 Shorthorns consigned by 19 breeders, averaged £42 12s., the highest price being 165 guineas.



Samuel de Champlain.

October.

(By Doris Webb.)

Bright October, torch in hand,
Crossed the land,
And she touched a sumac spire
With her fire.
Then the blaze of red and yellow in the trees,
Running riot, leapt and trembled in the breeze.

Fair Virginia creeper sprays
Caught the blaze,
And from out the grass there came
Jets of flame,
Till at last the burnt-out leaves of
crackling brown,
On the chilly wind of autumn fluttered
down.

—Lippincott's.

Little Trips among the Eminent.

Men Notable in Canadian History.

SAMUEL DE CHAMPLAIN.

[With acknowledgments to Bourinot, Parkman, Withrow, and others.]

After the death of Cartier, the links in the chain of events connecting the old world with Canada, were, for a time weakened. For some time after the death of King Francis, civil wars gave France enough to do within her own borders, and it was not until Henry IV was established upon the throne that interest again turned to the strange new land whose dense forests and tawny warriors had erstwhile so fired the imagination of the first bold European adventurers.

When peace was finally established, bold minds turned from war to adventure. The mystery of the Great West was again calling, and among the first to respond was the Marquis de la Roche. Not for glory alone, however, was the Marquis to dare the Northern Seas. He had, no doubt, heard great tales of the fortunes being made by plucky traders, who, in their sturdy little vessels, were

yearly crossing the ocean and making way up the blue St. Lawrence to reap a furry harvest from the Indians at the mouth of the Saguenay, hence he bargained for a monopoly of the fur trade. In return, he was to colonize New France, and his dignity was to be sustained by a list of titles that constituted him, nominally at least, a veritable Ozar of the vast forest domains.

It was not, however, easy to man the vessels—evidently the wild waste of waters did not so tempt the workmen, the men who must reef the sails and load the supplies and carry the ships well to their destination—and finally De la Roche was compelled to complete his crews from the prisons.

With his convicts, then, he set sail, the vessels being so small that, it is recorded, the sailors could reach over the edge and wash their hands in the Atlantic. After weary days land hove in sight, the low, treacherous shores of Sable Island, for so long veritably a grave-yard of the Eastern Coast. Here the Marquis landed, left forty of his crew (for what precise reason is not told), then went on with a few of the followers whom he could most trust. He had promised to return, but a storm arose that chased his ships back to France.

In the meantime the convicts left ashore on the island, as Parkman tells us, "rueful and desperate, wandered among the sandhills, through the stunted whortleberry bushes, the rank sand-grass and the tangled cranberry vines. They caught fish, hunted Baron de Lery's wild cattle (left ashore some years before), quarrelled, and murdered one another." In five years only twelve were alive, and when, at last, they were sent for and brought before Henry IV, they appeared as wild men, clothed in shaggy skins, with "beards of prodigious length."

In the meantime, English fishing-craft mingled with Breton, fluttering tawny sails about the shores of Newfoundland, and English adventurers made way down the coast as far as the New England States in search of the land of Norumbega. History, however, has passed over the names of these men, for the most part, only pausing to write large those of the explorer Frobisher, who near the close of the 16th century attempted to wrest the secret of the Arctic from its hold, and Sir Humphrey Gilbert, who, during the reign of Elizabeth, took possession of Newfoundland, with great ceremony, in the harbor of St. John's, erecting on the shore a pillar emblazoned with the arms of the Queen. Shortly afterwards, however, Gilbert was wrecked at sea, a happy fate, perhaps, if contrasted with the tragedy that lay in wait for his illustrious half-brother, Sir Walter Raleigh.

But to return.—Finally Henry IV of France, listening to the schemes of his friend, Aymar de Chastes, Governor of Dieppe, for the colonization of Canada, permitted two more vessels to be fitted out for a Western voyage. These, in charge of a rich merchant named Pontgrave, set sail from France in 1603, but more important than their sailing, more important than the patent given to Pontgrave for the colonization of Canada, was the fact that on board was—Samuel de Champlain.

Parkman, above all historians, perhaps, has paid glowing tribute to the event. "Long," he says, "before the ice-crusted pines of Plymouth had listened to the rugged psalmody of the Puritan, the solitudes of Western New York, and the stern wilderness of Lake Huron were trodden by the iron heel of the soldier, and the sandalled foot of the Franciscan friar. France was the true pioneer of the Great West. They who bore the fleur-de-lis were always in the van, patient

and indomitable, and foremost on this bright roll of forest chivalry stands the half-forgotten name of Samuel de Champlain."

If you were to visit Dieppe to-day, you would find there, carefully guarded, an odd old journal, written in clear, round hand, and embellished by quaint, even ludicrous, maps and drawings,—the very journal, in truth, written by this remarkable man. Knowing that, you smile no longer, but look at the yellowed, old pages with awed reverence, and you appreciate the jealous care with which the books are guarded, for you know that in them is preserved, in spite of the writer's lapses into credulity, a very notable account of Canada's history in those early days. No journal was ever more minutely kept, the events of each memorable day being carefully described, while the crude maps, and drawings guiltless of art or perspective, serve at least to illuminate what might otherwise be vague. So Champlain preserved the accounts of his voyage to the West Indies and Mexico; of his first voyage to the St. Lawrence (under the title "Des Sauvages"); of his subsequent explorations during 1613-15-17, under the title of "Voyage de la Nouvelle France"; and a narrative of later travels and discoveries.—Truly, indeed, may he be called "The father of New France."—But we anticipate.

Samuel de Champlain was born in 1567, at the little seaport town of Brouage, on the Bay of Biscay. His father was a captain in the navy, but he himself began life as a soldier. Peace, however, transformed him into an adventurer and explorer. No "spurious contentment" for him; he must needs exercise his talent to the uttermost.

His talent?—His indomitable will; his prophetic imagination; his love of adventure; his piety; his enthusiasm.

Thus it was that he first visited the West Indies and Mexico, writing his journal with meticulous care, adorning it with colored pictures of ships, ports, islands, Indians, with birds, animals, flowers, fishes, each in place, though usually in sad defiance of proportion.

When at Panama, he even conceived the idea of a ship canal across the isthmus, an interesting item to remember in this year of 1913, which has seen the uniting at that point of Atlantic and Pacific.

Returning to France, he joined, as has been seen, the Pontgrave expedition, which sailed from Honfleur in 1603, and henceforth we may follow him, by his journal, across the Atlantic, up the St. Lawrence, past the gleaming veil of Montmorenci, past the looming promontory at Quebec, past Cap Rouge, past the Richelieu, until Hochelaga was reached. Here, however, of the palisaded town that Cartier had found, not a trace was left, but the camp of a few Algonquins from the Ottawa marking the spot. Pushing on, he tried to go up the rapids above Montreal, but was not successful, and soon afterwards returned to France to find the good Aymar de Chastes, father of the expedition, dead.

Two months after Champlain's return, however, a new company was formed, the company to colonize, on the usual plan, in return for trading privileges. One Sieur de Monts, a Calvinist and friend of the King, was the leading spirit in the organization of this company, and it went without saying that Champlain should be one of the number when the ship set sail.

For Nova Scotia, the "La Cadie" of that day, it had been determined this time, to steer, hence, before Champlain lay a new land of dream, new adventures, new opportunities.

(To be continued.)

The Windrow.

There are six million rivets in the gates of the Panama Canal locks.

An ordinance against tipping has been passed by the city of St. Louis.

Both Missouri and Iowa are prescribing consolidated schools for rural districts.

Mr. Lloyd George's insurance plan, now being put into effect in England, provides for public sanatoria where tuberculous patients may receive free care and treatment while the State looks after their dependents.

The coldest city in the world is said to be Verkhoyansk in northern Siberia. The average annual temperature is eight degrees above zero, and the winter record is eighty-five degrees below zero. The rivers freeze solid to the bottom, small trees snap and split from the cold. Yet in summer the temperature averages fifty-nine degrees above zero and vegetation flourishes, though the ground a few feet below it never thaws out.

Some of the best books which are the product of Western genius and learning, notes T. P.'s Weekly, have been translated into Chinese. Spencer, Huxley, Darwin, John Stuart Mill, Adam Smith, Montesquieu, and Rousseau are familiar to every Chinese student. Indeed, on account of the literary excellence of the translated works, they have become classics in that country. In the realm of law and political science, such books as Bryce's "American Commonwealth," Lowell's "Governments and Parties in Continental Europe," Burgess's "Political Science and Comparative Constitutional Law," Bluntschli's "Lehre vom Modernen Staat," etc., are the standard text books in our schools and colleges. . . . Light literature translated from European languages is on the bookshelves of every Chinese home whose inmates claim acquaintance with the Chinese language. Scott's "Ivanhoe," Stevenson's "Treasure Island," Beecher-Stow's "Uncle Tom's Cabin," and Victor Hugo's "Les Miserables" are familiar to most people. Dickens, Dumas and other masters of fiction are well known. Although there is no Chinese translation of Shakespeare, Lamb's "Tales from Shakespeare" is read by every school boy in China, and we do not doubt that in time the works of the great English Bard will be translated. Some of the works of foreign writers have even been dramatized, such as the works of Zola and other French writers, which can be seen in the New Theatre on the Chinese Bund every Saturday evening. Nor would such reading be considered light in England. Roughly speaking there must be over 3,000 books translated into Chinese from the best authors in Europe and America. The average Chinese, by comparison with the average foreigner, is better read.

Nineteen hundred and thirteen will go down to history as the bird's year. National legislation in their interests, surpassing all former action, has marked the record of the past nine months. First came the law extending federal protection to all migratory birds, and now the news from Washington that the importation of feathers of wild birds into the United States is forbidden by action of congress. "This is the greatest legislative victory ever won for the birds of the world," writes the Secre-

tary of the National Association of Audubon Societies. Hereafter it will be illegal to bring the feathers of wild birds into this country except for educational purposes. The saving of bird life the world over is incalculable.—Our Dumb Animals.

Ennisclare Flower Garden Competition.

We publish with pleasure the results of the "Ennisclare Flower Garden Competition" for Halton County, Ont., instituted and maintained by Mr. H. C. Cox, of the Imperial Life Assurance Company, Toronto.

First Prize.—Miss Annie K. Lyons, lot 12, con. 10, Esqueusing Tp., Norval P. O., \$80.

Second Prize.—Mrs. Frances Hunter, con. 11, Esqueusing Tp., Norval P. O., \$50.

Third Prize.—Miss Helen Smellie, lot 8, con. 11, Esqueusing Tp., Norval P. O., \$10.

Hope's Quiet Hour.

A Complaint.

Why am I forced to stay,
Resting here day by day?
Busy and bright and free,
THAT is the life for me!
How can I happy be,
So full of energy,
Just to lie here so still?
This does not suit my will.

THE ANSWER.

Who died to set thee free?
Who suffered on the Tree?
Who has the right to say,
"Lie still, now, day by day?"
Lean on His loving breast,
There, there is perfect rest.
Listen, and hear Him say,
"With thee am I always."
Learn where to cast each care;
Learn more to value prayer;
Give up that wayward will,
Listen to His "Be still";
What then is there to fear,
When He is ever near?
He wants you now to rest,
HIS Will is ALWAYS best.

Catford, 1911.

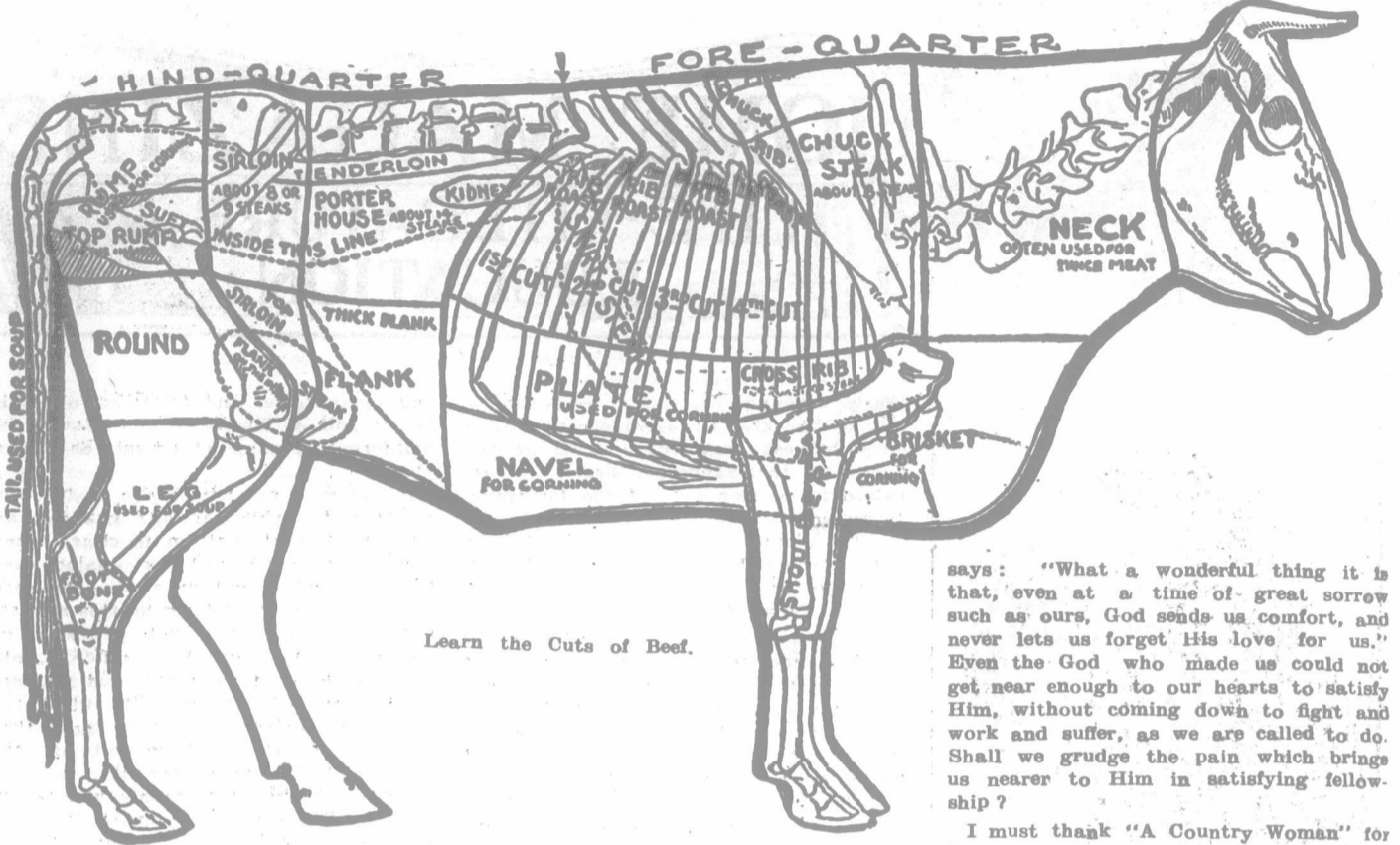
C. R. M.

The Happiness of the Sorrowful.

Behold, happy is the man whom God correcteth:
Therefore despise not thou the chastening of the Almighty.
He woundeth, and His hands make whole.
He shall deliver thee in six troubles;
For He maketh sore, and bindeth up;
Yea, in seven there shall no evil touch thee.
Job v, 17-19.

We speak harshly of "Job's Comforters"—perhaps because we are more familiar with the patriarch's words, "miserable comforters are ye all!" than we are with the earnest words with which his friends tried to show their sympathy. We quote glibly the saying of Eliphaz the Temanite: "Man is born unto trouble, as the sparks fly upward," and do not do him the justice to read the rest of his speech, in which he points out the blessedness of trouble. We speak of the Sermon on the Mount as beautiful and spiritual, we hold up the Beatitudes as shining jewels—the glory of God transfiguring earthly sorrow—and we have the same revelation here in our text. I have quoted the words as they are given in the R. V., not because there is any difference in the words themselves, but because they are arranged like poetry, and so convey a different impression.

There is plenty of trouble and pain in the world, we cannot deny that. The Bible is the great Torch-light, glorifying the blackness. Prophet, historian, and apostle, ring the joy-bells to cheer sad hearts. There is no light-hearted or frivolous forgetfulness of sorrow. It is seriously weighed against the far more exceeding weight of glory, and declared to be "light" in comparison: it is made to yield extracts of inestimable value, and welcomed as a gift from God. The



Learn the Cuts of Beef.

says: "What a wonderful thing it is that, even at a time of great sorrow such as ours, God sends us comfort, and never lets us forget His love for us." Even the God who made us could not get near enough to our hearts to satisfy Him, without coming down to fight and work and suffer, as we are called to do. Shall we grudge the pain which brings us nearer to Him in satisfying fellowship?

I must thank "A Country Woman" for her generous and self-denying gift of \$5 "for the poor and needy." I am planning to divide it among three or four poor and suffering women. I am sure the kind "Country Woman" has suffered, or she would not be so ready to be a Good Samaritan to those wounded comrades who are unknown to her by name. One glad day she will be surprised to hear the King saying to her: "I was an hungered, and ye gave Me meat . . . a stranger, and ye took Me in."
DORA FARNCOMB.

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.]

Dear Ingle Nook Friends,—Just a budget of helpful hints to-day, picked up from "here and there, and everywhere." Have you any to give in return?

Cooking Meat.

Now that the winter is in sight, the question of meats comes to the fore again, for with the cold weather one's appetite for them usually revives,—and with good reason, too, since they are rich in fat, our greatest heat-producer. Even lean meat contains a certain proportion of it embedded among its fibres.

To be wholly palatable, however, meat must be cooked right; the very best can be spoiled in the hands of a careless cook, spoiled so that it will neither look as well nor taste as delicious as it should. And yet just to remember a few simple principles is sufficient.

When roasting or boiling meat, the aim is to keep the juices in so that the meat will retain all of its rich flavor and yet be as tender as possible. If you put a piece of meat into "just warm" water, or into an insufficiently heated oven, you will soon see the juice beginning to ooze out and waste itself, hence this should be lesson enough that this is not the right way to do. The bright woman who has made the observation will next time put the meat into madly-boiling water, or into a very hot oven and watch results. In this case she sees that the outside quickly sears over so that the juices are comparatively well retained;—but there is something else to be considered: If kept too long in madly-boiling water or a very hot oven, the meat is sure to become rather hard and tasteless throughout; it does not cut with that juicy tenderness that marks the perfectly-done piece. Ostensibly, then, the right way is first to sear the outside thoroughly—Maria Parloa says 15 minutes fast boiling or fast baking is not

Master-Teacher gathered up in wonderful words the light which shone in the pages of Holy Scripture, and declared Himself to be "The Light," brightening the lives of weary, heartsick men and women.

It is folly to despise the Fatherly chastening of God, "for whom the LORD loveth He correcteth; even as a father the son in whom he delighteth." A child who roams the street, uncorrected and uncared-for, has little cause to flaunt his freedom in the face of one who is guided, guarded, instructed, and punished, by wise and loving parents. The momentary freedom is a small thing compared with the great loss. No after-discipline can fully make up for the wasted years when the nature was pliable and easily moulded. The child may chafe under wise discipline sometimes, but he will—in good time—recognize its value. Like trustful children, we may, and should, accept the chastening of our Father—no matter how incomprehensible His dealings with us may be. We shall miss the gain if we rebel against the rod. We all must endure chastening, because we are all the beloved children of a wise Father; but sometimes we lose instead of gaining. Sorrow hardens one heart—as it did the heart of Pharaoh—and softens another; it makes one person bitter and resentful, while another shines radiantly against the background of gloom—having the Light of the World within.

Brave endurance of pain, and daily struggle against discouragement, can never be wasted. A few days ago I heard a man say that when he was young the story of Sisyphus used to trouble him. It was terrible to think of one who was doomed to the awful and meaningless punishment of forever rolling a heavy stone up a hill. The work would seem to be near its accomplishment, and the top of the hill in sight, then the stone would fall again and all the work have to be done over again. It seemed like wasted toil. But, the speaker said, I have learned that such wasted work is impossible in God's world. The worker may seem to fail, over and over again; but the work itself (apart from success or failure) develops his muscle, and the continual "trying again" makes him resolute, patient, and unconquerable in spirit. So, as last, he ceases to be an amateur and becomes a professional, and can easily push the heavy stone over the top of the hill. Not only does he win the crown of victory, but he has gained immeasurably in many ways, just because the victory was tremendously hard to win. Happy are they that mourn: for they shall be strengthened. We miss the force of our Lord's second Beatitude when we fail to pour into that great word "comforted" its full meaning. Perhaps we say—very foolishly—that we prefer to escape the "mourning," and then we can do quite well without the "comfort." But, when we

remember that "comforted" means "strengthened," as well as admitted into marvellous fellowship with the King of sufferers, and with all his white-robed army of followers, we are not so weak and childish as to refuse the eternal gain because of our desire for present ease. "He that refuseth correction despiseth his own soul," says the wise man. What folly it is to despise one's own soul—that priceless thing which endures.

Browning says that man is as clay, whirling dizzily on the wheel of the Potter. The clay seems so perishable, so valueless, and yet so easily shaped—while it is yet unhardened. But the wheel—that great wheel of Time—will stop at last, and the clay, which seemed to be helplessly swept on by it, will endure—the clay and the Potter, man and God. If He is to make us beautiful eternally, if He is to perfect the children He loves, we must co-operate with Him in the shaping of our future. We are not at the mercy of blind Fate or Chance. Not one tiniest drop of bitterness in our cup of human happiness need be wasted medicine for our sin-sick souls. Not one touch of the Master's careful hands on our hearts—hearts softened by pain—but should mould some line of beauty in us. If the pain is doing us no good, or if it is doing us harm, then it is our fault, not God's.

We often think of our Lord's terrible message to lukewarm, uninterested members of the Church: "Because thou art lukewarm, and neither cold nor hot, I will spue thee out of My mouth." Do we accept gratefully the remainder of His message to the Church of Laodicea? He offers true and refined gold to those who are poor, yet think themselves rich. He offers white raiment of purity to those whose sins have left them naked, and yet who are unconscious of their shame. He offers eye-salve to those who think they can see, but have missed the One Light able to scatter the darkness of this life. Then He pleads, with wonderful tenderness, for the trust and fellowship of these lukewarm disciples, saying: "As many as I love, I rebuke and chasten: be zealous therefore, and repent. Behold, I stand at the door and knock: if any man hear My voice, and open the door, I will come in to him, and will sup with him, and he with Me. To him that overcometh will I grant to sit with Me in My throne, even as I also overcame, and am set down with My Father in His throne."

He endured, and became the Great Conqueror, how can we possibly be victors unless we also accept the cup of sorrow offered by our Father? We are not so foolish as to despise as valueless the perfecting of our own selves. Then we can thank God for the pain He has given. It is a great privilege to be allowed to speak to you each week. Could I say one helpful word unless I knew the meaning of sorrow from my own experience? Yesterday I had a letter from one who

too long to begin with—then reduce the heat to a lower degree so that slow but steady cooking will finish the roast or boil. When roasting meat, always set the roast on a rack, and, after the searing process has been concluded and the meat is brown all over, pour some hot water into the pan and use it for basting frequently. This will make the meat much more tender. . . . Corned beef and boiled ham need long simmering, and should be left in the water until nearly cold before being removed. Uncover the pot while the water is cooling, and cool as rapidly as possible.

An ordinary "boil" of beef, corned beef, or tongue, usually requires about five hours of slow, steady simmering after the searing process has been completed; if over ten or twelve pounds, an extra hour should be allowed.

When making stews, the object is to have the scraps of meat tasty, and surrounded by a sort of gravy flavored with vegetables, etc., so here again the method is somewhat similar. Put some dripping into a kettle, and when it is "smoking blue," drop in the scraps of raw meat, turning them about until they are brown and have their juices fairly well bottled in. If onion is to be added, brown the slices next, then pour in water and add whatever vegetables you wish cut in bits. Keep the stew simmering (Temp. 202 F.) and never let it boil, for "a stew boiled is a stew spoiled." Several hours of this slow cooking will not harm your stew in the least. Keep the cover pushed off a little to let the gases escape, until your dumplings, if any, are added; then, of course, the kettle must be closely covered. Never add salt to stewing meat until it is nearly cooked, as it has a tendency to harden the fibre.

Fowl, as a rule, needs about 1 1/2 hours to cook, but if at all tough may be given two or three hours. A ten-pound turkey will require 3 1/2 hours. Occasionally a veteran hen that has managed to escape with her life for several seasons, comes to the pot, and then some maneuvering is necessary. Steam her, however, for a day, then bake her as usual, and you need not be surprised if people praise your "chicken."

Frying is the least wholesome method of cooking meat, especially if it be sized slowly in a little fat, but a nicely-cooked beefsteak or chop is not to be despised. Have the pan very hot, sear the outside until brown all over, then cook steadily. Mutton and pork chops need very thorough cooking; beef may even be rarely done, if liked that way by those who eat it, but no matter how pink the inside may be, the outside should be very brown.

Many people have a prejudice against veal, but really nothing can be nicer than a veal loaf. Simmer the scraps steadily with the cover off the pot, until the gravy has pretty well boiled down, then season and turn into a mould decorated with slices of hard-boiled egg. Many people also have a prejudice against mutton, finding fault with its "strong" taste. If, however, the skin that comes next to the fat is removed before cooking, the greater part of the strong flavor will disappear.

PARTS FOR COOKING.

To nine women out of ten, perhaps, the majority of the various cuts of meat are a dark and not-to-be-understood mystery. They send to the butcher's for "steak," or "roast," or "boil," or "soup-bone," and that is all there is to it.

Sometimes, however, yes, often, money may be saved by a little enlightenment in the matter, for the cheaper portions of meat are quite nutritious, and may often be very well made a portion of the daily fare. They must, however, be cooked with great care, else they are certainly poorer in flavor,—and whatever does not appeal to the appetite never "pays," no matter how little its cost.

It stands to reason that the parts of an animal which are not in constant motion, and which thus escape being hardened into muscle, must be the most tender. Looking at the cut which accompanies this, you will see that the tenderloin, sirloin, and porterhouse, occupy the very choicest places, and so for these you must be prepared to pay a high price: roast sirloin and tenderloin, and porterhouse steak, are surely dishes fit for a king. But the choicer rib roasts ("seven prime ribs") and the round roast, are also very good, while

round and chuck steaks, if cooked as they should be (see below), are not to be despised.

The tougher ribs make very good pot-roasts, or, when boned, make rolled ribs. They also make excellent stews. Indeed, nearly all the tougher parts of meat are good for stews if cooked slowly enough.

For corning, use the rump, navel-piece, plate and brisket, and do not forget that when cooking corned beef a long five-hour operation is necessary if best results are to be had. Simmer, simmer, simmer, if you would have good, tender, pink, delicious corned beef. In fact, it may be taken as a rule that all the tougher portions of beef need slow cooking.

The neck, being constantly in motion, is tough, and may be used for mince-meat, hash, and "Hamburg steak." The meat-grinder, it will be seen, comes in as a treasure here. Mutton neck may be used to make fine broth.

The leg may be used for potted meat and soup.

Even when all of the above have been disposed of, the economical woman will still find use for many other parts of the animal. The head of a good beef will make a fine crock of headcheese. The liver (those of calves and pigs are best) may be made into many an appetizing dish, but any liver which shows streaks or spots should be discarded as unfit for food. The tongue is, of course, a dish fit for an epicure, especially if a plump, firm one be chosen, while kidney stew is often a dish in fine houses. Kidneys, by the way, should be of a clear, bright color. Tripe and sweetbreads are also dainties; stuffed heart is a dish at once cheap and nutritious; while in some countries the brains are considered very good.

So now for some recipes. JUNIA.

Meat Dishes.

Sea Pie.—Cut 1 lb. lean beef or scraps of meat in small pieces and dip in a mixture of flour, salt and pepper. Put into a saucpan with 1 carrot sliced, a small turnip cut into bits, and enough cold water to cover all. Let come to a boil. Meantime make a crust as follows: Sift together 2 small cups flour, 1/2 teaspoon baking powder, and a pinch of salt, then work in 1/2 lb. suet chopped fine, and mix to a firm dough with cold water. Roll into a sheet large enough to cover the pie. When the meat is boiling, place the crust on top, then put on the lid of the saucpan. Stew gently for 1 1/2 hours, loosening the crust, now and again, from the side of the pan with a knife.

Soup.—When making soup, the aim is to get every bit of the nourishing element out of the meat and into the soup, hence only the portions of meat that cannot be used up otherwise should be used for it,—the lower part of the leg, the tail, scraps of neck or backbone, etc. To make good soup, put the raw scraps or bones into cold water and let soak for a while, then cook slowly. Add vegetables and seasoning as preferred. The bits of meat left after making soup are not much good, although some make croquettes or stew of them. The vegetables may be left in the soup in bits, but the result is better if they are put through a sieve.

The Cheaper Round Steak.—Sear the steak until brown all over, then add a little water, cover closely, and cook very slowly on the back of the range for three hours. Add onions and thickening of browned flour, blended in water, to the gravy, season, and serve very hot.

Beef Broth.—Put rump steak through the meat-chopper. Put 1 pint of it into a jar with 1 pint cold water, and set in a kettle of cold water. Simmer until the meat looks pale and colorless; strain and season. Remember that beef broth or beef tea is only a stimulant. It is not a food, and contains only two per cent. of actual nourishment. Sick folk should never be left to depend upon it. As Dr. Fothergill says, "All the bloodshed caused by the war-like ambition of Napoleon is as nothing compared to the myriads of persons who have sunk into their graves from a misplaced confidence in the food-value of beef tea." Its nutritive value can, however, be greatly increased by adding to it baked flour or one of the patent cereal foods.

Baked Hash.—Take 1 cup cooked beef, 1 cup cooked rice, 1 cup milk, 1 egg, 2

tablespoons butter, salt and pepper to season. Chop the meat, put the milk on the fire, and when it is hot add all the other ingredients except the egg. Stir for a minute, remove from the fire, and add the egg, well beaten. Turn all into a baking-dish and bake 20 minutes in a rather hot oven.

Beef Pie.—Slice off the remains of a roast of beef, and put all necessary into a stewpan. Add gravy, a lump of butter, some sliced onion, salt and pepper, and water enough to make plenty of gravy. Sift in 1 tablespoon flour, cover, and stew gently. When done, put all into a baking-dish, and cover with a thick layer of hot mashed potatoes, beaten well with a little milk or cream, butter, and seasoning. Brush over the top with beaten egg and set into the oven to brown. Serve with catsup or horseradish.

Roast Lamb.—Take a breast roast. Make a good stuffing as follows: One pint crumbs, 1 tablespoon butter, 1/2 onion, 1 teaspoon dried herbs, salt and pepper to season. Let stand an hour. Wipe the meat, fill the place for the stuffing, dredge with salt, pepper, and flour, and roast on a rack, basting often, and allowing 15 minutes to a pound. Serve with mint sauce.

Poor Man's Goose.—Slice a sheep's or pig's liver. Mix together 1 tablespoon flour, 1/2 teaspoon salt, 1/2 teaspoon pepper. Dip each slice in this. Put a layer of the liver at the bottom of a dish. Have an onion parboiled and chopped fine. Mix it with the powdered sage leaves and sprinkle a little over the liver; put in another layer, then more onion and sage, and so on. Parboil a few potatoes, peel them, cut them in slices, pour the water over the liver, cover all with sliced potatoes, and bake one hour.

Brain Cakes.—Wash the brains with a pint of cold water mixed with 1 tablespoon vinegar. Boil for ten minutes, then drain and chop. Mix with 2 tablespoons bread crumbs, 1 teaspoon chopped parsley, pepper and salt to season, and a beaten egg. Heat a spoonful of dripping in a pan, drop in the mixture by spoonfuls, and fry a golden brown.

TO MAKE PALMS GROW.

Dear Junia,—I am much interested in your corner, and am coming for some information. Could you tell me how to make palms grow? What soil is best adapted for them? Do they require sunlight? I have a palm about five years old, and the tips of the leaves seem to be dying. What causes this? Also, is milk and water good to bathe them with? "SALLY."

Victoria Co., Ont.

Perhaps one cannot do better than quote you what is said in regard to palms by that authority on plant-growing, Prof. Bailey, of Cornell University.

"Palms in general are tropical in nature," he says, "and while there are a number of species that are found at considerable elevations, where the nights are decidedly cool, yet, in a young state, the same species may make more progress in a night temperature of 60 degrees F.; and with this in view, a minimum temperature during the winter of 50-60 degrees is safest for young and growing palms, while an advance of 15-20 degrees during the day will not hurt them.

"An abundance of water is required, for many palms grow on the banks of rivers or in swampy ground; and even those found on high and rocky ground send their roots down to such a depth as to find a liberal water supply.

"Some shading throughout the summer is best, the foliage grown under glass being more tender than that naturally produced outdoors. Repotting should be done during the spring and summer months, preferably, these being comparatively little root action on the part of most palms between November 1 and March 1. Give only moderate-sized shifts; that is, use pots only one or two inches larger, and always ram the soil firmly.

"Rotted sod is the basis for the best soil for palms, and a fair proportion of stable manure (old) is a safe fertilizer, such a soil being mixed with various proportions of peat or sand, to make it lighter and more open for some delicate species.

"Insects are frequently troublesome if allowed to gain headway, various scale

insects doing the greatest damage, while red spiders and thrips may become established unless forcible syringing is persisted in. The most successful practice requires close observation on the part of the grower, and the prompt removal of all insects."

Eben Rexford adds that poor drainage is the reason for the tips of the leaves turning brown. To obviate this, he recommends putting in the bottom of each pot (pots should be deep) three inches of broken crockery, brick, or charcoal, covered with sphagnum moss to keep the soil from washing down. He would never water the plants, he says, until the surface of the soil is dry. To remove scale and mealy bug, he recommends applying fir-tree oil or lemon oil with a bristle brush, scrubbing each spot off with it. If the leaves turn yellowish, and no insects can be found, fungous disease may be at work, in which case apply copperdine once a month. It seems to me that your palm requires repotting, probably to a deeper pot—and don't forget the drainage. I do not find milk and water recommended for a bath for the leaves. Soapuds are mentioned.

Did You Order These Patterns?

We have money on hand from Walter's Falls, Mount Healey, and Priceville, sent for patterns. No name was signed. On receipt of this information we shall be pleased to forward the patterns.

The Scrap Bag.

FLOUR PASTE FOR FILLING CRACKS

Wheat flour mixed to a stiff paste with linseed oil is said to be an excellent filler for cracks in floors, etc., to be painted over. Fill the cracks with the paste, working it in well with a thin knife, and let dry thoroughly before painting.

TO KEEP CRANBERRIES.

Wash glass sealers well, and fill them with absolutely sound berries. Pour in cold water to overflowing, and seal. Keep in a cold place.

MENDING STOCKINGS.

Use a white china egg mending ball for black stockings, and a black one for white—solid ones—and you will find that much eye-strain will be prevented.

FRESH AIR WITHOUT DRAFTS.

A supply of fresh air can be obtained by placing a board about four or five inches wide under the lower sash, which is raised to admit it. The window is thus closed against rain, snow and drafts, but permits the fresh air to enter between the sashes.

TO MEND BROKEN CHINA.

Make a thick solution of gum arabic, and stir into it plaster of Paris to make a paste. Apply with a brush to the edges of the broken chinaware.

TO CLEAN CLOTHING.

Put a blotter under the spot to be cleaned, then rub well with a cloth dipped in chloroform. The blotter soaks up the chloroform and prevents its leaving a "ring."

WHEN MAKING RAG RUGS.

When making rag rugs, sew together only colors that will harmonize, mixing them well. For instance, for a room with brown or buff walls, use rags colored brown, and olive-green; you may add a little black and burnt orange, if you choose. For a "blue room," sew in turn, dark blue, light blue, dark blue, white,—and so on. Never use lace-curtains in a room with rag rugs. Choose instead, curtains of barred muslin or of scrim, or five-cent factory cotton, either stencilled or trimmed with heavy insertion or strips of flowered sateen in coloring to match the rest of the room.

WINDOW-BOX FOR WINTER.

Start a window-box now to place on a table in a good light. In it plant ferns and garden plants that will live on for a while, also slips of any kind. Have also a few pots of parsley for use during the winter.

POISON BOTTLES.

Stick pins through the corks of bottles in which poison is kept and there will be fewer mistakes.

HEMSTITCHING.

Rub white soaps on material from which threads are to be drawn for hemstitching. They can be drawn more easily.

CLEANING WINDOWS.

Use chamois instead of cloth when cleaning windows and less polishing will be required.

CLEANING CELERY.

When cleaning celery save the bleached leaves, the roots (scraped clean) and the outside stalks. Spread them on a clean tin and dry slowly in the oven. When dry powder them and pack in a glass jar to use for flavoring soups.

TO CLEAN TEA AND COFFEE POTS.

Do not wash them with soapsuds; wash out well after each using with clean, hot water and dry well. If they be of granite or agate ware and become discolored, nearly fill each pot with cold water, add one teaspoon borax and heat gradually to boiling point. Then rinse with hot water, wipe, and keep on back of range until perfectly dry.

STARTING A FIRE.

A contributor to "Good Housekeeping," says: "I once read a discovery advising campers to add a quantity of butter to their store of supplies, as it often proves invaluable in starting a fire of damp twigs, etc. I wondered if many knew what a blessing a small quantity of sugar can be in like circumstances. I have used sugar many times when the fire was all but gone, and have often revived a stubborn, smouldering fire in the kitchen range, and even in the fire-place. As sugar contains sufficient carbon to cause it to ignite, a bright flame appears almost instantly. It is entirely safe—and sometimes half a teaspoonful of sugar will suffice, so it is not as extravagant as it at first sounds."

WASHING KNITTED GARMENTS.

A writer in Pictorial Review gives this method: Wash the article in warm suds and rinse thoroughly. Then dry the garment by placing it in a pan in which a towel has been laid (to prevent possible rust), and put it in a warm oven. Turn and shake it occasionally; when dry, the article will be as light and fluffy as new. A knitted garment dried in this way always retains its shape, whereas if it were hung up to dry it would stretch.

EMBROIDERY HOOPS FOR DARNING.

Embroidery hoops help to make darning easy. Draw the material tightly in the direction of the rent or tear, fixing the hoops firmly, then darn.

STORING DAHLIAS.

The following method of storing dahlias is recommended by Mr. Calvin Titus, of Marblehead, Mass.: Put them in piles in the cellar, three or four feet from the furnace, and cover them over tightly with newspapers. This method has been tried by at least one person, who has been storing dahlias for twenty years. In trying this method, there was a loss of hardly two per cent. He had one thousand seven hundred roots; they were made into two piles with a dozen or so layers of newspapers carefully tucked in around the bottom, thereby making them as snug as possible, in order to prevent the circulation of air. Along toward spring, the newspapers were sprinkled with water, using a fine sprayer. This was to prevent the bulbs from shriveling. As a result, at the end of the winter they were plump, and usually had started just a little.—Suburban Life.

WINTER PROTECTION OF PLANTS.

Put a mulch of straw on leaves over roots that need protection, binding branches over to keep the leaves from blowing away. This should be done late in fall, just before winter sets in. Do not remove all of the covering at once in spring. Remove half of it and leave the rest until danger of heavy frost is past. Small trees and vines may be protected by binding straw or old sacking about them. Very tender vines may be cut from their support, stretched on the ground and covered with leaves, etc. In frosty winter weather the sun does more harm than the frost. It is repeated freezings and thawings that do the damage, and the protection prevents this.

Fashion Dept.

HOW TO ORDER PATTERNS.

Order by number, giving age or measurement as required, and allowing at least ten days to receive pattern. Also state issue in which design appeared. Price ten cents PER PATTERN. If two numbers appear for the one suit, one for coat, the other for skirt, twenty cents must be sent. Address Fashion Department, "The Farmer's Advocate and Home Magazine," London, Ont. Be sure to sign your name when ordering patterns. Many forget to do this.

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

Name
Post Office
County
Province
Number of pattern.....
Age (if child or misses' pattern).....
Measurement—Waist, Bust,

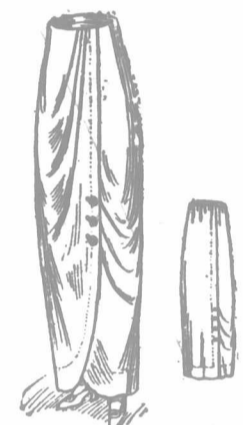
Date of issue in which pattern appeared.
Address: Pattern Dept., "The Farmer's Advocate and Home Magazine," London Ontario.



DESIGN BY MAY MANTON.
8023 Loose Coat for Misses and Small Women, 14, 16 and 18 years.



7997 Blouse in Balkan Style, 34 to 40 bust. 8002 Boy's Suit, 4 to 6 years.



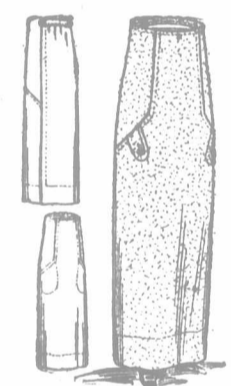
8006 Draped Two-Piece Skirt, 22 to 30 Waist.



8012 Boy's Box Plait Dress, 2 to 6 years.



DESIGN BY MAY MANTON.
7868 Semi-Princesse Dress for Misses and Small Women, 16 and 18 years.



8022 Four-Piece Skirt, 22 to 30 waist.



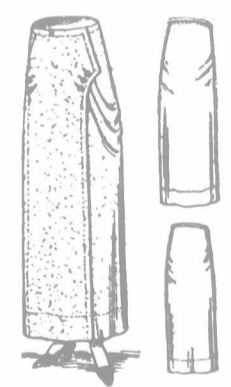
DESIGN BY MAY MANTON.
8007 Closed Bloomers, 22 to 32 waist.



8009 Child's Caps, 1, 2 and 4 years.



DESIGN BY MAY MANTON.
8026 Girl's Coat in Balkan Style, 8 to 14 years.



8025 Two-Piece Skirt for Misses and Small Women, 13 and 18 years.



7994 Pattern to Refoot Stockings, 8, 9 and 10 inches.



8005 Surplice Blouse, 34 to 42 bust.



DESIGN BY MAY MANTON.
7433 Princesse Combination for Misses and Small Women, 14, 16 and 18 years.



7964 Infant's Plain Slip, One Size. 7971 Infant's Bishop Dress, One Size.

The People of the Whirlpool.

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Chapter II.

MISS LAVINIA'S LETTERS TO BARBARA.

New York, "Greenwich Village,"
January 20, 19—.

"So you are glad that I have returned? I wish that I could say so also, in your hearty tone of conviction. Every day of the two years that I have been scattering myself about Europe I have wished myself at home in the house where I was born, and have wandered through the rooms in my dreams; yet now that I am here, I find that I was mixing the past impossibly

that are flowing steadily upward, east and west of the Park; while the people who were neither my financial nor social equals thirty years ago are dividing the year into quarters, with a house for each. A few months in town, a few of hotel life for 'rest' in the south, then a 'between-season' residence near by, seaside next, mountains in early autumn, and the 'between-season' again before the winter cruise through the Whirlpool.

"I like that name that your Martin Cortright gives to New York. Before I went abroad I should have resented it bitterly, but the two months since my return have convinced me of its truth, which I have fought against for many years; for even the most staid of us who, either of choice or necessity, give the social vortex a wide berth, cannot escape from the unrest of it, or sight of the wreckage it from time to time gives forth. It is strange that I have not met this Cortright, or never even knew that he shared your father's admiration of your mother, though owing to our school tie we were like sisters. Yet it was like her to regret and hold sacred my pain she might have caused, no matter how unwillingly. Did his elder sister marry a Schuyler, though not one of the well-known branch, and did he as a boy live in one of those houses on the west side of Lafayette Place that were later turned into an hotel?

"The worst of it all appears to me to be that the increase of wealth in the upper class is exterminating the home

to the Civil War, and then bravely sitting down and rolling their own hearts up with the bandages with which they busied their fingers. I suppose you are wondering if I lost a lover in those days, or why I have not married, as I am in no wise opposed to the institution, but consider it quite necessary to happiness. The truth is, I never saw but two men whose tastes so harmonized with mine that I considered them possible as companions, and when I first met them neither was eligible, one being my own father and the other yours! I shall have to list your queries, to be answered deliberately, write my letters in sections, day by day, and send them off packet-wise, like the correspondence of the time of two-shilling post and hand messengers. To begin with, I will pick out the three easiest:—

1. What is it in particular that has so upset me on my home-coming?
2. Do I think that I could break through my habits sufficiently to make you a real country visit this spring or early summer, before the mosquitoes come? (Confessing with your altogether out-of-date frankness that there are mosquitoes, a word usually dropped from the vocabulary of commuters and their wives, even though they live in Staten Island or New Jersey.)
3. Is the Sylvia Latham, to whom I have been a friendly chaperon during my recent travels, related to the Lathams who are building the finest house on the Bluffs? You have never seen the head of the house, but his initials are S. J.; he is said to be a power in Wall Street, and the family consists of a son and a daughter, neither of whom has yet appeared, although the house is quite ready for occupancy.

(My German teacher has arrived.)

January 22nd.

"1. Why am I upset? For several reasons, some of which have been clouding the horizon for many years, others crashing up like a thunder-storm.

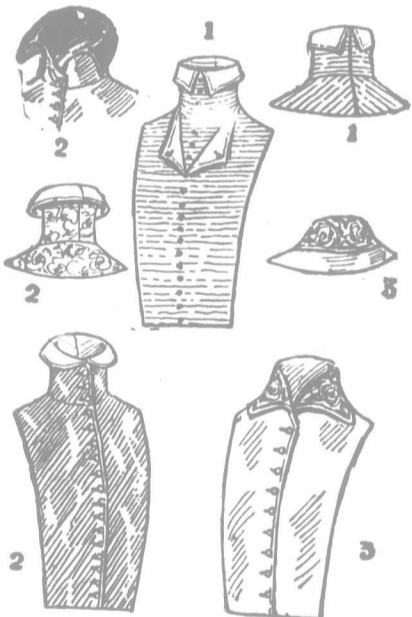
"I have for a long time past noticed a certain apathy in the social atmosphere of the little circle that formed my world. I gave up any pretensions to general New York society after my father's death, which came at a time when the social centre was splitting into several cliques; distances increased, New Year's calling ceased, going to the country for even midwinter holidays came in vogue, and cosmopolitanism finally overcame the neighborhood community interest of my girlhood. People stopped making evening calls uninvited; you no longer knew who lived in the street or even next house, save by accident; the cosy row of private dwellings opposite turned to lodging houses and sometimes worse; friends who had not seen me for a few months seemed surprised to find me living in the same place. When I began to go about again, one day Cordelia Martin (she was a Bleecker—your father will remember her) met in the street and asked me to come in the next evening informally to dinner and meet her sister, an army officer's wife, who would be there en route from one post to another, and have an old-time game of whist.

"I went, glad to see old friends, and anticipating a pleasant evening. I wore a new soft black satin gown slightly V in front, some of my best lace, and my pearl ornaments; I even wondered if the latter were in good taste at a family dinner. You know I never dwell much upon attire, but it is sometimes necessary when it is in a way epoch making.

"A butler had supplanted Cordelia's usual cordial waitress; he presented a tray for the card that I had not brought and said, 'second story front.' This seemed strange to me, as Cordelia herself had always come to the stairway to greet me when the door opened.

"The 'second story front' had been done over into a picturesque but useless boudoir, a wood floor polished like glass was dotted by white fur islands; the rich velvet carpets, put down a few years before, had in fact disappeared from the entire house.

"A maid, anything but cordial, removed my wrap, looking me and it over deliberately as she did so. I wondered if by mistake I had been bidden to a



DESIGN BY MAY MANTON.
7698 Collars and Vests for Women and Misses, Small 34 or 36, Medium 38 or 40, Large 42 or 44 bust.



7897 Plain Guimpe or Blouse for Misses and Small Women, 14, 16 and 18 years. 7987 Girl's Dress, 10 to 14 years.



The Twins.
Ian and Richard.

with the present, in a way common to those over fifty. Yes, you see I no longer pretend, wear unsuitable head-gear, and blink obliviously at my age as I did in those trying later forties. I not only face it squarely, but exaggerate it, for it is so much more comfortable to have people say, 'Fifty-five! Is it possible?'

"By the way, do you know that you and I share a distinction in common? We are both living in the houses where we were born, for the reason that we wish to and do not because we cannot help ourselves. Since I have been away it appears that every one I know, of my own age, has made a change of some sort, and joined the two streams

idea, to which I cling, single woman as I am; and consequently the middle classes, as blind copyists, also are tending to throw it over.

"The rich, having no particular reason for remaining in any particular place until they become attached to it, live in half a dozen houses, which seems to have a deteriorating effect upon their domesticity; just as the Sultan, with fifty wives that may be dropped or replaced according to will, cannot prize them as does the husband of only one.

"Your letters are so full of questions and wonderments about ways in your mother's day, that they set me rambolling in the backwoods of the sixties, when women were sending their lovers



Add water to milk—
You weaken the milk.
Add soft wheat to flour—
You weaken your flour.
Cheapens it too.
Soft wheat costs less—worth less.
Soft wheat flour has less gluten—less nutriment.
Your bread is less nutritious, sustaining, economical.
Soft flour has less strength, less quality gluten.
Giving less good things for your money and things less good.
Use Manitoba flour—Manitoba hard wheat flour.
Having everthing the soft stuff lacks.
FIVE ROSES is all Manitoba.
Without a grain of cheaper wheat.
Strengthen your food values.
Use FIVE ROSES.

Five Roses Flour

Not Bleached



Not Blended

LAKE OF THE WOODS MILLING COMPANY, LIMITED, MONTREAL

grand function—no, there were no visible signs of other guests.

"Not a word was spoken, so I made my way down to where the library living-room had been, not a little curious to see what would come next. Thick portieres covered the doorway, and by them stood the butler who asked my name. Really, for a moment I could not remember it. I was so startled at this sudden ceremony in the house of a friend, of such long standing that I had jumped rope on the sidewalk with her, making occasional trips arm-in-arm around the corner to Taffy John's little shop for molasses peppermints and 'blubber rubbers.'

"My hesitation seemed to add to the distrust that my appearance had in some way created. The butler also swept me from head to foot with his critical stare, and at the same moment I became internally aware that I had forgotten to remove my arctic overboots. Never mind, my gown was long, I would curl up my toes, but return to the dressing-room in full sight of that man, I whose forbears had outbowed Peter Stuyvesant, and, I fear, outdrunk him—never!

"Then the portieres flew apart, and facing a glare of bilious-hued electric light, I heard the shouted announcement of 'Miss Doormat' as I stumbled over a tiger rug into the room. I believe the fellow did it on purpose. However, it was very funny, and my rubber-soled arctics probably prevented my either coasting straight across into the open fireplace, or having a nasty fall, while the laugh that the announcement created on the part of my host, Archie Martin, saved me from an awkward moment, for from a sort of gilt throne-like arrangement at one side of the hearth, arrayed in brocaded satin gowns cut very low and very long, heads crimped to a crisp, and fastened to meagre shoulders by

English Hand-made Lace

MADE BY THE COTTAGERS OF BUCKINGHAMSHIRE.

This is the old-fashioned lace made on the cushion, and was first introduced into England by the Flemish Refugees. It is still made by the village women in their quaint old way.

Our Laces were awarded the Gold Medal at the Festival of Empire and Imperial Exhibition, Crystal Palace, London, England, for general excellence of workmanship.

BUY some of this hand-made Pillow Lace, it lasts MANY times longer than machine-made variety, and imparts an air of distinction to the possessor, at the same time supporting the village lace-makers, bringing them little comforts otherwise unobtainable on an agricultural man's wage. Write for descriptive little treatise, entitled 'The Pride of North Bucks,' containing 200 striking examples of the lace makers' art, and is sent post free to any part of the world. Lace for every purpose can be obtained, and within reach of the most modest purse.



COLLAR—Pure Linen
\$1.00.



DAINTY HANDKIE—70c.
No. 910.—Lace 1 1/4 in. deep.

Collars, Fronts, Pla-
stons, Jabots, Yokes,
Fichus, Berthes, Hand-
kerchiefs, Stocks,
Camisoles, Chemise
Sets, Tea Cloths, Table
Gentres, D'Oyilles,
Mats., Medallions,
Quaker and Peter Pan
Sets, etc., from 25c.
60c., \$1.00, \$1.50,
\$2.00, up to \$5.00 each.
Over 300 designs in
yard lace and insertion
for 10c., 15c., 25c., 45c.
up to \$3.00 per yard.

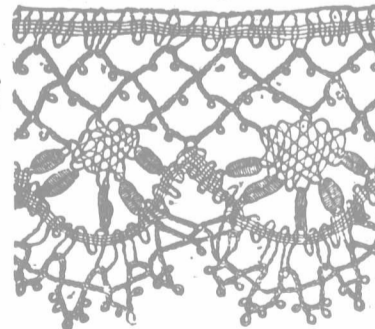
IRISH CROCHET

Mrs. Arm-
strong having
over 100 Irish
peasant girls con-
nected with her in-
dustry, some beautiful ex-
amples of Irish
hand-made
laces may be
obtained. All
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sold direct
from the lace-

Every sale, however small, is
a support to the industry



(1 1/4 in. deep.) STOCK—Wheel Design.
Price 25c. each. (Half shown.)



No. 122.—30c. per yard.

MRS. ADDIE ARMSTRONG,

ONLEY, BUCKS., ENGLAND.

Please Mention the Advocate

jewelled collars, the whole topped by a group of three 'Prince of Wales' feathers, Cordelia and her sister came forward two steps to greet me.

"Of course, I thought to myself, they are going to a ball later on. I naturally made no comment, and we went in to dinner. The dining-room was very cold, as extensions usually are, and the ladies presently had white fur capes brought to cover their exposure, while I, sitting in the draught from the butler's pantry, was grateful for my arctics. The meal was more pretentious than edible, —a strange commentary upon many delightful little four or at most five course affairs I had eaten in the same room. I soon found that there was no ball in prospect, also that Cordelia and her sister seemed ill at ease, while Archie had a look of suppressed mischief on his face, which in spite of warning signals broke forth as soon as the coffee being served, the butler left.

"One great comfort about men is that they do not take easily to being unnatural. Archie and I, having been brought up like brother and sister from the time we went to a little mixed school over in Clinton Hall, were always on cordial terms.

"Well, Lavvy," he began, 'I see you're surprised at the change of base here, and I'm going to let you in on the ground floor, if Cordelia won't. You see, Janet (she's not in town to-night, by the way) is coming out next month, and we are getting in training for what her mother thinks is her duty toward her, or else what they both think is their duty to society, or something else equally uncomfortable.'

"Archie!' remonstrated Cordelia, but he good-naturedly ignored her and continued: 'Now I want Janet to have a jolly winter and marry a good fellow when the time comes, but as we've got the nicest sort of friends, educated and

all that, who have travelled along with us, as you have, from the beginning, why should we change our habits and feathers and try to fly for a different roost?

"Archibald," said Cordelia, in such a tone that she was not to be gainsaid, "Lavinia, as a woman of the world, will understand what you refuse to: that it is very important that our daughter should have the surroundings that are now customary to the social set with whom she has been educated, and into which, if she is to be happy, she must marry. If she is to meet the right people, she must be rightly presented. All her set wear low gowns at dinner, whether guests are present or not, just as much as men wear their evening dress at night and their business suits in the morning. That we have kept up our old-fogy habits so long has nothing to do with the present question."

"Except that I have to strain my purse to bring up everything else to suit the clothes, as naturally gaslight, a leg of mutton, and two vegetables do not make a good foreground to bare shoulders and a white vest! And I'd rather fund the cash as a nest-egg for Jenny."

"Archie, you are too absurd!" snapped Cordelia, yet more than half inclined to laugh: for she used to be the jolliest woman in the world before the spray of the Whirlpool got into her eyes.

"As to meeting suitable people to marry, and all that rubbish," pursued Archie, relentlessly, "I was considered fairly eligible in my time, and did you meet me at any of the dances you went to, at the Assemblies at Fourteenth street Delmonico's that were the swell thing in those days? No; I pulled you out of an old Broadway stage that had lost a wheel and keeled over into a pile of snow opposite father's office, when you were practically standing on your head. You didn't fuss, and I got to know you better in five minutes than any one could in five years of this rotten fuss and feathers."

"That was purely accidental and I wish you wouldn't mention it so often," said Cordelia, flushing; and so the conversation, at first playful, gradually working toward a painful dispute, went on, until my faithful Lucy came to escort me home, without our having our game of whist, that excuse for intelligent and silent companionship."

.....

"January 25th.

"I dwelt on that little dinner episode, my dear Barbara, because in it you will find an answer to several questions I read between your lines. Since my return I find that practically all my old friends have flown to what Archie Martin called 'a different roost,' or else failing, or having no desire so to do, have left the city altogether, leaving me very lonely. Not only those with daughters to bring out, but many of my spinster contemporaries are listed with the buds at balls and dinner dances, and their gowns and jewels described. Ah, what a fatal memory for ages one has in regard to schoolmates! Josephine Poonsonby was but one class behind us, and she is dancing away yet."

"The middle-aged French women who now, as always, hold their own in public life have better tact, and make the cultivation of some intellectual quality or political scheme at least the excuse for holding their salons, and not the mere excuse of rivalry in money spending."

"I find the very vocabulary altered—for rest read change, for sleep read stimulation, etc., ad infn."

"Born a clergyman's daughter of the old regime, I was always obliged to be more conservative than was really natural to my temperament; even so, I find myself at middle life with comfortable means (owing to that bit of rock and mud of grandma's on the old Bloomingdale road that father persistently kept through thick and thin), either obliged to compromise myself, alter my dress, go to luncheons where the prelude is a cocktail, and the after entertainments to play cards for money, contract bronchitis by buzzing at afternoon teas, make a vocation of charity, or—stay by myself,—these being the only forms of amusement left open, and none offering the intimate form of social intercourse I need."

"I did mission schools and parish

visiting pretty thoroughly and conscientiously during forty years of my life,—on my return an ecclesiastical, also, as well as a social shock awaited me. St. Jacob's has been made a free church, and my special department has been given in charge of two newly adopted Deaconesses, 'both for the betterment of parish work and reaching of the poor.' So be it, but Heaven help those who are neither rich nor poor enough to be of consequence and yet are spiritually hungry."

"The church system is necessarily reduced to mathematics. The rector has office hours, so have the curates, and they will 'cheerfully come in response to any call.' It was pleasant to have one's pastor drop in now and then in a sympathetic sort of way, pleasant to have a chance to ask his advice without formally sending for him as if you wished to be prayed over! But everything has grown so big and mechanical that there is not time. The clergy in many high places are emancipating themselves from the Bible and preaching politics, history, fiction, local sensation, and what not, or lauding in print the moral qualities of a drama in which the friendship between Mary Magdalene and Judas Iscariot is dwelt on and the latter adjudged a patriot. I don't like it, and I don't like hurrying to church that I may secure my seat in the corner of our once family pew, where as a child I loved to think that the light that shone across my face from a particular star in one of the stained-glass windows was a special message to me. It all hurts, and I do not deny that I am bitter. Those in charge of gathering in new souls should take heed how they ignore or trample on the old crop!"

"So I attended to my household duties, marketing, take my exercise, and keep up my French and German; but when evening comes, no one rings the bell except some intoxicated person looking for one of the lodging houses opposite, and the silence is positively asphyxiating—if they would only play an accordion in the kitchen I should be grateful. I'm really thinking of offering the maids a piano and refreshments if they will give an 'at home' once a week."

"There is an inordinate banging going on in the rear of the house, and I must break off to see what it is."

.....

"January 30th.

"My Dear Child:—

"Your second question, regarding visiting you the coming season, was answering itself the other day when I was writing. Life here, except in winter, is becoming impossible to me. I have lost not only Josephus, but my back yard! The stable where they keep the pigeons has changed hands. Yes, you were right,—he did haunt the place, the postman says; and I suppose they did not understand that he was merely playful, and not hungry, or who he was, else maybe he was too careless about sitting on the side fence by the street. I could replace Josephus, but not the yard,—there are no more back yards to be had; their decadence is complete. I've closed my eyes for years to the ash heap my neighbor on the right kept in hers; also to the cast-off teeth that came over from the 'painless' dentist's on the left."

"When the great tenement flat ran up on the north where I could, not so long ago, see the masts of the shipping in the Hudson, I sighed, and prayed that the tins and bottles that I gathered up each morning might not single me out when I was tying up my vines in the moonlight of early summer nights."

"Josephus resented these missiles, however, and his foolish habit of sitting on the low side fence under the ailantus tree then began. Next, I was obliged to give up growing roses, because, as you know, they are fresh-air lovers; and so much air and light was cut off by the high building that they yielded only leaves and worms. Still I struggled, and adapted myself to new conditions, and grew more of the stronger summer bedding plants."

"Five days ago I heard a banging and pounding. Only that morning Lucy had been told that the low, rambling carpenter's shop, that occupied a double lot along the street to the southwest, had been sold, and we anxiously waited de-

Possessing exquisite freshness and a fullness of flavor not found in other teas

"SALADA"

CEYLON TEA—"Pure and Clean to a Leaf"
BLACK, MIXED OR } Sealed Packets Only
NATURAL GREEN } Beware of Imitations

Prize Lists now ready for

The National Live Stock Horticultural and Dairy Show

Exhibition Park :: TORONTO, ONT.

November 17 to 22

The exceptional advantages offered by the National Live Stock, Horticultural and Dairy Show are attracting horsemen, breeders, poultry fanciers, horticulturalists, fruit and vegetable growers from all parts of the Dominion.

The show is big enough for the finest that Canada can produce; the prizes are large enough to warrant competition by every breeder and exhibitor.

An efficient organization will see that the interests of every branch are properly met.

Enlarged facilities will provide ample space in every department.

Send entries in at once and try for a share in the \$30,000 of prize money.

Entries close November 5th

Reduced freight and passenger rates on all railways.

R. J. FLEMING, President

A. P. WESTERVELT, Manager,

502 Temple Building,

Toronto, Ontario

Phone Adelaide 3303.

Every Woman Should Write for our Fur Catalogue



It is not enough to pick a good fur, one must also select a good style. No fur house in Canada has achieved more distinction for dressy appearance in their fur garments than we have. We also maintain the reputation of using the very choicest selection of skins, and yet our prices are no higher than ordinary furriers charge. In order to cultivate a larger outside connection, we have issued a very beautiful and very expensive catalogue of which we want every woman who cares for dressy and durable furs to have a copy. Everything in fur a woman or a man may want is pictured, described and priced. It is especially published for those who cannot come to our store in person, and we assure those ordering by mail from this catalogue that they will be given the same guarantee of perfect satisfaction, or money refunded, that always goes with our fur garments.

A Copy is Reserved for You Postpaid on Receipt of Your Name and Address.

This catalogue is handsomely printed on high-grade coated paper; the pages are 8½ inches x 9½ inches; there are 94 half-tone illustrations, said to be the most perfect fur reproductions seen anywhere. The catalogue contains full information about ordering, shipping, refunding, etc., and states our full guarantee.

WRITE FOR YOUR COPY OF THIS BOOK TO-DAY.

Holt, Renfrew & Co.

Limited.
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WINNIPEG, 430 Main St. MONTREAL, 399 St. Catherine St. W.
TORONTO, Yonge & Adelaide QUEBEC, 35-43 Buede St.

WRITE TO THE NEAREST STORE



BY APPOINTMENT
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Crop Producers—Soil Builders.
A fair trial will prove

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Live agents wanted
everywhere.

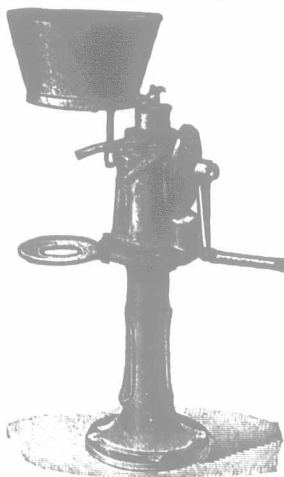
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Toronto, Canada

BOOTS—Save nearly 50% buying from
Factory direct. Agents Wanted.
Send postage 4c. for large illustrated list and
particulars. British Boot Co., 105 Portland Sq.,
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Please mention "The Farmer's Advocate."

THE PREMIER CREAM SEPARATOR

The Product of Experiment and Experience



In the manufacture of the Premier Separator special attention has been given to the following features:

- (1) Efficiency in skimming,
- (2) Quality of material,
- (3) Simplicity of construction,

with the result that the Premier is the most efficient and durable separator in the market to-day and is the easiest to operate.

A glance at our collection of testimonials will prove the all-round satisfaction which this machine is giving; a post card will bring you same. Write at once.

The Premier Cream Separator Company
St. John Toronto Winnipeg

velopments. We were spared long suspense; for, on hearing the noise, and going to the little tea-room extension where I keep my winter plants, I saw a horde of men rapidly demolishing the shop, under directions of a superintendent, who was absolutely sitting on top of my honeysuckle trellis. After swallowing six times—a trick father once taught me to cure explosive speech—I went down and asked him if he could tell me to what use the lot was to be put. He replied: 'My job is only to clean it up; but the plans call for a twelve-story structure,—warehouse, I guess. But you needn't fret; it's to be fireproof.'

"'Fireproof! What do I care?' I cried, gazing around my poor garden—rather I must have fairly snorted, for he looked down quickly and took in the situation at a glance, gave a whistle and added: 'I see, you'll be planted in; but, marm, that's what's got to happen in a pushing city—it don't stop even for graveyards, but just plants 'em in.'

"My afternoon sun gone. Not for one minute in the day will its light rest on my garden, and this is already written on it, and I see it in an arid mud bank. I wonder if you can realize, you open-air Barbara, with your garden and fields and all space around you, how a city-bred woman, to whom crowds are more vital than nature, still loves her back yard. I had a cockney nature calendar planted in mine, that began with a bunch of snowdrops, ran through hot poppy days, and ended in a glow of chrysanthemums, but all the while I worked among these I felt the breath of civilization about me and the solid pavement under my feet.'

"I believe that every woman primarily has concealed in the three round corners of her heart, waiting development, love of home, love of children, and love of nature, and my nature love has yet only developed to the size of a back yard.

"Yes, I will come to visit you at Oaklands gladly, though it's a poor compliment under the circumstances. The mother of twins should be gone to; but tremble! you may never get rid of me, for I may supplant Martha Cokle, the miraculous, in spoiling the boys."

February 1st.

"One more question to answer and this budget of letters will go to the post with at least four stamps on it, for since you have yoked me to a stub pen and begged me not to criss-cross the sheets, my bills for stamps and stationery have increased.

"Sylvia Latham is the daughter of your Bluff people. Her father's name is Sylvester Johns Latham, and he is a Wall Street broker and promoter, with a deal of money, and ability for pulling the wires, but not much liked socially, I should judge,—that is, outside a certain commercial group.

"Mrs. Latham was, at the time of her marriage, a pretty southern girl, Vivian Carhart, with only a face for fortune. In a way she is a beautiful woman now, has quite a social following, a gift for entertaining, and, I judge, unbounded vanity and ambition.

"Quite recently some apparently valueless western land, belonging to her people, has developed fabulous ore, and they say that she is now more opulent than her husband.

"They were pewholders at St. Jacob's for many years, until three seasons ago, when they moved from a side street near Washington Square to 'Millionsaire Row,' on the east side of the Park. There are two children, Sylvia, the younger, and a son, Carhart, a fine-looking blond fellow when I knew him, but who got into some bad scrape the year after he left college,—a gambling debt, I think, that his father repudiated, and sent him to try ranch life in the West. There was a good deal of talk at the time, and it was said that the boy fell into bad company at his mother's own card table, and that it has caused a chilliness between Mr. and Mrs. Latham.

"However it may be, Sylvia, who is an unspoiled girl of the frank and intellectual type, tall, and radiant with warm-hearted health, was kept much away at boarding-school for three years, and then went to college for a special two years' course in literature. She



"OTHELLO" TREASURE

The Wonder Worker

The latest production in Cast Iron Ranges on the Canadian Market. It is a Wonder Worker, and will keep a fire for days without replenishing the fire, and will save the price of the range in fuel. The most wonderful Baker ever put on the market.

Beautiful Design of a Semi-Plain Finish.

All the Nickel Parts removable for cleaning purposes.

Complete Top of Range is Burnished, no need for Black-leading.

Every Range has Thermometer.

Special Linings for Wood, Takes 28 in. Wood.

Illustration shows Glass Oven Door.

The Wonder Baker

No. 9-21 has 6-9 in Holes, Oven 22 x 20 x 13, Firebox holds 30-lb Coal, Large Ash Pan and Reservoir.

Patent Device for lifting the Front Covers for Broiling, Toasting, or putting in Fuel.

For Sale by Dealers in every locality. Write for Beautiful Illustrated Booklet and any information.

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The D. MOORE COMPANY, LIMITED

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Agencies:—MERRICK-ANDERSON CO., Winnipeg, Man. JOHN BURNS, Vancouver, B.C.

Baby's Own Soap



Leaves the skin—no matter how tender—soft—white—aromatized. Perfect for nursery and toilet. 4-13 Albert Soaps Limited, - Montreal.

BUST AND HIPS



Every woman who attempts to make a dress or shirt waist immediately discovers how difficult it is to obtain a good fit by the usual "trying-on-method," with herself for the model and a looking-glass with which to see how it fits at the back. "Hall-Borchert Perfection Adjustable Dress Forms" do away with all discomforts and disappointments in fitting, and render the work of dressmaking as once easy and satisfactory. This form can be adjusted to 50 different shapes and sizes; bust raised or lowered, also made longer and shorter at the waistline and form raised or lowered to suit any desired skirt length. Very easily adjusted, cannot get out of order, and will last a lifetime. Write for Illustrated Booklet containing complete line of Dress Forms with prices.

Hall-Borchert Dress Form Co. of Canada, Limited 45B Lombard St., Toronto, Ont.

had barely returned home when her mother, hearing that I was going abroad, asked me to take Sylvia with me, as she was deficient in languages, which would be a drawback to her social career.

"It seemed a trifle strange to me, as she was then nineteen, an age when most girls of her class are brought out, and had been away for practically five years. But I took her gladly, and she has been a most lovable companion and friend. She called me aunt to overcome the formal Miss, and I wished she were my daughter. I'm only wondering if her high, unworldly standpoint, absorbed from wise teachers, and the halo that she has constructed from imagination and desire about her parents during the years of her separation from them, will not embarrass them a little, now that she is home for good.

"By the way, we met in England last spring a young sub-professor, Horace Bradford, a most unusual young man for nowadays, but of old New England stock. He was one of Sylvia's literature instructors at Rockcliffe College, and he joined our party during the month we spent in the Shakespeare country. It was his first trip, and, I take it, earned by great self-sacrifice; and his scholarly yet boyish enthusiasm added hugely to our enjoyment.

"He spoke constantly of his mother. Do you know her? She lives on the old place, which was a farm of the better class, I take it, his father having been the local judge, tax collector, and general consulting factotum of his county. It is at Pine Ridge Centre, which, if I remember rightly, is not far from your town. I should like you to know him.

"I have only seen Sylvia twice since our return, but she lunches with me tomorrow. You and she should be fast

friends, for she is of your ilk; and if this happens, I shall not regret the advent of the Whirlpool Colony in your beloved Oakland as much as I do now.

"I am really beginning to look forward to my country visit, and am glad to see that some 'advance season' tops are spinning on the pavement in front of the house, and a game of marbles is in progress in my front yard itself, safe from the annoying skirts of passers-by. For you should know, dear Madam Pan, that marbles and tops are the city's first spring sign.

"By the way, I am sure that Horace Bradford and Sylvia are keeping up a literary correspondence. They are perfectly suited to each other for any and every grade of friendship, yet from her family standpoint no one could be more unwelcome. He has no social backing; his mother is a religious little country woman, who doubtless says 'riz' and 'reckon,' and he only has what he can earn by mental effort. But this is neither here nor there, and I'm sure you and I will have an interesting summer croon in spite of your qualms and resentment of the moneyed invasion.—Not another word, Lucy is waiting to take this to the post-box.

"Yours faithfully,

"Lavinia Dorman.

"P. S.—Josephus has just come back! Lean, and singed by hot ashes, I judge. I dread the shock to him when he knows about the yard!

(To be continued.)

BRAVE YOUTH.

Her Father (sternly)—"Young man, can you support my daughter in the style she's been accustomed to?"

Lover (briskly)—"I can, but I'd be ashamed to."

RED RING Certain-teed Roofing

Quality Certified—Durability Guaranteed

If you will investigate for yourself, you will find that Red Ring Certain-teed Roofing is giving satisfaction beyond all expectations—that it costs less and is easily applied. It comes in rolls of 100 sq. feet.

Here's Some Money-Saving Advice: Don't buy roofing unless this Red Ring Certain-teed Label of quality is attached. Don't send your money away from home—see the roofing before you buy it—at your local dealer's. He will surprise you with the low prices he can make. Any way, send for sample and free book, "How to Build for Less Money". Write to-day

The STANDARD PAPER CO., LIMITED, 109 George Street, Toronto, Ont.

MITCHELL SLIDE-EASY NECKWEAR PATENT QUALITY STYLE VARIETY

WHY SHOULD THE SHERLOCK-MANNING 20th CENTURY be called Canada's Biggest Piano Value?

Write to-day for catalogue and particulars THE SHERLOCK-MANNING PIANO CO., London, (No Street Address Necessary) Ont.— Please mention "The Farmer's Advocate."

If you have a "thick neck," our

GOITRE SURE CURE

is a most satisfactory and beneficial home treatment that acts both internally and outwardly on the goitre. It has cured many cases that were considered hopeless. Write for particulars and booklet "F."

We specialise in the unsatisfactory conditions of the Skin, Scalp, Hair, Complexion and Figure, and invite correspondence or personal consultation, which is confidential. When writing, describe trouble fully.

HISCOTT INSTITUTE
61 College St. Toronto, Ont.
Established 1892



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

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

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.

FOR Sale or Rent—200 acres near Niagara Falls; good soil; good location and good buildings; very desirable farm. E. Husband, Main street, Hamilton, Ont.

FARM For Sale—100 acres 1 1/4 miles from Seaford, Huron County; one of best farming districts in Ontario. Rich clay loam, all under cultivation. Two story frame house beautifully situated among ornamental trees. Bank barn, stone stabling, cement floors, well at both barn and house, never failing stream, medium sized orchard. One mile from country school and 1 1/4 from Collegiate Institute. Telephone and Hydro Electric Power pass the gate. Admirably adapted for grain, dairy or stock farm. An ideal country home. Apply; Miss Susie Govenlock, Seaford, Ont.

FOR SALE 123 acres, Wellington County, mile from Drayton, one hundred acres cultivated, tile drained, three acres maple bush, nineteen cleared pasture, water forced to barn, windmill, drilled well, ever flowing spring, well fenced, good orchard, eight acres wheat, eight roomed stone house, furnace, cistern, large bank barn, litter carrier, implement shed, all good. Must sell. Would exchange for suitable small property near good town. Write: Ed. Kells, Drayton, Ont.

FOUR Hundred Acre Farm for sale to close an estate. Five miles north of Woodstock, on gravel road, good buildings, spring creek, good wells, close to church and school. Splendid dairy farm. Stevenson Dunlop, Box 961, Woodstock, Ontario.

MARRIED Man wanted, good milker and plowman, abstainer and non-smoker preferred; wife to board extra man in summer, smaller no family; good wages, free house, milk, garden and summer firewood, good locality, open Nov. 20th. Send references. W. T. Davidson & Son, Meadowdale, Ont.

ONE Hundred ten acres level good land. Eighty cultivated. Good house, ten rooms, cellar, ample outbuildings. Two hundred apple, three hundred pear, three hundred peach, sixty plum, grapes, strawberries, all bearing thirty-two hundred. Catalogue. F. R. Crawford, Greenwood, Delaware, U.S.A.

ONE Hundred fruit and trucking farms. Short mild winters. List: F. R. Crawford, Greenwood, Delaware, U.S.A.

TO Rent on Shares—100-acre dairy farm; partly stocked; with two complete sets of good buildings; may be let as two farms; silos, alfalfa, good soil, also location. No applicant considered who will not furnish at least \$600 in stock. State age, experience, give reference and number in family. Box G, Farmer's Advocate, London, Ont.

WANTED—Good, all-round, experienced (married) man to work on a farm by the year. Ernest Houlton, Kerwood, Ont.

WANTED—Farm hand, single, handy with machinery and horses. Steady job to the right man. Give references. Alex F. McNiven, St. Thomas, Ont.

WANTED at once two young men to drive retail milk wagons and help milk. Must be reliable and strictly temperate. Wages \$300. References required, yearly engagement. Thorn, Hill Farm Dairy, North Bay.

WANTED. Permanent position on farm with view to purchase later on. Good experience. Box B, Advocate, London.

WANTED. A Trapper to take Englishman with him for winter, can cook, trap and shoot. Full particulars. Box B, Advocate, London.

MULES FOR SALE
A team of Mules will be sold by Public Auction on the farm of the undersigned on Thursday, Nov. 6th, 1913.
MIKE A. JANTZI - **BADEN P.O.**

Don't Read unless you wish to take 10 to 12 sheep on 1/2 shares.
Write: **J. FRANK YOUNG**
52 William St. - St. Thomas, Ont.

News of the Week

CANADIAN.

The Duke and Duchess of Connaught have returned to Canada.

Dr. R. P. Bowles, M.A., DD., LL.D., has been installed as President and Chancellor of Victoria University, Toronto.

Mr. Duncan Campbell Scott, the well-known Canadian poet, has been appointed by the Dominion Government as Deputy Minister for Indian Affairs.

BRITISH AND FOREIGN.

Prince Arthur of Connaught, and the Duchess of Fife, were married on October 15th.

The United States Congress decided not to recognize the election of Prov.-President Huerta of Mexico, and his Congress. Huerta has obtained a loan of \$2,600,000 in Paris.

A battleship, the "Queen Elizabeth," which uses oil instead of coal for her motive power, was launched at Portsmouth, Eng., on October 16th.

It has been semi-officially announced that President Wilson will fight for the abolition of discrimination in Panama tolls in favor of American coastwise vessels.

The first French aerial mail was dispatched from Villacoublay, France, to St. Julien-Beycheville, last week. Lieut. Andre Rouin was the aviator in charge.

Four hundred lives were lost by the mine explosion near Cardiff, Wales; on October 14th. The disaster was the most terrible that ever happened in Wales.

By the blowing up of the German airship, "L2," at Johannisthal, on October 17th, 28 men met death. The catastrophe is the worst so far in the history of aviation. The "L2" measured 500 feet from end to end.

Martin Glynn has been appointed Governor of New York in the place of William Sulzer, who was removed from office by the High Court of Impeachment.

We Know Not.

By John Francis Beckwith.

I have hung my guns on the corner rack,
And never again shall I follow
The call of the wild and the lonely track
Through the wood-clad mountain hollow.

The autumn had tinted the shelving side
Where leafless branches were sighing,
And birds of passage had gone with the tide
Of a summer in glory dying.

I had followed a trail—but it matters not,
It was bigger game I was hunting;
But the caveman in me fired a shot
At a little snow-white bunting.

He fell to the ground with broken wing,
A blood-stained fluttering feather,
And never, never again would he sing
O'er meadow and lilac heather.

I lifted him up, and I heard the call
Of his mate from a cluster of willows;
And I thought of the nest with its
Hungry small.

And the north-cold, wintry billows.
For never, never again would he fly
With buds and the young grass springing;
Wing-shot and still, on the nest he
Would lie—
And who would the food be bringing?

That's why I've hung my guns on the rack,
That's why I shall always remember
We do not know when the guns will crack
Nor the coming of life's December.

We know not the day till vesper rings,
And know not when summer is over;
Twilight may find us with broken wings
In a field of blossoming clover.

—Our Dumb Animals.

Here Are the Results of Our Contest No. 2



Bottom Rests on Floor

FOLDED

MAN BORN JUNE, 1871

Nine of the competitors were equally close, as will be seen by the results, and it has been necessary for us to split up the money and divide it among the nine. The following are the prizewinners:

First Prizes, \$20.00 Each.

Mr. Walter Lewis, Mooresville P.O., Ont., guessed June, 1871.
Mr. Gordon Thompson, West Flamboro, Ont., guessed June, 1871.
Mr. D. R. Kindree, Ridgetown, Ont., guessed June, 1871.

Second Prizes \$13.33 Each.

Mr. Theodore Stock, Tavistock, Ont., guessed March, 1871.
Mr. Hugh C. Miller, Attercliffe Station, guessed March, 1871.
Mr. H. Kyle, Woodham, Ont., R. R. No. 1, guessed April, 1871.

Third Prizes, \$8.33 Each.

Mr. Wm. H. Sherick, Ringwood, Ont., guessed April, 1870.
Mr. W. A. Townsend, Belwood, Ont., guessed June, 1870.
Mrs. H. J. Beeton, Fergusonsvale, Ont., guessed February, 1871.

All of the above prizewinners have received their cash, and all the bath tubs have been sent out.

We want good salesmen for a good article, and good commission paid. Man in the Bath Tub is on the "square." Watch for our next contest. We are forming a Selling Club, which will carry large cash prizes, and also commission on each tub sold, and want every Advocate reader who wants to join our Selling Club to write to us at once for full particulars.

The Folding Bath Tub Company, Limited
GANANOQUE, ONTARIO

"INTERNATIONAL POULTRY FOOD"

C. W. MONSON, one of the best known poultrymen in Indiana, says—"I heartily recommend INTERNATIONAL POULTRY FOOD, as I have tested it on my hens. They laid eggs all winter. No one around here did as well with their poultry, and my results were caused by INTERNATIONAL POULTRY FOOD."

GEORGE PETERS writes: Highland Grove, Ont., March 29. "International Stock Food Co., Limited: Dear Sirs,—I must say your Poultry Food is all that you claim. I never had my hens lay all winter before this and they have laid steadily."

INTERNATIONAL POULTRY FOOD is the "best poultry tonic in the world," as one admirer puts it.

It makes hens lay all the winter, because it keeps fowls strong and healthy.

It is a wonderful egg producer—prevents chicken cholera—cures roup—and is a prime fattener.

Eggs are way up. Now is the time to make money out of your hens. Buy INTERNATIONAL POULTRY FOOD and double your egg production.

For Sale by Dealers Everywhere. 76

We'll send you a free copy of our \$3,000 stock and poultry book. Write for it.

International Stock Food Co. Limited
TORONTO.

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.

MAMMOTH Imperial Pekin ducks, Silver Campines, Barred Rocks. The best at reasonable prices. L. J. Gibbons, Iroquois, Ont.

WHITE Wyandotte cockerels (Beulah Farm Strain, noted for egg-laying). Price \$2 each. J. L. Laughton, Osman, Ont.

When Writing Mention Advocate

OBLIGING HER.

The sweet young thing was being shown through the Baldwin locomotive works. "What is that thing?" she asked, pointing with her dainty parasol. "That," answered the guide, "is an engine boiler." "She was an up-to-date young lady, and at once became interested. "And why do they boil engines?" she enquired again. "To make the engine tender," politely replied the resourceful guide.

Kansas Teacher—Where does all our rain go to, anyway?
Stude—Into the hopper.
Teacher—What hopper?
Stude—Grasshopper.

Mail This Coupon Now

MESSRS. CATESBYS LIMITED (of London) TORONTO, ONTARIO Dept. "A," 119 West Wellington St. Please send me your new season's Style Book and 72 pattern pieces of cloth. I am thinking of buying a suit—overcoat.*

Name

Full Address

*If you only want overcoat patterns, cross out the word "suit." If you only want suitings, cross out "overcoat." London Farmer's Advocate. Coupon No. 1.

We Want Every Reader of the London Farmer's Advocate to Sign and Mail This Coupon

Mail it and get a free set of Catesbys' suit or overcoat patterns, and be convinced that it is possible to buy a better suit in London, England, for \$12.50 than could be bought in Canada for \$25.00.

You've heard that clothing is much cheaper and better in England—you know that English fabrics are the finest in the world.

Think, then, of the advantage of securing a suit made of the best English woollens, cut in the latest Canadian, New York or London style (whichever you prefer), and tailored to your individual measure, delivered to your door all duty and carriage charges prepaid, for about half what you would have to pay if you bought it in Canada.

Isn't it worth while, then, to get our patterns and see what there is in this offer? You can't lose anything by it, but you may save a whole lot.

All you need do is to fill in the coupon and mail it to our Toronto office. By return we'll send our latest Style Book, 72 pattern pieces of fine English suitings, a letter explaining our system of doing business, and a self-measurement chart that is so simple you can't go wrong in taking your own measure.

We will also send you 100 testimonials from Canadians who at first were as sceptical as you are, but who are now satisfied and regular patrons.



Write now. If you don't want to cut this paper, send a post card or letter. We'll mail book and patterns anyway. But to get them you must mention London Farmer's Advocate.

CATESBYS LIMITED

(Of Tottenham Court Road, London, England) 119 West Wellington Street TORONTO

THE "BURLINGTON."

This shows the most popular style of suit worn by well-dressed men in Canada. The materials used are specially selected for this shape of suit. \$12.50. Duty free and carriage paid.

The Ideal Home Light

The soft mellow rays of the Rayo Lamp

make it the best for all home uses. Read and sew without straining the eyes. Easy to clean and rewick. Safe. Economical. Stock carried at all chief points.

For best results use ROYALITE OIL.

THE IMPERIAL OIL COMPANY, Limited Toronto Montreal Winnipeg Vancouver Ottawa Quebec Calgary Edmonton Halifax St. John Regina Saskatoon



The Beaver Circle

Our Senior Beavers.

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

Tommy Gough in English

When first the new boy came to school, His name was not announced. The children knew how it was spelled, But not how 't was pronounced.

"'T is easy to decide," quoth one; "Of course it rhymes with rough. I'm positive, in my own mind, That that boy's name is Gough."

"You may be right," a second said, "'T is possible, although I rather think, if he was asked, He 'd say his name was Gough."

"'Pooh, pooh!" a loud voice called in scorn, "With nonsense let 's be through. That I am right, you must allow; We 'll call the new boy Gough."

"That 's as you please," replied a fourth, "While swinging on a bough; 'And yet I see no reason why His name should not be Gough."

But here the boy himself appeared, And said, with bashful cough: "Say, fellows, can I play with you? My name is Tommy Gough." —St. Nicholas.

The Twenty-first of October.

(A contribution by C. H. S.)

The month of October has come once more, and with it the memorable twenty-first, the anniversary of the battle of Trafalgar. It seems so long ago that some of us are very apt to forget all about it, but if we could only realize, to a certain extent at least, the impor-

SUGAR AS YOU LIKE IT

FINE Grain Sugar

To have every grain alike, size of dots at left, each one choice extra Granulated White pure cane sugar, get the St. Lawrence in bags, with red tag—200 lbs., 25 lbs., 50 lbs.

MEDIUM Grain

In the bags of St. Lawrence "Medium Grain" — blue tags — every grain is choicest granulated sugar, about size of a seed pearl, every one pure cane sugar.

COARSE Grain

Many people prefer the coarser grain. The St. Lawrence Green Tag assures every grain a distinct crystal, each about the size of a small diamond, and almost as bright, but quickly melted into pure sweetness.

Your grocer's wholesaler has the exact style you want—grain, quality and quantity all guaranteed by

St. Lawrence Sugar Refineries Limited, Montreal.



LEARN ALL ABOUT A GAS ENGINE

Practical instruction on Stationary and Portable engines for Farm and Factory use. Automobiles (Shopwork and Driving lessons) Motor Boats. Write today for illustrated Booklet and full particulars. Educational Department

Y.M.C.A. BROADVIEW BRANCH TORONTO

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The Canada Business College Chatham, Ontario

37 years without change of management, and Canada's most up-to-date business school. 480 students placed in 12 months is our latest record. Get a copy of list if interested. Handsome Catalogue E, giving particulars, is free. If you cannot come to Chatham, take our home training, of which Catalogue F gives particulars.

ADDRESS: D. McLACHLAN & CO., Chatham, Ont.

For Best Results— HARAB Fertilizers The Harris Abattoir Co. Toronto

Furniture at Factory Prices
Sent Freight FREE to any Station in Ontario

Write for our large
Photo-illustrated
Catalogue
No. 7

Adams
Furniture Co., Limited
TORONTO, ONT.



Buy this oven-tested flour

Your oven will certainly produce more bread and better bread as a result of our oven test.

From each shipment of wheat delivered at our mills we take a ten-pound sample. It is ground into flour. We bake bread from this flour. If this bread is high in quality and large in quantity we use the shipment of wheat from which it came. Otherwise, we sell it.

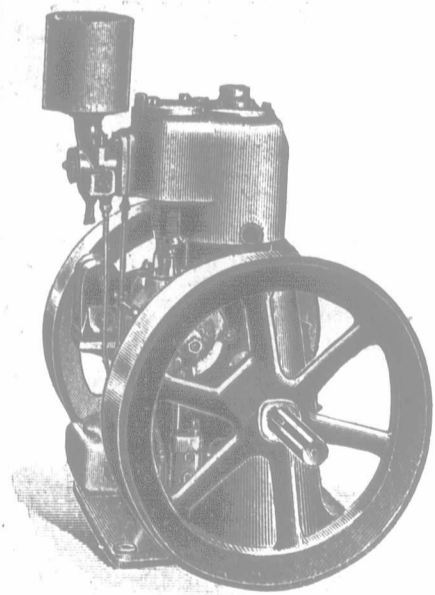
PURITY

The baking quality of flour sold under this name is therefore an exact certainty. Buy and benefit!

"More Bread and Better Bread" and
"Better Pastry Too" 527

A LEADING firm of contractors (name and address sent on application) sent an expert to the Toronto Fair last month to buy the best gasoline engine on the ground. After careful examination and comparison with others he bought a Lister 7 h.-p. Engine, because he found:

THE LISTER GASOLINE ENGINE



The most reliable and best value.

It starts instantly—every time—no batteries to run down.

Self-oiling—no oil cups to fill.

Self-regulating at all loads. No attention needed when at work.

Fitted with phosphor-bronze bearings throughout.

No babbitt metal to wear and run out.

In a word, the best quality engine at the fair.

We have sold over 50,000 Melotte Cream Separators in Canada during 15 years. Ask any Canadian user how he likes the Melotte.

Well—we guarantee the Lister as good an engine as the Melotte is a cream separator. We can't say more.

CATALOGUES, PRICES AND TERMS FREE FROM

R. A. LISTER & CO., Limited

58-60 Stewart St.,
TORONTO, ONT.

197 Princess St.
WINNIPEG, MAN.

tance of this glorious achievement in shaping the destiny of our Empire, we might think otherwise.

Military critics say that Napoleon Bonaparte was the greatest military genius who ever lived. He commanded a powerful army, and had overswept, gradually, country after country, until, no doubt, the people of that time thought he would, like Cæsar of old, control the world. There was one country, however, which he had not mastered, and that was Britain. He believed, to use his own words, "If we can master the English Channel for six hours, we are masters of the world." There was Britain, the metropolis of a far-flung Empire, with Napoleon ready to pounce upon her with his seething swarms. Her destiny was hovering in the balance.

The hope of Britain, as it is to-day, was her fleet, and it did not fail her in her hour of peril. The French fleet was not even permitted to reach the English Channel, but was utterly crushed on a foreign sea. Lord Nelson, who commanded the British fleet, did not live to reap the benefits or to share the glory of his brilliant achievement. On his cold brow there was placed a wreath of human fame which only the end of time can undo. He has left us a glorious inspiration, as his life was not spent in satisfying a ruthless ambition, in a war of subjugation and conquest, but in the simple performance of duty. It devolves upon us, therefore, who have inherited that which Nelson died to defend, to merit this noble heritage, and to remember in gratitude his gallant achievement upon each anniversary.

Lastly, let me repeat his dying signal, the message which the motherland conveys to her sons all over the world to-day, "England expects that every man will do his duty."

Senior Beavers' Letter Box.

Dear Puck and Beavers,—I saw my first letter in print so I thought I would write again.

The authors I like best are Horatio Alger, Jr., G. A. Henty, and Nisbet, writers of perils and adventures, and scout books. Some of the books I have read are: "The Young Musician," "Swiss Family Robinson," "Sir Robert Baden-Powell and the Boy Scout," and the "Army Airships," and a great many others, too numerous to mention. I get books out of the Sunday-school Library every Sunday I go. I worked out instead of going away for holidays. The threshers came on Friday night, but will not start to thresh till Monday because of a big thunderstorm. It is raining now, but not very heavy, but I cannot go to Sunday-school. I am going to run the blower on the separator on Monday. I wish some of the Beavers about my age would write to me, because I am sure I would write back. As my letter is getting rather long, I will close, wishing the Beaver Circle success.

FLOYD JOHNSON (age 11, Sr. IV).
St. George, Ont.

I hope you managed the blower all right, Floyd. I like to see boys interested in the farm work.—Puck.

Dear Puck and Beavers,—Well, Puck, I have been a long time thanking you for the book I received as a prize. Thank you for it. The days have slipped by so quickly, I forget all about writing till the day is gone. The book was just what I wanted. I have hunted up the names of several flowers already.

We have taken "The Farmer's Advocate" for about a year. We got sample copies before we took it, and I got acquainted with the Beaver Circle. We all like this paper fine.

I have one brother, Cyril, he is two years older than I am, and has passed Entrance. I am in the Entrance class.

For pets I have a pair of rabbits, a kitten, a colt, and two calves. The rabbits are pure white, without any markings. They run about the place free, but stay around the barn most of the time. Their names are Snowball and Pink Ears, but they are so much alike you can scarcely tell them apart. They are about three months old. The kitten's name is Molly. She is very playful, and plays ball and hide-and-seek with me.

I am very fond of dumb animals, and I do not see why people will be cruel

to them. I was in Riverdale Park, Toronto, and enjoyed seeing the animals. There was a big elephant which claimed the first attention. The keeper was not there, or I might have had a ride on its there.

back. There were all sorts of animals. Say, Puck, when are you going to start a new competition?

I am very fond of reading books. We have a public-school library, and I have read nearly every book in it that I find fit. My favorite books are, "Beautiful Joe," "The Red Fox," "Anne of Green Gables," "Mother Carey's Chickens," and "The Elsie Books," also a lot of others, such as "A Very Naughty Little Girl," "Black Beauty," and "Rebecca of Sunnybrook Farm." But I have read many, many others. I think I like the dumb animal stories best. I do not say that there are not plenty of good books, however. Have many of the Beavers read "Anne of Green Gables," and sequel; also "Mether Carey's Chickens"? Aren't they funny in parts! "The Elsie Books" are very sad in parts, but so interesting. Don't you think there are a lot of them, Puck? I have not read them all yet. I don't care much for fairy tales. Anderson's and Lamb's fairy tales are pretty good, though.

I am very fond of music as well as books. I do not mean practicing, for, though I like it, it tires me soon.

Say, Puck, we are going to put our rabbits in the barn loft where they can eat hay. Would you give them cabbage leaves? What else besides that and the hay would you give them?

I think I had better close. Say, a few days ago I saw a pale, bluish-purple butterfly, quite small. Have you seen any? I will say good-bye.

LUCILE GLASS (age 11, Sr. IV).
Thorndale, R. R. No. 3.

We are going to give you another competition just as soon as all the Garden Competition letters are in, Lucile. . . . I am so glad you like animals. You may give your rabbits some cabbage leaves, also carrots, clover, almost any kind of vegetables, in fact.—P.

Dear Puck and Beavers,—I will tell you about my vacation. I went to three picnics. One of them was Oakdale picnic, and there was a very large crowd. They had a merry-go-round, and I was on three times. Going on the horses is most fun, but they were nearly always packed in the afternoon so that you could hardly get on. They had a swing for the little children, and also some of the best speakers around the country. There were Scotchmen in the plaids, with the bagpipes, and little girls dancing, and people from away off singing and telling stories.

There were races, and young men's hop, step and jump; young men's high jumping, and ladies' hitching contest. The women in this had to harness the horses and drive around in a circle, and the one that got back first got first prize. There was a baby show, and the young men of Oakdale and Oil City had a base ball team against each other, and Oil City won. They had Brigden Silver Band playing, and the people who went before dinner took their lunch, and each family ate by itself. All taken together, it made a happy day, and I was very tired when I got home.

I said I was going to tell about my vacation, didn't I? And I have only told about the nicest day of it. The rest must be omitted, as my letter is getting too long.

VERA GETTY (age 11, Book IV).
Croton, Ont., R. R. No. 2.

Dear Puck and Beavers,—I have just finished reading the letters of your Circle, and enjoy reading them. I am going to tell you about our Sunday-school class.

There are six scholars in our class. We have a nice teacher; her name is Miss Patterson. We have our class up in the gallery. We named it the "Bound-to-Win Club." Our button is gold, with a white center. We started a contest in April, and it lasted till the end of June. Our colors were blue and red. At the end of the month, whoever had the least number of verses memorized would have to serve supper. Wishing the Circle every success, I remain,

GLADYS CLARK (age 13).
Ravenswood, Ont.

Dear Puck and Beavers,—We have taken "The Farmer's Advocate" for a number of years, and I like to read it, especially the Beaver Circle. I think it is a true title, because it is a Circle of busy people who own the name. I have stopped school and am working on a farm. We have sixty hens, six horses, sixteen head of cattle, and six pigs. For pets, I have a dog and a black calf. The dog's name is Buff, and the calf's name is Darkie. Will you please let me join your Beaver Circle, and I will tell about my life in England? I am an English girl. I have not the privilege that many young people have of telling mother and father, brother or sister, everything, as I have not seen them for twelve years, and they are in England. I have seen more of the world than many of my age, which is fourteen. I will close with a few riddles.

A room full, a house full, and you can't catch a spoonful? Ans.—Smoke.

What goes up white and comes down yellow? Ans.—An egg.

As I was going over London bridge I met a cart full of people, but there wasn't a single one in it? Ans.—They were all married.

RUTH LEGGE (age 14).

Plainville, Ont.

Dear Puck and Beavers,—I have never written to "The Farmer's Advocate" before, and I thought I would like to send you a letter and tell you about our holidays. We went to Hamilton and stayed a week. Our sister met us at the station and took us to her boarding-place, and on Monday one of the other boarders took us out, and we went up the incline to the roller rink. Well, I guess it would take too long to tell you all the fun we had. Wednesday we went to Toronto on the boat, and while we were over there we went to T. Eaton's and had a big look there.

For pets I have five bantams. My brother has five. He is eight years old and I am twelve. I am in the Third book. I will close now because I am tired. STANLEY MERRITT.

Tweedside, Ont.

Dear Puck and Beavers,—This is my second letter to your Circle, and as I saw my first one in print, it gave me courage to write again. I have just finished reading Gladys Clark's letter, and wish she would write to me, as I am also interested in farm work. I passed into the Senior Fourth book at holidays. We are going to have the same teacher this year as we had last. Her name is Miss Orr, and we all like her fine. Well, as my letter is getting rather long, I will close. Hoping that great w.-p. b. is not hungry when this arrives, and wishing the Circle every success, I remain an interested reader.

JEAN E. MIRY (age 13).

Foxey, Man. Isle, Ont.

Beaver Circle Notes.

Louise Shales wishes to know what is the age limit for the Beaver Circle; also if our Circle has a badge. The age limit is sixteen. There is no badge for the Circle, except the badge of working busily "at work, and at play," as Beavers should. We have thought at times of having Beaver badges, but there are so many Beavers that no one could find time to attend to the badges, so the idea had to be given up.

Honor Roll.—Lloyd Kennedy, Josie Readman, Mary Roth.

Riddles.

Why are twice ten and twice eleven the same? Ans.—Because twice ten are twenty, and twice eleven are twenty, too (two).

What is the difference between a fashionable young lady and a butcher? Ans.—One dresses to kill, and the other kills to dress.

Why is a chicken's neck like a dinner-bell? Ans.—Because it is wrung for dinner.—Sent by Louise Shales.

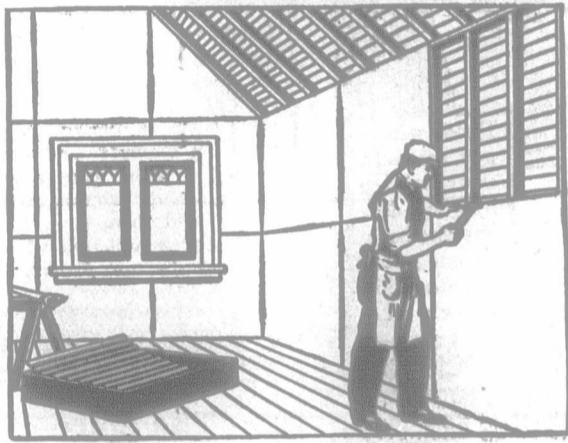
Why do we look over a stone wall? Ans.—Because we can't look through it.—Sent by Mary Roth.

STOP WASTING MONEY by slaughtering your young calves! Veal them up—beef them or raise them to replenish your dairy herd, by using

Caldwell's Cream Substitute Calf-Meal

It contains Linseed, Wheat, Oats, Corn, Locust Bean, Pea and our famous Molasses Meal. We print the ingredients of our Calf-Meal as well as our guarantee on a tag and attach to every bag. We have nothing to conceal. Knowing that competitors cannot give you a meal with the sum total of the nutritious qualities possessed by our Cream Substitute, we lay bare the facts. It will pay you to use it. If your Feedman doesn't stock it, write direct to us.

The Caldwell Feed Co., Limited, Dundas, Ontario



Applying Wall Board to Studding

For a Better House--At Lower Cost--In a Month Less Time--Use

BISHOPRIC WALL BOARD AND SHEATHING

Bishopric Wall Board is made in sheets 4 x 4 feet by imbedding dressed laths, under 500 lbs. pressure, in one side of a sheet of hot Asphalt-Mastic and surfacing the other side with sized fibre-board. It comes to you in crates of 16 sheets, ready to nail on the wall, and any handy man can put it on in far less time than skilled workmen can apply lath and plaster.

Bishopric Wall Board goes on DRY, so that you can move into the house the day it is finished, without weeks of waiting for it to set and dry.

On account of the lath (and Bishopric is the only Wall Board made with lath) it makes a flat, rigid, substantial wall. On account of the patented Asphalt-Mastic it makes a moisture-proof, rat- and vermin-proof, fire-resisting wall, warm in winter and cool in summer. On account of the surface of sized fibre-board it makes a wall that is easily painted or papered.

The first cost of Bishopric Wall Board is less than that of lath and plaster—it never falls off, so costs nothing for repairs—and it saves on the fuel bills every winter.

If you are building or remodeling, write us—a post card will do—it will bring you information of real dollars-and-cents value. Address Dept. "L."

Working Plan for Bishopric Model Home.—Send six cents to cover cost of mailing to our office in Ottawa, and we will send you architectural plan for building, etc.

Bishopric Stucco Board, made specially for stucco work. Write for sample.

BISHOPRIC WALL BOARD CO., LIMITED

Room 44, Canada Life Building

OTTAWA, ONTARIO

SHIP US YOUR CREAM

WE Supply cans and pay all express charges within a radius of 100 miles of Berlin. Send a statement of each shipment. Pay every two weeks.

WRITE FOR FULL PARTICULARS

THE BERLIN CREAMERY CO.

BERLIN, CANADA

Imp. Stallions CLYDESDALES Filies Imp.

To the Clydesdale men of Canada we wish to say our 1913 importation are home, and we have some of the best show material in this country. More size more style, more quality, more character and better breeding than ever before, in both stallions and fillies. JOHN A. BOAG & SON, Queensville, Ont. Electric Cars every hour

KNITTING MACHINES



Home knitting is quick and easy with any one of our 6 Family Knitting Machines. Socks and Stockings, Underwear, Caps, Gloves, Mittens, etc.—Plain or Ribbed—can be knitted ten times as fast as by hand, and for far less than they cost ready-made.

A child can work our machine. Besides your own family work, you can make good money knitting for others.

6 Illustrated Catalogue—No. 622—FREE.

Agents wanted in every locality for typewriters and home-money-maker knitting machines.

Address—

GREELMAN BROS.

Box 632, Guelph, Ont.

SWEET MILK WANTED

Shippers required to send milk daily in eight gallon cans to Toronto. Good prices. Write for particulars to:

S. PRICE & SONS LTD., Toronto

T. CHEESE FACTORY PATRONS

When your factory closes, we want your cream. We supply two cans free. Pay all express charges. Remit twice each month. Test each can received. References—Dun's or Bradstreets, Toronto. Write for cans and give our creamery a trial.

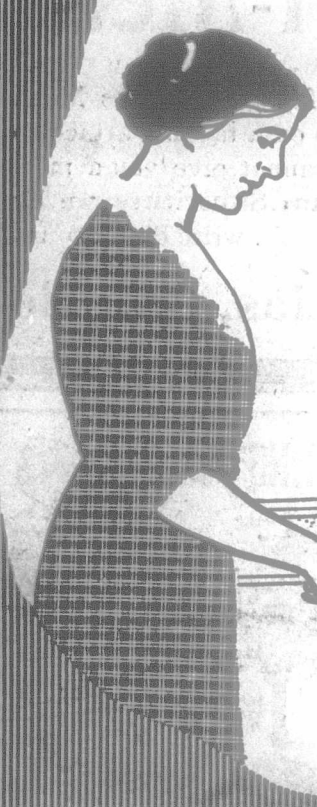
TRELEAVEN & RANTON, Palm Creamery, Palmerston, Ont.

Cream Wanted

Highest markets—unlimited demand. Toronto consumes daily the milk and cream from over 14,000 cows, and the butter from over 70,000 cows. We need your cream and your neighbors'. Write:

TORONTO CREAMERY CO., Limited Toronto, Ontario

The toast door is so roomy and well arranged that a rich, juicy steak or nice toast can be done to a turn without the usual tiring stooping necessary with common ranges. This and many other similarly convenient features increase the pleasures of kitchen work and should be fully looked into before you buy your range.



385

Pandora Ranges are sold everywhere by good dealers who back up our guarantee on this splendid range—McClary's

McClary's Pandora Range

London Toronto Montreal Winnipeg Vancouver
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Central Business College

STRATFORD, ONT.

The best Business Training School in Western Ontario; in affiliation with the ELLIOTT BUSINESS COLLEGE, TORONTO, the best Commercial School in that City. Write either School for free catalogue and learn what we can do for you. Enter at any time.

We place graduates in positions

Crate-Fattened Poultry

We are open to receive shipments of crate-fattened poultry of all kinds. Highest market prices paid. Write us for quotations.

HENRY GATEHOUSE

348-350 West Dorchester Street, MONTREAL

FISH, POULTRY, EGGS, GAME and VEGETABLES

Gossip.

There has already been shipped to the United States a carefully-selected batch of twenty-eight dairy Shorthorns. They were purchased by Professor Thomas Shaw, for the great railway magnate, J. J. Hill, of St. Paul, Minn. The male progeny of these imported dual-purpose cows are to be placed with farmers along the lines of railway with which Mr. Hill is connected. Professor Shaw has been the champion in the States of the dairy Shorthorn. He strongly believes them to be the class of cattle that farmers should have in that country; he considers them the nearest approach to the ideal dual-purpose animal, and he considers there is certain to be a great demand in the States for animals of the breed. As Argentina, South Africa, Canada, etc., have also this summer been customers for dairy Shorthorns, breeders in Great Britain may well look forward to a good foreign trade.—G. T. B.

Trade Topic.

The Ontario Wind Engine and Pump Company, Limited, whose advertisement runs in these columns, have this year put on the market an internal combustion engine, so designed that the entire mechanism is placed in a cam-box 12 inches in diameter and weighing about 50 pounds. This consolidation of vital parts in a detachable box makes it possible to send them to a factory or branch house to be adjusted where the work can be done by an expert, saving time of going to the owner's place, and extra expenses which long journeys cause. This is real economy. Look up the advertisement and enquire about these engines.

The Spice of Life.

A lazy man, regarded as the village fool, was asked to lend a hand with a piece of farm work. "What'll you pay?" he asked.

"I'll pay what you're worth," answered the farmer.

The "fool" scratched his head a minute, then announced decisively: "I'll be darned if I'll work for that!"

In a certain school, a teacher was giving his class reading. It came to a part about a woman drowning herself. The teacher asked a boy to read again. He began:

"She threw herself into the river. Her husband, horror-stricken, rushed to the bank—"

The teacher said: "Now, tell me why the husband rushed to the bank?"

Quick and sharp came his answer: "Please, sir, to get the insurance money."

"Well, George," said the president of the company to old George, "how goes it?"

"Fair to middlin,' sir," George answered. And he continued to currycomb a bay horse. "Me an' this here hoss," George said, suddenly, "has worked for your firm sixteen years."

"Well, well," said the president, thinking a little guiltily of George's seven-dollar salary. "And I suppose you are both pretty highly valued, George, eh?"

"H'm," said George, "the both of us was took sick last week, and they got a doctor for the hoss, but they just docked my pay."

THE HEN A STRANGER.

"Of the great industries of earth, we have left in the race for first honors only wheat and poultry—one the acknowledged staff of life, the other known to the world chiefly as the rude awakener of the suburbanite's dream of an easy road to fortune.

"Of all animal industries," says Milo Hastings in the Canadian Thresherman, "poultry production is the best adapted to intensive agriculture. Cattle-growing is but one step above the chase, and is developed in new and sparsely-settled countries. Australia has 2.78 cow brutes per capita; the United States 1.22; England .28; Japan practically none.

"Some day we will forget the taste of pork, as we have forgotten the taste of venison, and beef will become a by-product of the dairy business, but the hen will stay with us until she is relieved by the analytical chemist, and eggs are made at Niagara Falls."



PERFECTION Seed & Grain Separator

(Patented 1901)

The best and latest mill for Cleaning and Grading all kinds of Seed and Grain.

See nearest Agent or write for Catalogue to THE TEMPLIN MFG. CO., FERGUS, ONTARIO




PLAYTIME

MAKES LIFE EASIER

To lessen household drudgery and make life easier for housewives is the basis on which our establishment is founded, and the growth of our business is due entirely to the fact that we have accomplished that object.

The patented and exclusive features that make the "Playtime" superior didn't "just happen." They are the results of years of experience and study. In OUR opinion it is the best washing machine ever made for farm use. We would like YOUR opinion after a careful examination of its merits. See it at your dealer's or send to us for full information.

Cummer-Dowdell Limited,
Hamilton - Ontario.



DEPARTMENT OF MILITIA AND DEFENCE.

Auction Sale of Condemned Ordnance Stores.

UNDER the direction of the Honourable the Minister of Militia and Defence, a public auction will be held on November 3rd, 1913, at the Ordnance Depot, London, Ont., for the sale of certain condemned ordnance stores, comprising over 4,000 lbs. old brass, 13,500 lbs. old wrought iron, 400 lbs. scrap steel, 350 lbs. old leather, and various other articles comprising other old metals, old canvas, condemned tents, etc., etc.

Captain K. C. Folger, S. O. O., London, will furnish any other information which may be required.

Articles purchased must be removed within 48 hours after the sale.

Sale at 10 o'clock A. M.

Terms, cash.

EUGENE FISET, Colonel,
Deputy Minister

Department of Militia and Defence,
Ottawa, October 7, 1913.

Newspapers will not be paid if this advertisement is inserted without authority from the Department.

STEEL TANKS



All styles and sizes. Ask for catalogue No. 24.

THE HELLER - ALLER COMPANY
Windsor, Ontario

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.

FARM HELP

Young men for Ontario Farms
Apply:—

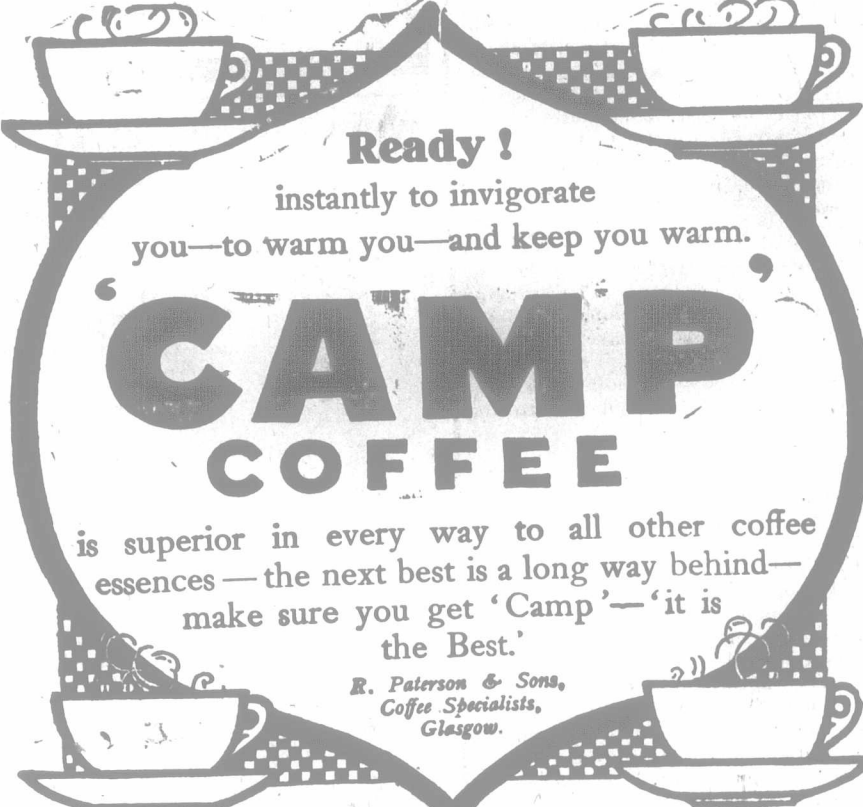
BOYS' FARMER LEAGUE
Drawer 126 - WINONA

Please mention "The Farmer's Advocate."



It's on the job twenty-four hours a day, three hundred and sixty-five days a year—any time, anywhere—work days, play days—from farthest North to farthest South—on well-made roads or unbroken trails—the Ford is always "fit and ready."

Six hundred dollars is the new price of the Ford runabout; the touring car is six fifty; the town car nine hundred—all f.o.b. Ford Ontario, (formerly Walkerville Post Office) complete with equipment. Get catalogue and particulars. Ford Motor Company of Canada, Limited, Ford, (formerly Walkerville,) Ont.



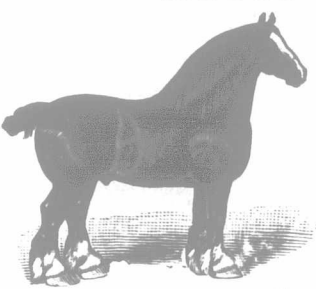
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instantly to invigorate
you—to warm you—and keep you warm.

CAMP COFFEE

is superior in every way to all other coffee essences—the next best is a long way behind—make sure you get 'Camp'—'it is the Best.'

*R. Paterson & Sons,
Coffee Specialists,
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Great Auction Sale of
BROOD MARES, FILLIES and FOALS
Clydesdales
AND
Shires
Imported pedigreed and guaranteed as represented.



Annual sale at Ormsby Grange Stock Farm, Ormstown, P. Que.
Catalogue, giving full particulars as to colors, ages and pedigrees, in course of preparation, and will be sent on application. Sale at 10 o'clock a.m. on
Friday, November 7th, 1913
S. END POST CARD TO
D. McEACHRAN :- :- Ormstown, P. Que.

When writing advertisers please mention this paper.

Questions and Answers.

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

Miscellaneous.

To Register.

I have a young filly that I would like to have registered. The dam is a registered Standard-bred; also the sire. Where would I write to have her registered?
SUBSCRIBER.

Ans.—Write "The Accountant," National Live-stock Records, Ottawa.

Setting out Fires.

If a man sets out a fire after the first of September, is he responsible if it does his neighbor any harm?
R. L. Ontario.

Ans.—It is highly probable that he is. For further information, we would refer you to Ontario Statutes, 1912, Chap. 62, and 1913, Chap. 64.

Woods Plant.

Enclosed, find a leaf of a plant I found in the bush. I would like to know, through your valuable paper, the name of it, and whether it is of any value?
J. A. S.

Ans.—The enclosed leaf is from the plant foam-flower, or false mitrewort (*Tiarella cordifolia*). The plant is valueless, except for its beauty.

Renewal of Chattel Mortgage.

A took a chattel mortgage from B, drawn Oct. 19, 1911. A gave a statement and renewal Sept. 28, 1912, and a statement and renewal Oct. 9, 1913. Is it void, not being renewed before Sept. 28, 1913?
W. A. J. Ontario.

Ans.—Yes, as against creditors of the mortgagor, and as against subsequent purchasers and mortgagees in good faith for valuable consideration.

Engine and Power Queries.

1. What horse-power gasoline engine would you advise me to get to run a good-sized chopper, saw wood, and do all the smaller jobs, such as pumping water, running cream separator, fanning mill, etc.?

2. I want to have the engine at the barn. Could I run a shaft to the house to supply power there, a distance of about 125 feet?

3. Does it take more power to run a threshing machine than a cutting-box and blower?
A READER.

Ans.—1. Six- to eight-horse power.
2. For light work this would be practicable. It should be supported in a number of places. A rope belt is sometimes used in such circumstances.
3. A large cutting-box, with blower attached, fed to its capacity, is said to take as much power as a threshing machine.

Gossip.

Attention is directed to the change of advertisement of Dr. D. McEachran, Ormstown, Que. He is now advertising an extensive auction sale of imported Clydesdale and Shire brood mares, fillies, and foals. The sale will be held November 7th. See the advertisement and drop a line for a catalogue. Satisfaction is guaranteed.

John Miller, Brougham, Ont., writes: "I am having a good trade in rams this fall. Have sold ten of my imported rams, but have six left yet, which will be sold at a very low price to close out the lot. I also have some of my best home-bred rams to sell, and as good a lot of ram lambs as I ever saw in one bunch. Am breeding nearly 100 imported and home-bred ewes to my best Minton rams, which will be sold at very reasonable prices. After the ram season is over, will send a list of buyers. They are distributed over nearly every Province in Canada, and ten different States."



Prevent Disease.

Equip your stable with WOODWARD water basins. Automatically keep fresh and pure water before your cows.

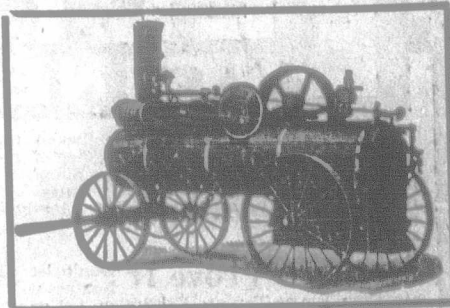
The individual basin is the only pure method of preventing the spread of disease.

Get our free catalogue, showing the basins and other stable equipment.

WRITE TO-DAY.

Ontario Wind Engine & Pump Company, Limited

Toronto Winnipeg Calgary



REBUILT PORTABLE ENGINES

We have a splendid stock of good, rebuilt portable engines of different types and by different makers, from 10 to 18 horsepower; all splendid value at the prices we ask for them.

Suitable for farmers' own use, silo-filling, threshing and other work. Ensure having your silos filled at the proper time by having one of these engines on hand to do the work.

We also have several rebuilt traction engines and threshing machines to offer. Description and prices of our stock will be given promptly on request.

THE ROBT. BELL ENGINE & THRESHER CO., LTD.
Seaforth Ontario

Davies Fertilizers ARE

Money Seeds

"As you sow them—so shall you reap."

WRITE:
The William Davies Co., Ltd.
WEST TORONTO, ONT.

PRESIDENT SUSPENDERS
NONE SO EASY

EXTIRMO
The Triumph of Science

An infallible destroyer of Rats, Mice & Beetles. Mummifies and leaves no smell. Recommended by eminent medical Officers, Sanitary Authorities, etc. Harmless to Human Beings & Domestic Animals.


From all Chemists, Druggists and Stores. FOR BEETLES AND COCKROACHES ASK FOR EXTIRMO B (Green Label).

Sole Proprietors: **THE EXTERMA CO.**
86 Chiswell St., LONDON, E.C.
Wholesale Agents: **SHARLAND & CO.**
27 COMMON STREET MONTREAL.

BLACK KNIGHT STOVE POLISH

FOR BRIGHTNESS AND LIGHTNESS, USE BLACK KNIGHT

A PASTE NO WASTE | THE F. F. DALLEY & LTD. HAMILTON, ONT. | No Dust No Rust



Use Coal Oil—12c. For 10 Hours

This is the cost for Coal Oil per horse power to run this engine, figuring the price at 16c. a gallon. Don't let the high price of gasoline prevent you from having cheap, safe and dependable farm power.

ELLIS ENGINE

Will develop more power on a gallon of the cheapest coal oil than other engines will do on a gallon of high-priced gasoline; no danger of fire or explosion. Simplest engine on the market; only three working parts; starts without cranking; runs either way; no excessive weight; guaranteed 10 years and will last a life-time. Anyone can run it; very complete instructions furnished.

Make Us Prove It Don't let any competitor or agent tell you that Ellis Engines will not use coal oil satisfactorily; ask anyone who saw them run at Toronto Exhibition. Let us prove it to you under actual working conditions on your own place before you buy. We'll ship an engine from Windsor, Ontario, on 30 day's trial, freight prepaid, so you will have neither duty nor freight to pay. If we don't prove our claims, send the engine back. Write to-day for catalogue and opinions of users in all parts of Canada.

ELLIS ENGINE CO., 94 Mullett Street, Detroit, Mich.



Big Ben



To wake up on the installment plan

Big Ben gets you up on the installment plan, a little at a time, by ringing every other half minute for ten minutes, so you'll wake up gradually. Or he'll do the whole job all at once, with one long, straight, five-minute ring.

You can set him to do it as you choose, and shut him off short in the middle of his call either way.

That makes him two good clocks in one, to suit everybody's taste in early rising.

He plays no pranks. He won't go off before it's time and rob you of your full measure of sleep. He won't go off behind time and rob you of your work time. It's Big Ben's business to run on time, to ring on time and stay on time.

Big Ben attends to his own business and helps you attend to yours by getting you and the farm hands out early.

Then he sticks around the house and keeps time all day for the women folks so they can have their meals on time.

There never was a clock that fitted in better with farm work.

He's triple-nickel plated and so handsome you'll want to keep him in the parlor instead of a bedroom.

Stands seven inches tall from the top of his head to the tip of his toes; has big, easy-winding keys, large hands, and big figures that you can read at a distance on dark mornings, and is built of good implement steel so he'll last for years. He's doing this kind of work in 3,000,000 American homes today.

Six thousand Canadian dealers sell him—his price is \$3.00 anywhere. A community of clock-makers stand back of him. Their imprint, "Made in La Salle, Illinois, U. S. A., by Westclox," is the best alarm-clock insurance you can buy.

Questions and Answers. Miscellaneous.

Difficult Churning.

What is the reason we have to churn so long? We always churn an hour, and sometimes nearly two hours. We have tried everything we know, such as scalding the cream, and always put it in cold water to cool it well. It was the same when we had a fresh cow.

A FARMER'S DAUGHTER.

Ans.—Common causes of difficult churning are thinness of cream and churning at too low temperature. Try a temperature of 58 to 60 degrees F. Cows advanced in lactation frequently give milk with a hard butter-fat. If you run a separator, turn the cream screw so as to skim a cream of not less than 30-percent fat. If the weather is cold, bring the temperature a little higher. Perhaps one stripper cow may be causing all the trouble. Do not fill the churn up to half full, and do not turn too fast. Ripen the cream quickly with a good starter of sour cream. Old cream sometimes gives difficulty.

Horse Grunts.

I have a horse which has been ailing for some time. The first I noticed was when we stepped him down a step or moved him forward, he would grunt. When driving him single he appeared to be afraid of the shafts striking his sides; also in starting him off he seemed to be sore in his body. When in the pasture-field he was unable to reach to the feed unless he placed one fore leg forward. Have had a veterinarian attending him for about two months, and on examining him he stated that the soreness was behind his fore legs. He used mustard plasters, and at present we are using flannel cloths wrung out of very hot water about every hour and a half during the day, and put on warm, dry blankets for the night. This seems to give very little relief as yet, and lately he is stocking badly in the hind legs. There appears to be nothing else the matter with the horse, as he feeds well out of the manger.

W. H.

Ans.—No doubt your veterinarian is prescribing proper treatment. Do not feed too heavily on grain while standing idle. A light grain ration, and light exercise, if he is able to take the latter, should reduce the stocking. If your veterinarian is not now attending the case, you had better advise him as to the animal's condition.

Service Fees.

I took a pure-bred cow to A's place to be bred to a bull, and when I got there A had sold the bull, but said he was getting another right away, and that he might get an imported bull, and if he did get an imported bull he would charge \$10 for pure-bred and \$2 for grade cows. I returned cow to A's place and had her bred, but nothing was said about charges, nor that it was an imported bull he had got. This summer when my cow calved a bull calf, it was a poor specimen—a regular slab. A was at my place and I showed him the calf and told him if it didn't improve I would castrate it. A said it might turn out all right. I fed calf all the new milk it would drink twice a day for about seven weeks, when it was evident it would make a poor bull, so I castrated the calf, for I thought a fair steer better than a poor bull. This was the cow's second calf. The calf she had last year was as nice as could be desired. I met A on the road and offered to pay him \$2, the amount he was charging for grade cows, but he would not take it. He said my cow was pure-bred and he would charge me \$10. I told him I did not want a pedigree, and as my calf was castrated, it was just the same as a grade. Can A collect \$10? Is not the extra price between grade and pure-bred for getting owner of bull to sign pedigree application?

M. D. J.

Ans.—It is more than likely that A can collect \$10 service fees. It matters not to him what kind of a calf you get, or what you do with it. His charges are based on the breeding of the cow served, and if your cow is pure-bred, and he is making a regular charge of \$10 for pure-breds served, you will have to pay, unless he sees fit to be lenient in your case because the calf was inferior.



\$100 to \$200 PROFIT PER MONTH

Selling Farmers What They Need

Every farmer in Canada needs and uses our kind of goods. Over 2,000 men are making big money selling Rawleigh Quality Products, Household Remedies, Extracts, Spices, Soaps, Toilet Articles, Stock Remedies, Poultry Supplies, etc. Every article of the highest quality, well known and reliable.

We want a man at once in every locality to represent the greatest Buying, Manufacturing, Distributing and Selling Organization in North America. Established 19 years. Capital and Resources over Two Million Dollars. References, Dan's, Bradstreet's, or any bank in Winnipeg.

We offer you the opportunity to

Get Into Business For Yourself

With little competition. We are the only concern of our kind who own and operate a factory in Canada. No duty. Freight services prompt.

We want men of good standing in their community, who can furnish satisfactory testimonials, and jump for the conduct of the business. No experience required. We teach you how to handle the goods successfully and stand back of you with the services of our great organization.

If you can meet our requirements, write for particulars of our matchless offer.

The W. T. Rawleigh Medical Co.
50 Henry Street
Winnipeg, Man.

Aylmer Superior Level Force Pump

For Hand and Windmill use. Has Six, Eight, and Ten-inch Stroke. Adjustable Base.

Fig. 36.



Fig. 36 represents our Superior Lever Pump, fitted for hand and windmill use. Made in 1 1/2 and 2-inch.

This style of lever and fulcrum has several advantages over the ordinary style; having longer stroke, the power is greater, making it work easier. The handle being wood, they are not so liable to break in frosty weather.

The base is adjustable, admitting of top being raised or lowered to any position desired.

The handle is drilled for three lengths of stroke. Six, eight, and ten-inch stroke.

This is readily converted into a Windmill Pump by the addition of a flat bar, which screws into the cross-head on top.

Cylinders capped inside require to be two inches longer to obtain same stroke.

This pump is adapted for all depths of wells; furnished with Iron, Brass Body or Brass Lined Cylinder. You'll never regret placing one of these pumps on your farm. Write us to-day for prices and illustrated catalogue free.

Aylmer Pump & Scale Co.
Aylmer - Ontario



HERE YOU ARE, BOYS!

Just the book you've been looking for.

Modern Quadrille Call Book

and Complete Dancing Master. Cloth bound. Price, postpaid, only 50c. Write for large catalogue of books, free.

WINDSOR SUPPLY CO.
Windsor, Ont.

MOLASSES FEEDS

For Dairy Stock and Horses

Write for FREE samples to
CHISHOLM MILLING COMPANY
TORONTO

Make Certain of Complete Success in Your Concrete Work



Write for a free Copy of this book



For farm buildings, county roads, or railroad bridges

CANADA Portland CEMENT

Can be depended upon to make concrete that will last for generations. There is only one grade---the best that science and skill can make.

The label on every bag is your guarantee of satisfaction.

Canada Cement Company Limited Montreal

There is a Canada Cement dealer in your neighborhood. If you do not know him, ask us for his name.

Send your Raw FURS to John Hallam

Sixty Thousand trappers now send us their Raw Furs. Why not you? We pay highest prices and express charges, charge no commission and send money same day goods are received. Millions of dollars are paid trappers each year. Deal with a reliable house. We are the largest in our line in Canada.

FREE HALLAM'S TRAPPERS GUIDE

French and English.
A book of 96 pages, fully illustrated. Game Laws revised to date—tells you how, when and where to trap, bait and traps to use, and many other valuable facts concerning the Raw Fur Industry, also our "Up-to-the-minute" fur quotations, sent ABSOLUTELY FREE for the asking. Write to-day—address JOHN HALLAM, Limited
Mail Dept. 306
111 Front St. East, TORONTO

SAVE-THE-HORSE



(Trade Mark Registered.)

CURE THE HORSE WHILE HE WORKS.
Mr. Marion Chaney, 805 Kilbourne Ave., Rockford, Ill., writes: For Burr Bros., Wholesale Grocers, I kept 35 horses. I saw Mr. Runyon's testimonial on what it did for a SPAVIN; he being at Milford O., where I was raised, led me to try it. I cured a COCKED ANKLE and also a SIDE BONE. I recommended it to a friend, who cured his horse two years this July, that previously had 50 holes burnt in his leg and could not be driven. Soon after using SAVE-THE-HORSE they trotted him over the pavements. It is a great medicine. Now I want your advice," etc.

Every bottle of Save-the-Horse is sold with an iron-clad contract that has \$60,000 paid-up capital back of it, guaranteeing to permanently cure or refund the money.

WRITE! AND STOP THE LOSS.

TROY CHEMICAL CO.

21 Commerce Ave., Binghamton N.Y.
Druggists everywhere sell Save-the-Horse WITH A CONTRACT, or we send by Parcel Post or Express prepaid.

Canadian Factory and Office;
148 Van Horn St. Toronto, Ont.

Notice to Importers C. CHABOUDEZ & SON

205 rue La Fayette, PARIS, FRANCE
If you want to buy Percheron Horses and Mares, I will save you time and money and all trouble with papers and shipment. Will meet importers at any landing port. I am acquainted with all breeders and farmers. 30 years experience. Best reference. Correspondence solicited.

HORSE AND CATTLE INSURANCE

Against Death by Accident or Disease
Specialties of Stallions, In-foal Mares, Track Horses, Transit, etc. Liberal policy issued by a Company operating under Federal Insurance Department's supervision.

WRITE FOR FREE BOOKLET

The General Animals Insurance Company of Canada
Head Office: 71a St. James Street, Montreal, Que.

NOTICE TO HORSE IMPORTERS

GERALD POWELL,
Commission Agent and Interpreter,
Nogent Le Rotrou, France,

Will meet importers at any port in France or Belgium and assist them to buy Percherons, Belgians, French Coach horses. All information about shipping, banking, and pedigree. Many years' experience; best references. Correspondence solicited. P.S.—Nogent is in the heart of the Perche horse district.

Messrs. Hickman & Scruby

Court Lodge, Egerton, Kent, England.
Exporters of Pedigree live stock of all descriptions. Illustrated catalogues and highest references on application. We are doing a very large business in draft horses of all breeds, but especially Percherons, and we are offering unsurpassed values. All over the world there is a shortage of wool and mutton, sheep will go higher, and we solicit orders for show flocks. Our prices on big bunches of field sheep will surprise you.

Shires and Shorthorns

In Shire stallions and fillies, from the best studs in England, we are offering some rare animals at rare prices. Scotch Shorthorns of either sex or age, of highest breeding and quality. John Gardhouse & Son, Highfield, Ont. L.-D. phone.

DR. BELL'S Veterinary Medical Wonder. 10,000 \$1.00 bottles FREE to horsemen who will give The Wonder a fair trial. Guaranteed to cure inflammation, Colic, Coughs, Colds, Distemper, Fevers, etc. Agents wanted. Dr. Bell, V.S., Kingston, Ont.

Gossip.

In our advertising columns will be found an offering of Leicester stock rams from the high-class show flock of the Bow Park Farm, of Brantford, Ont. This is an exceptionally choice offering, and as the advertisement will only appear a limited number of times, it will be necessary for interested parties to move quickly.

At Peterborough Repository, England, the last week in September, a large number of Shire mares, fillies and foals, sold at auction, made fairly good prices. 192 foals averaging over \$150. The highest price for a yearling filly was 160 guineas, approximately \$840. A two-year-old filly sold for 150 guineas, about \$1,575, and a colt foal for \$1,050.

Henry Arkell & Son, Arkell, Ont., report the sale of ninety field rams to a Northern Michigan ranch. They also state that sales this season have been extra good, and a large number of them have been made through the advertisement which runs in "The Farmer's Advocate." Look up the advertisement.

At the last of the series of auction sales of Aberdeen-Angus cattle which took place at Inverquharity, Kirriemuir, Scotland, the last week in September, the top price obtained was 85 guineas, approximately \$445, for the two-year-old heifer Village Vine, by Verderer. Two other heifers brought 52 and 53 guineas, respectively, and twenty-nine head from the same herd averaged \$180.

Here is a story from "The Book of Glasgow Anecdotes" published by Scribners: A West Highlander who had dwelt long in Glasgow, was finally summoned from it to the bedside of his dying father. When he arrived the old man was fast nearing his end. For a while he remained unconscious of his son's presence. Then at last the old man's eyes opened, and he began to murmur. The son bent eagerly to listen. "Dugald," whispered the parent, "Luckie Simpson owes me five shillings." "Ay, man ay," said the son eagerly. "'An' Dougal More owes me seven shillings." "'Ay," assented the son. "'An' Hamish McCraw owes me ten shillings." "'Sensible tae the last," muttered the delighted heir. "Sensible tae the last." "Once more the voice from the bed took up the tale. "'An' Dugald, I owe Calum Beg twa pounds." "Dugald shook his head sadly. "'Wanderin' again, wanderin' again," he sighed. "It's a peety."

AN UNINTENDED ALLUSION.

The susceptibility of the human mind to suggestion is a constant source of danger. A case where it wickedly transformed an act of pure kindness of heart into a piece of impertinence is reported by a writer in the Cincinnati Times-Star. Two women were walking down one of the city's principal shopping streets the other day, when they noticed another woman just in front of them.

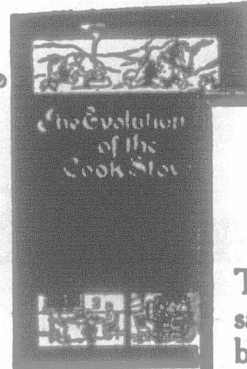
"That lady's waist is unbuttoned in the back," said one to the other. "I believe I'll speak to her about it."

The other looked over the unconscious subject of comment. Then she shook her head.

"I don't believe that I would say anything to her," said she. "I doubt if she is the kind of person who would appreciate your kindness. She isn't very neatly got up, don't you see? Her shoes are horribly run down at the heel."

"I don't care," said the first woman. "Any one would be glad of a warning that her waist is unbuttoned. It doesn't matter if she doesn't seem to be a very nice person. I am going to call her attention to it."

And so she walked up to the stranger and tapped her on the shoulder. As the woman turned, the would-be benefactor said, just as sweetly as she knew how, "Pardon me, but did you know that your shoes are run down at the heel?"



Let us send you our book "The evolution of the Cookstove"—an interesting history of cooking. It also gives a clear, simple description of the Dominion Pride Range—complete in every detail. Reading this book is like examining the range itself.

Send for a copy.

COUPON

Canada Malleable & Steel Range Manufacturing Co., LIMITED OSHAWA.

Send a free copy of your book "The Evolution of the Cookstove."

NAME _____

ADDRESS _____

Wepay Freight

Save 30% on your New Range

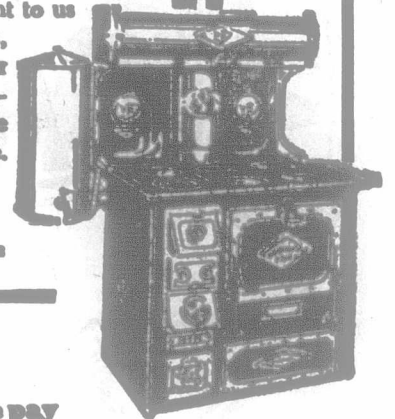
That's about \$20.00 isn't it? And you can save it by ordering direct from the factory (the biggest malleable range plant in Canada.)

Dominion Pride Range is the range you would choose at any price—a beautiful steel range with unbreakable doors, castings and lids of malleable iron—a range that saves coal—a range so solidly built that with care it will last a lifetime.

And you can secure a Dominion Pride Range by making a small payment with your order—the balance on terms to suit your convenience.

Dominion Pride Range

Thousands upon thousands of Canadians have sent us direct for their ranges, and we have yet to hear a complaint. Our unconditional guarantee goes with every range.



WINCHESTER



"LEADER" AND "REPEATER"

SMOKELESS POWDER SHELLS

No matter whether your favorite sport is field, wild fowl or trap shooting, Winchester loaded shells will give you the fullest measure of shooting satisfaction. No shells will make a good shot out of a poor one, but shells that are loaded so that they are uniform in velocity, spread the shot evenly, and give good penetration help wonderfully to make good bags in field or marsh and high scores at the traps. Winchester shells embody all these important elements.

BE SURE AND GET THE W BRAND

Clydesdales for Sale My first importation for 1913 landed in March. One dozen fillies of the highest standard will be offered at rock-bottom prices during June and July. Write for particulars and prices or phone.

G. A. BRODIE

NEWMARKET, ONT.

CLYDESDALES—Imp. Stallions and Fillies.

In the modern Clydesdale the three great requisites are breeding, size and quality. In my 1913 importation I have all the above as choice as the breed produces; also French Coach Stallions and Welsh Ponies. Correspondence solicited. I. D. Phone James Torrance, Murkham, G.T.R., Locust Hill, C.P.R.

CLYDESDALES, Imported and Canadian-bred

With over 25 head to select from I can supply, in either imported or Canadian-bred, good mares, fillies, stallions and colts. Let me know your wants. L.-D. Phone. R. B. PINKERTON, Essex, Ontario

Horse Owners! Use



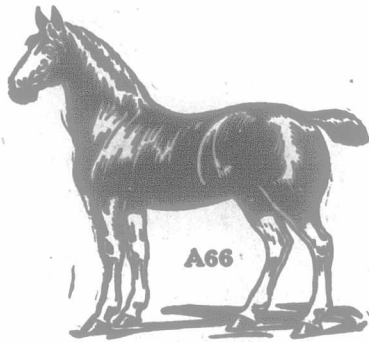
GOMBAULT'S Caustic Balsam

A Safe, Speedy, and Positive Cure. The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUSTIC OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. The Lawrence-Williams Co., Toronto Ont.

Mack's \$1,000 Spavin Remedy is absolutely guaranteed to cure Bone or Bog Spavin, Ringbone, Thoroughpin, Curb, Capped Hock, Shoe Boil, Sprung Knee, Lacerated and Ruptured Tendons, Sweeney and all other forms of lameness affecting a horse, or your

Cures All Kinds of Lameness, Quickly, Positively, Permanently.

Mack's \$1,000 Spavin Remedy is absolutely guaranteed to cure Bone or Bog Spavin, Ringbone, Thoroughpin, Curb, Capped Hock, Shoe Boil, Sprung Knee, Lacerated and Ruptured Tendons, Sweeney and all other forms of lameness affecting a horse, or your



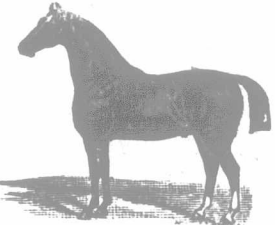
money back in a jiffy. It's a powerful remedy that goes right to the bottom of the trouble and cures the lameness in just a few days, and the animal may be worked as usual. Contains nothing that can injure the horse and heals without leaving scar, blemish or loss of hair.

Ask your druggist for Mack's \$1,000 Spavin Remedy—if he cannot supply you, write direct to us. Ask for our valuable Free Book, "Horse Sense" No. 2. If you are not positive as to the cause of your horse's lameness, mark on horse above where lameness occurs and tell us how it affects his gait, also tell age of animal. Our graduate veterinarian will diagnose the trouble and tell you how to cure it. This service is free.

Price \$2.50 per bottle and worth it. Address: McKellar Drug Co., Binghampton, N. Y. LYMAN BROS. CO., LTD., TORONTO, ONT. Distributors to Drug Trade.

DR. PAGE'S ENGLISH SPAVIN CURE

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hocks, Strains or Bruises, Thick Neck from Distemper, Ringworm on cattle, and to remove all unnatural enlargements.



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

J. A. JOHNSTON & CO., Druggists 171 King Street E., Toronto, Ont.

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 diplomaed veterinary doctor. For any diseases, write and consult him now. NATIONAL STOCK FOOD COMPANY Ottawa, Ont.

Please mention "The Farmer's Advocate."

Questions and Answers. Veterinary.

Brain Trouble.

Pig ten weeks old refused food, walked around in a circle with nose close to ground, and grunted. I gave one ounce Epsom salts. Next day I discovered that he had black teeth, and I broke them off and gave more Epsom salts. He ate a little, but had difficulty in swallowing. Next day he ate a little more, but staggered and fell, and walked around with nose to ground. I gave more purgative medicine. He lifts his hind feet high when walking. Is this contagious? W. G.

Ans.—There is pressure upon the brain. If simply a congestion of the vessels, the treatment you have adopted, that is the administration of purgatives, is all that can be done. If a growth, nothing can be done. It is not contagious. As regards "black teeth," this is simply an imaginary disease of swine, and in no case should a tooth be "broken off." When a tooth should be removed, it should be extracted. V.

Calves with Cough.

Calves have been on grass all summer, and also fed milk and flaxseed. After harvest they were turned on new seeding, with a second growth of oats and some ragweed, when they contracted a cough similar to a horse with heaves, and seemed short of breath. We purged them. One has died. They are now on rape and turnips. Do you think this is hoose or husk? H. S.

Ans.—We do not think it is husk, but if another dies a post-mortem will determine, as the presence of parasites can be readily detected in the windpipe. If it be this trouble, it will be wise to employ a veterinarian, as treatment consists in injecting about 1 dram of oil of turpentine in 1/2 ounce sweet oil into the windpipe with a hypodermic syringe. We are of the opinion that they have catarrh, and would advise keeping them in dry, comfortable, and well-ventilated stable, giving each 30 grains chlorate of potassium and 5 grains quinine three times daily, rubbing the throats well with mustard, mixed with oil of turpentine, and then wrapping well with flannel cloths. Apply the mustard once daily for two days, but keep their throats well wrapped for a week or longer. Feed well on milk, clover, flaxseed, etc. V.

Miscellaneous.

A Snake Identified.

Am sending a small snake. Would like if you could tell us, through the columns of your paper, what species it belongs to. C. B.

Ans.—The snake was a common, harmless, milk snake, young, last spring.

Commission Men.

Can you give me the name of some live-stock commission men who handle feeding sheep and lambs? G. H.

Ans.—See our issues of October 9th and 16th, articles on Buffalo live-stock market and Toronto live-stock market.

A Book on Strawberries.

Please advise me, through your paper, whether you have a book on strawberries. G. R. R.

Ans.—We have no book devoted exclusively to strawberries, but several books giving special chapters to strawberry culture may be had through this office. Popular Fruit Growing, by Sam. B. Green, may be had through this office at \$1, postpaid. There is a very good bulletin on strawberries published by the Dominion Department of Agriculture.

A JOB FOR THE JANITOR.

It is the custom at a certain school for the teachers to write on the black-board any instructions they desire the janitor to receive. The other morning the janitor saw written: "Find the greatest common divisor." "Hullo!" he exclaimed. "Is that earned thing lost again?"

HAD THE GOODS.

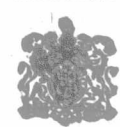
"I am seeking the light," announced the Pilgrim. "Well," replied the drug-store clerk, "we carry antifat and peroxide."

HIGHEST PRICES PAID FOR LIVESTOCK FED ON

MOLASSINE MEAL

Made in England

ROYAL WARRANT



FINE TRIBUTE FROM MESSRS. PENNISTON:

Molassine Co. Ltd. 402 Board of Trade Bldg. Montreal, Que.

Dear Sirs—We have been feeding your "MOLASSINE MEAL" since last September to our Milch Cows and we must say that after feeding your Meal about three weeks the flow of milk was increased and also the quality, and all during the Winter and Spring months the yield was uniform.

At our recent sale, held a short time ago, we received the very highest price for our stock and contribute it to our regular feeding of your Meal.

Yours truly, (Signed) PENNISTON BROS.

No one can doubt that it pays to feed "MOLASSINE MEAL" after reading the above testimonial. Therefore, why not have the same results? Begin to feed your livestock to-day and enjoy the same high prices.

Look for this Trade Mark



on every bag.

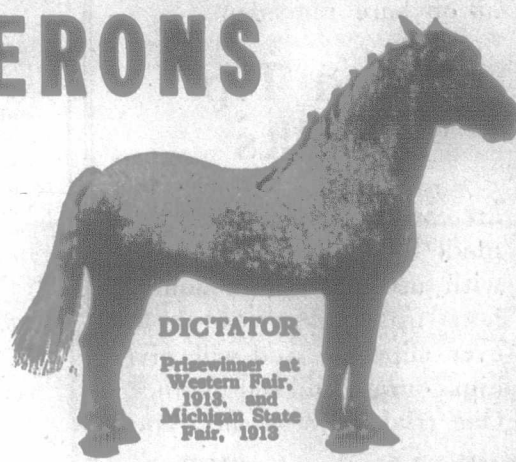
"MOLASSINE MEAL" is put up in bags containing 100 lbs. Ask your Dealer for it or write directly.

MOLASSINE Co. OF CANADA LIMITED

ST. JOHN, N.B. MONTREAL TORONTO

PERCHERONS

Stallions two years old and over, dapple greys and blacks, 1,800 to 2,100. Stallions that are breeders. Stallions with style and action. Stallions that you can get business with. Mares that are breeders, for they have all raised colts and are now in foal to the best horses.



DICTATOR

Prize-winner at Western Fair, 1913, and Michigan State Fair, 1913

Send for circular, telling why I can sell cheaper than others.

F. J. Sullivan,

Windsor, Ontario

CLYDESDALES—Stallions and Fillies

We have again landed at our stables a large and choice collection of Clyde Stallions and Fillies of strictly high-class show calibre. We never had a lot that measured up to the standard of this lot, big, fleshy quality; close, straight action and bred in the purple. We can supply winners in any company. Write us.

SMITH & RICHARDSON - Columbae P.O. Brooklin, G. T. R.; Myrtle, C. P. R. L.-D. 'phone,

Imp. CLYDESDALES, PERCHERONS Imp.

I sold more horses last year than any other Canadian importer. Why? because I had a bigger and better selection than any other man in the business and my prices and terms are the best obtainable. This year I have 80 head to choose from and their breeding, size, quality, character and action are at the top of all others, Clydesdales, and Percherons, stallions and fillies.

T. H. HASSARD - Markham, G.T.R., Locust Hill, C.P.R.

Imp. Percherons, Clydes and Shires

My 1913 importation from France and Scotland are now in my stable. If you want the best in Percheron, Clydesdale and Shire stallions and fillies, come and see my offering; 30 head to select from. Also Hackneys and French Coach stallions. I have all ages of best breeding and highest quality, and the prices are low.

J. E. ARNOLD, GRENVILLE, QUEBEC

Mount Victoria Clydes & Hackneys

Which is best of a high-class Clydesdale stallion or filly, or something that has won and can win again in Hackney stallions or fillies, visit our barns at Hudson Heights, Que. T. B. MACAULAY, Proprietor. E. WATSON, Manager, Hudson Heights, Que.

TOPPERS IN CLYDESDALES AND PERCHERONS

I have just landed a big importation of Clydesdales and Percherons, if you want a big ton stallion with the best of quality come and see me, I can show you the best lot of stallions and fillies you ever saw.

T. D. HILLIAT - Shelton, Ont.

IMPORTED CLYDESDALES

A few choice young stallions always on hand and for sale. Frequent importations maintain a high standard. Prices and terms to suit.

BARBER BROS., Gattineau Pt., Que., near Ottawa.

WHEN WRITING ADVERTISERS PLEASE MENTION

The Farmer's Advocate



THE SAFE WAY

Is always the best way. Sudden freezes, icy, slippery roads have no terrors for the farmer whose horses wear

Red Tip Calks

All roads are good roads. His horse is as sure footed as on bare macadam.

Red Tip Calks

are easy to adjust, and are so made that they wear sharper with use. They will hold a horse up on any road however slippery, and will give him courage and self-reliance. One trial will convince you.

Send for Booklet "K."



Neverslip Mfg. Co.
New Brunswick, N. J.

Insist upon the
RED TIP

Fistula and Poll Evil

Any person, however inexperienced, can readily cure either disease with

**Fleming's
Fistula and Poll Evil Cure**
—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in

Fleming's Vest-Pocket
Veterinary Advice
Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated.
**FLEMING BROS., Chemists,
75 Church Street, Toronto, Ont.**

ABSORBINE

TRADE MARK REG. U.S. PAT. OFF.

Will reduce **Inflamed, Strained, Swollen Tendons, Ligaments, Muscles or Bruises.** Stops the lameness and pain from a **Splint, Side Bone or Bone Spavin.** No blister, no hair gone. Horse can be used. \$2 a bottle delivered. Describe your case for special instructions and Book 2 K Free.

ABSORBINE, JR., the antiseptic liniment for mankind. Reduces **Strained, Torn Ligaments, Enlarged Glands, Veins or Muscles, Heals Cuts, Sores, Ulcers.** Allays pain. Price \$1.00 a bottle at dealers or delivered. Book "Fidelity" free.
W. F. YOUNG, P.D.F., 258 Lyman Bldg., Montreal, Can.

Prizes at the New National

A perusal of the prize lists of the National Live Stock, Horticultural and Dairy Show, which opens at Toronto on November 17th, gives promise of handsome cash awards to the lucky exhibitors. Over \$30,000 in prize money is to be distributed among the various branches, and the following brief summary is given of the amounts allotted to the different divisions:

BEEF CATTLE DEPARTMENT.

Breeding Cattle Division.

Class 18.—Shorthorns—Prize money \$1,590, ranging from \$75 to \$50.
Class 19.—Herefords—Prize money \$870, ranging from \$50 to \$20.
Class 20.—Aberdeen-Angus—Prize money \$640, ranging from \$35 to \$20.
Class 21.—Galloways—Prize money \$224, ranging from \$20 to \$10.

Fat Cattle Division.

Class 22.—Shorthorns—Prize money \$245, ranging from \$35 to \$10.
Class 23.—Herefords—Prize money \$100, ranging from \$25 to \$10.
Class 24.—Aberdeen-Angus—Prize money \$110, ranging from \$25 to \$10.
Class 25.—Galloways—Prize money \$75, ranging from \$15 to —.

HORSES.

Clydesdales.—Class 1—Prize money \$805, ranging from \$60 to \$25.

Class 2—Prize money \$685, ranging from \$50 to \$15.

Class 3—Prize money, \$430, ranging from \$60 to \$30.

Shires.—Class 4—Prize money \$320, ranging from \$40 to \$20.

Percherons.—Class 5—Prize money \$435, ranging from \$50 to \$25.

Class 6—Prize money \$110, ranging from \$30.

Hackneys.—Class 7—Prize money \$460, ranging from \$50 to \$30.

Standard-bred.—Class 8—Prize money \$435, ranging from \$50 to \$20.

Thoroughbreds.—Class 9—Prize money \$275, ranging from \$50 to \$30.

Ponies.—Class 10, fourteen hands and under—Prize money \$195, ranging from \$20 to \$15.

Heavy Draft Horses.—Class 13—Prize money \$305, ranging from \$40 to \$25.

In addition to these, there will be special prizes given by the Canadian Dairy Breeders' Association of \$25, for grand champion bulls and cows which are registered in the Canadian Herdbook, the prizes to be awarded on record of performance.

Trade Topic.

SEEDS AT THE WINTER FAIR.—The seed section at the Ontario Provincial Winter Fair has grown steadily ever since its inception, and it has been the policy of the management to do everything possible to encourage a further growth. This year the prizes in the open section for seeds have been increased by about twenty per cent., the prizes for spring wheat, fall wheat, white oats, six-rowed barley, etc., now being: 1st, \$8; 2nd, \$6; 3rd, \$4, and 4th, \$2. In former years, the Canadian Seed-growers' Association gave a considerable number of prizes for their members, which they have been obliged to discontinue on account of a ruling by the Dominion Department of Agriculture with reference to the use of funds which were received largely from grants by the Department. A similar classification has been put on under the heading of Specially Selected (Registered) Seed, and the prize money is furnished as a direct grant to the Fair, from the Dominion Department. Members of the C. S. G. A., will, therefore, have practically the same prizes open to them as last year. A new departure has been made in the form of a competition for work done in school gardens or children's home plots, the entries to be made by the teacher, to the Director of Elementary Agricultural Education, Ontario Agricultural College, Guelph, who will gladly furnish further information at any time. The same liberal classification is offered for seed from the field-crop competitions. Anyone having seed fit for exhibition purposes should get a prize list from the Secretary, R. W. Wade, Parliament Buildings, Toronto.

We Don't Say "Buy Our Meal

because it is the best." We say: "Here's what Caldwell's Molasses Meal contains—you know it is the best."

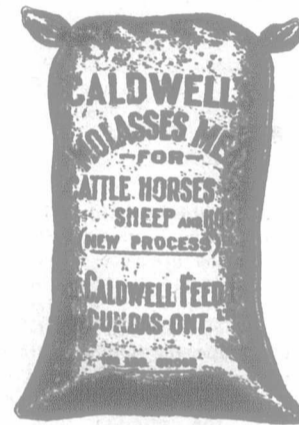
When you buy

Caldwell's Molasses Meal

you know positively that it is

84% pure cane molasses, and
16% edible moss.

Our Government-guarantee protects you. Then, why take chances?



The use of Caldwell's Molasses Meal is known to be a decided economy. It is dry to the touch, easily handled and—being what it is—is bound to be good for your stock.

N. B.—MAKE SURE!
Tell your dealer you want Caldwell's, and oblige us by letting us know if he doesn't handle it.

The Caldwell Feed Co., Limited
Dundas, Ontario

Molasses Meal, Dairy Meal, Cream Substitute, Calf Meal, Poultry Meals

2 IN 1

SHOE POLISH

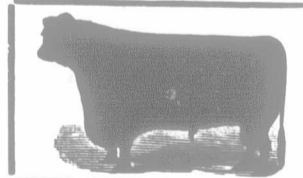
10 CTS

Gives a Quick, Brilliant Polish That Lasts

Easier to Use Better for the Shoes

No Turpentine

Aberdeen-Angus Bulls



Two-year-old bull, Middlebrook Warrior 2nd, sired by the Toronto Champion, Hundred. Also four young bulls to ship about December 1st. They are right kind for herd headers or to cross with grades.

WRITE FOR PRICES

FORSTER FARM :: Oakville, Ontario



Canada's Champion Herefords When selecting a herd header or foundation stock come to Canada. I have always both sexes for sale.
L. O. CLIFFORD Oshawa, Ontario

When Writing Please Mention this Paper

Right Up To The Last Minute

THERE is no complicated "nest" of gears—no hard-to-clean "contraptions" in the bowl—no oil cups or glass lubricators—on the

Standard

Cream Separator. There's nothing "obsolete" in the whole machine. It's right up to the last minute. Built of the best materials by the most costly machinery, and rigidly tested.

The few simple working parts can be held in one hand. Every gear and bearing is in a bath of oil, and machine needs to run

be oiled but once in four months. Wide-open bowl and perfectly smooth discs easily cleaned. Supply can about a foot lower than most machines. Crank four inches higher, eliminating back-breaking stooping. All working parts enclosed, keeping out dust and making it impossible for children to get hands or clothes injured.

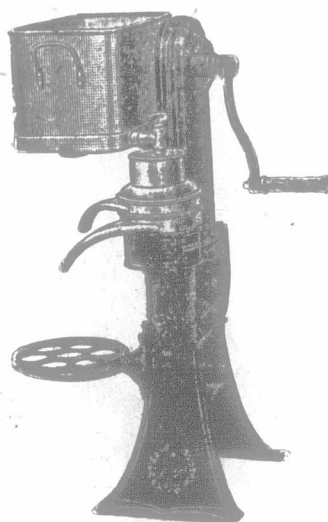
These are some of the features that go to prove the Standard's up-to-date-ness. Others are told about in our new catalogue, which also shows the new records for close skimming, established by the Standard at Government Dairy Schools. Write for a copy of this new catalogue.

The Renfrew Machinery Company, Limited

Head Office and Works: RENFREW, ONT.

Sales Branches at Sussex, N. B. Saskatoon, Sask. Calgary, Alta.

AGENCIES ALMOST EVERYWHERE IN CANADA



Gossip.

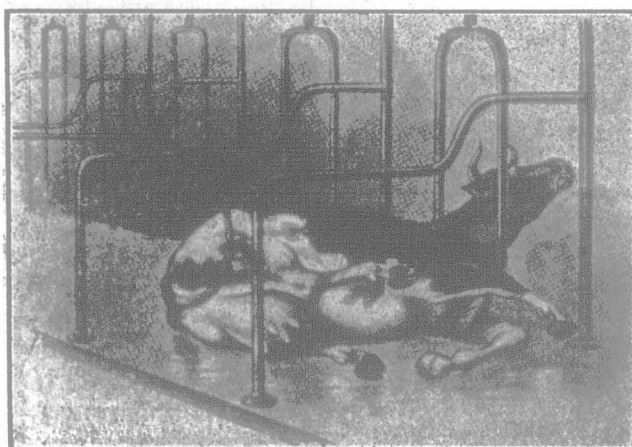
Clydesdales for Canada shipped from Scotland the last week in September, were consigned to R. A. Snowball, Chatham, N. B.; Wm. Colquhoun, Mitchell, Ont., and T. H. Hassard, Markham, Ont.

SHORTHORNS AND LEICESTERS AT SPRUCE LODGE.

Pure Scotch and Scotch-topped, the large and well-balanced herd of Shorthorn cattle, owned at the Spruce Lodge farm of W. A. Douglas, Caledonia, Ont., are the result of over half a century's breeding along lines of continuous improvement. Very many of these cows are good for 40 lbs. of milk a day for months after freshening. Coupled with this is modern type and fleshing qualities—the kind of cattle the trade is asking for to-day—and to supply a portion of that trade there are fourteen heifers from ten months to three years of age, the predominating features of which are high quality and exceptional merit. The majority of them are got by the renowned breeding bull, Imp. Joy of Morning. Others are by the Missie bull, Royal Star. Parties wanting breeding females will make a big mistake not to get in touch with Mr. Douglas. Three of the lot are daughters of Imp. Beauty 32nd. The Leicesters need no words of commendation. For many years bred to the choicest imported rams obtainable in England, the flock stands second to none, and from their ranks have come very many of the leading winners on both sides of the line. For immediate sale are fifteen shearing ewes, sired by an imported ram, and bred to an imported ram. Also a big selection in shearing rams and ram lambs. An early order guarantees an early selection, and the trade to-day demands the best.

MAPLE BLUFF SHORTHORNS.

For nearly fifty years, Maple Bluff Stock Farm, the property of A. J. Howden, Columbus, Ont., has been the home of the best in Shorthorn cattle, and during that time, through systematic breeding, changes in type have been brought about, principally along the line of early-maturity and better-doing qualities, making the breed for beef production more profitable for the ordinary farmer, and while the Maple Bluff herd have been abreast of the times in the matter of modern type, a section of the herd have received particular attention along the line of milk production. These are all of the old Atha tribe, originally of Bates' breeding, and certainly among them are some that are most profitable from a dual-purpose standpoint, and of these, for sale, are several nice, level heifers, and one bull calf. In the pure Scotch end of the herd are Marr Emmas and Missies, Cruickshank Villages, Duchess of Glosters, Butterflies, Kinellar Claret, Cruickshank Nonpareils, Miss Ramsdens, Crimson Flowers, Duke of Northumberland, and Bridesmaids. The get of such well-known sires as Imp. Butterfly King, Imp. Spicy Count, Imp. Lord Kintour, Imp. Waterton, Imp. Broadhocks Golden Fame, and the Mina bull, Prince of Pine Grove. Practically all of the younger ones are the get of the big, thick, red Lavender-bull, Lord Lavender 70558, a bull that bred remarkably well at the head of this herd, as the dozen or more nice, thick one- and two-year-old daughters in the herd are proof. The present stock bull is Nonpareil Lord, by the Cecelia-bred son of Imp. Ben Lomond, Ben Cecil, dam Imp. Dalmeny Nonpareil. He is a roan, particularly even in his fleshing, and should do well on the big, thick cows of the herd. Anything in the herd is for sale. Particularly attractive is the big selection of heifers, low-down, and splendidly fleshed. They are a nice lot. In young bulls of near serviceable age is a roan, nine months old, a Kinellar Claret, got by Lord Lavender. He is heavily and evenly fleshed, is nice in his lines, and should develop into a bull of more than average merit. Another is a red seven-months Marr Emma, by Lord Lavender, and with an imported dam. He is an extra thick, mellow, young bull, and will certainly make a good one. Still another is a red six-months-old Village, by Lord Lavender, and whose dam, by Imp. Waterton, is a half-sister to Lady Aberdeen 2nd, winner for two years of the milking Shorthorn class at Toronto. Write Mr. Howden your wants in Shorthorns.



No accidents like this on Cork Brick Floors

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.

Shorthorns, Cotswolds, Berkshires

In Shorthorns offering cows and heifers and calves of either sex. In Cotswolds have ram and ewe lambs and breeding ewes for sale. In Berkshires have a nice lot ready to ship.

CHAS. E. BONNYCASTLE,
P. O. and Station, Campbellford, Ontario.

SHORTHORNS!

Bulls of useful age all sold. Would appreciate your enquiry for females. Catalogue and list of young animals.

M. Cargill & Son, Cargill, Ont.

Oakland—42 Shorthorns

Here is a herd of breeders and milkers. Only one young bull left ready to go, and he is a good one. We also offer our two stock bulls, -72692- and -81845-. Write your wants. Price sells.

JNO. ELDER & SONS, Hensall, Ont.

1854 MAPLE LODGE STOCK FARM 1913

Shorthorns and Leicesters

I have a most excellent lot of young rams for sale, mostly sired by imported Comaught Royal. Something very choice in young bulls. House one mile from Lucan Crossing, G. T. Ry.

A. W. SMITH, MAPLE LODGE, ONTARIO

Spring Valley Shorthorns

A few of the best young bull prospects we ever had. They will please you. Will sell females too. Visit the herd; we think we can suit you. Particulars on application.

KYLE BROS., R. R. No. 1, Drumbo, Ont.

Spruce Lodge Shorthorns & Leicesters

Present offerings; young cows and heifers in calf from good milking families. Also a choice lot of Leicester rams and ewes of all ages.

W. A. Douglas, R. R. No. 2, Caledonia, Ont.

CEDARDALE SHORTHORNS

All bulls sold out some time ago, but have still several fine heifers and good cows for sale of rare value, Scotch-bred and of good individual type. Heifers in calf and being bred to our superior stock bull. DR. T. S. SPROULE, Markdale, Ont.

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.

Please mention "The Farmer's Advocate."

Ship your LIVE STOCK to the old firm of
DUNNING & STEVENS, Inc.
Commission Merchants EAST BUFFALO, N. Y.
Room 1, Live Stock Exchange Building
Established 1876 Write for market paper
Paid-in Capital, \$100,000 or pass books

THE AULD HERD AND PLEASANT VALLEY SHORTHORNS

We have females of all ages and of the best Scotch families for sale. Those interested should come and see us. Correspondence invited.

A. F. & G. AULD Eden Mills, Ont. Bell 'phone. Guelph or Rockwood Stns.
100 SHORTHORNS 100
IN OUR HERD

For sale—Imported yearling show bull; 14 bull calves 8 to 14 months old; cows and heifers and show material all ages. Herd headed by three high class imported bulls, all three were prize-winners at Toronto this year.

MITCHELL, BROS., BURLINGTON, ONTARIO
Farm 1/4 mile from Burlington Junction.

5 Shorthorn Bulls 5—We have for sale at moderate prices 5 Scotch Shorthorn bulls, including one of our herd bulls
Also a number of high-class heifers and heifer calves

A. J. HOWDEN & CO., COLUMBUS, ONT.
Myrtle, G.T.R. & C.P.R. Long-distance 'phone

Irvine Side Shorthorns

We are offering just now some very choice Scotch-bred heifers, high-class in type and quality, bred in the purple; also one right nice yearling roan bull.

L.-D. phone. JOHN WATT & SON, Salem, Ont.

Shorthorns and Clydesdales

Shorthorn offering for October and November include 7 good young bulls from 9 to 15 months old. A catalogue of our Clydesdales will be mailed on application. W.G. Pettit & Sons, Freeman, Ont. Bell 'phone Burlington Jct. Sta., G.T.R.

Springhurst Shorthorns

Four of the first-prize Shorthorns at the late Guelph Show, including the champion and grand-champion fat heifer, were all sired by bulls of my breeding. I have now for sale ten young herd headers of this champion-producing quality. HARRY SMITH, HAY P. O., ONT. Exeter Station. Long-distance Telephone.

SHORTHORNS

ELORA, G.T.R. and C.P.R.

—Records show that cattle bought from the Salem herd won numerous ribbons the past season; we have others. Several young bulls are priced reasonably
J. A. WATT, SALEM, ONT.

Brampton Jerseys

tested daughters. Several imported cows and bulls for sale. Canada's Greatest Jersey Herd.

We are doing the largest business we ever did, chiefly with our old customers; young bulls and heifers from sires with
B.H. Bull & Son, Brampton, Ont.

Raw Furs

E.T. CARTER & CO.

84 Front St., East, Toronto.

Our FALL PRICE LIST will be issued shortly, and will be mailed to all those whose name is on our mailing list. If we have not got your name and address, send it now.

THE OPEN SEASON for Trapping:
RATS is DEC. 1st to APRIL 30th.
MINK is NOV. 1st to MARCH 31st.

To have your furs in prime condition, and to obtain best prices, do not start trapping much before NOVEMBER 1.

WE PAY POSTAGE AND EXPRESS.
Small parcels must be sent by post.

RAW FURS

Our specialty is **CANADIAN RAW FURS**. Write for our free price list. We pay all mail and express charges. Remit same day as goods received. Hold shipments separate when requested. Prepay charges for returning furs if valuation is not satisfactory. We do not buy from dealers, but from trappers only.

HALLMAN FUR CO., Toronto
N. Hallman, Manager, 4 years with John Hallman; E. J. Hagen, Secy., 11 years with John Hallman; J. L. Jewell, Buyer, 6 years with John Hallman; G. Hagen, Secy., 7 years with John Hallman.

FALL AND WINTER Milk or Cream WANTED

You have got to feed your cows in the winter time whether they are milking or not, so why not arrange to have most of them earning the high price we pay for winter milk and cream.

We take all that you produce. Furnish cans for milk. Pay on the 10th of each month.

Winter contracts start November 1st. Make up your mind at once. We are receiving applications now. Write:

Mark the envelope **CITY DAIRY CO., Toronto, Ontario**

The oldest salt on the market to-day is **RICE'S**

Its REPUTATION AND LONG LIFE is worth anything you have it in

RICE'S PURE SALT

North American Chemical Co., Ltd., Clinton.

Milk Wanted

For milk route in Windsor
WALTER N. KNIGHT
20 Aylmer Ave. Windsor, Ont.

The Maples HOLSTEIN Herd

Headed by Prince Aaggie Mechthilde. For sale at present: Choice bull calves, from Record of Merit dams with records up to 20 lbs. butter in 7 days. All sired by our own herd bull. Prices reasonable.

WALBURN RIVERS, FOLDENS, ONTARIO

Glewood Stock Farm 2 YEARLING HOLSTEINS BULLS FOR SALE. out of big milking strains; at low figure for quick sale. **THOS. B. CARLAW & SON, WARKWORTH, ONT.** Campbellford Station.

Holstein—Fit for service, a brother to sire Canadian-bred Champion Queen Butter Baroness, 33.17 lbs. butter in seven days. His dam the only cow in Canada with two granddaughters averaging 31.71 lbs., and six averaging 27.56 lbs. in seven days. **Wm. A. Rife, Hespeler.**

IN B FLAT.
The Teacher (whispering)—Now, children, give us "Little Drops of Water," and put some spirit in it.

The Head (whispering)—Careful, sir, school. Remember this is a temperance school. Say—"put some ginger in it," if you must.

Questions and Answers. Miscellaneous.

Septic Tank.

Please give full descriptions how to install a septic-tank system, such as you have at Weldwood. C. T.

Ans.—See page 1293, of our issue of July 24 last.

Wall Chipping.

I have a wall of large, poorly-burnt brick under my barn. They are crumbling off some, and are worse where water runs down them and freezes on. Can you tell me any way to save this wall? I had thought of plastering it with cement and lime, and then washing it with cement. Any information will be very thankfully received.

A SUBSCRIBER.

Ans.—If the cement plaster or wash could be made to stick, it would likely aid in preserving the wall, but there would likely be a tendency for it to chip off. Painting the brick might aid in saving them. You might try a little of the cement. Have any of our readers tried a cement coating on brick?

Dutch Sets.

How are Dutch sets propagated? I sowed onion seed last spring, and it has produced onions one-half inch to one inch in diameter. Are they Dutch sets? If planted next spring, what will they produce? A. C. A.

Ans.—Your onions are sets. Sets are usually produced by planting 30 lbs. or more of seed per acre, and delay seeding until the latter part of May. This treatment crowds the seedlings, causing them to grow very small. From one-half to three-quarters inch in diameter is the desired size for sets. If planted early, in rows about one foot apart and three inches apart in the row, they will produce good, marketable onions by the first of July, or onions for bunching by June first.

New Ontario.

1. What kind of climate is that of New Ontario? Does it keep cold late in spring, and does it get cold early in the fall? Is there much snow?

2. Is it a good farming country? Does it grow wheat, oats, rye, alsike, and alfalfa?

3. Is it a good country for growing vegetables, such as onions, carrots, tomatoes?

4. Is it a profitable country for bees? 5. Are there any railways going through there? A. W.

Ans.—1. The climate of New Ontario depends largely upon latitude. Of course, frosts come earlier in fall, and cold weather remains later in spring than in Southern Ontario. The snowfall is usually quite heavy.

2. The clay belt is good farming land. It is a great clover country. Cereals grow very well in good sections.

3. It is a good vegetable country. 4. Properly cared for, they should do well in some sections.

5. Yes. The Temiskaming & Northern Ontario.

Horse Queries.

1. What is a Standard-bred horse? Is it a roadster or carriage horse?

2. If two colts are sired by the same horse, and only three days difference in their ages, and both the mares are about the same age and size, because one is so much larger and better, should it be turned down for being in the wrong class? Both colts are Standard-bred, and are sired by Baronage, a horse that weighs 1,035 pounds.

3. Has a judge the right to take the entry book in his hands and look it over before giving his decision? F. W.

Ans.—1. The Standard-bred is a pure breed, a mare whose sire is a registered Standard-bred and whose dam and granddam were sired by registered Standard-bred horses, is considered pure-bred, provided she has a record of 2.30, or is the dam of a trotter with a record of 2.30. Any mare sired by a Standard-bred horse, and with two daughters having records of 2.30, is eligible. There are other rules, but this gives an idea. Roadsters are usually lighter and speedier than carriage, the latter being larger, heavier built, not so speedy, and higher acters.

2. It might be necessary to throw out such a colt.

3. Yes. Entries go by numbers.

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Herd headed by King Johannes Pontiac Korndyke, whose near dams and sisters, 13 in all, average 33.77 lbs. butter in 7 days. His sister, Pontiac Lady Korndyke, has a record of 35.02 lbs. butter in 7 days, 156.92 lbs. in 30 days—world's records when made. We are offering several females bred to this bull, also a few bull calves.

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Pedigreed Shropshires Shearing Rams and Ram Lamb. Prices right. Apply W. F. Somerset, Port Sydney, Ont.

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Questions and Answers. Miscellaneous.

A Patent.

Would you kindly let me know, through "The Farmer's Advocate," whether there is a patent or trademark on Scott's Emulsion?

C. S.

Ans.—Scott's Emulsion carries a registered trademark, and the necessary patent to protect the manufacturer.

Hydro-Electric and Trees.

The hydro-electric line is cutting off some of my orchard. The trees are just starting to bear. They are about 12 years old. Would like to know how much I am entitled to for each tree, by law?

E. A. S.

Ontario.

Ans.—There is no legally fixed amount. You are entitled to reasonable compensation, whatever that be; and if you cannot agree with the commission upon the amount, you may have it determined by arbitration.

Calf Paralyzed—Top-dressing Fall Wheat.

1. Calf seemed paralyzed when it came. It would put its hind legs up towards its front ones, and push its front legs back. It was a large calf, and in good condition. It got so it could walk around, but not very well, and would take spells when it could not get up or move around. Will it get over it without any remedy? If not, what remedy would you advise to use, and would it be advisable to keep it for a breeding cow? Calf is three months old.

R. L.

Ans.—1. The trouble with your calf seems to be congenital, or to date from time of birth. We are not in a position to name the disease or cite a similar case. We would advise you, however, not to keep same for breeding cow, but to dispose of it upon the first favorable opportunity.

2. There appears to be no best time to top-dress fall wheat. One thing must be avoided, though, if possible, and that is getting on the ground while soft. After the wheat comes up, in the late autumn, winter, or early spring, all lend themselves as favorable periods for this operation. Keep in mind the wash on sloping land, and danger of cutting soft land, and apply when most convenient.

Cows Fail to Conceive.

I cannot get my cows in calf. They are all in good condition, sleek and thriving. They go about three months after calving before they come in season. I always breed the first time. Then they appear to be with calf till about the seventh or eighth week, when they come in season and we go through the process again. Last year I had to sell four cows out of eight. I bought four more to take their places, and three of them and one of my own stock I cannot get with calf this year. I have tried two Shorthorn bulls. Some advise to try a Jersey or Holstein, but I do not like to do this, as my cows are grade Shorthorns. I never see anything come from the cows that would lead me to believe they abort. In winter I feed about ten pounds mixed chop per cow, to those in full milk, with hay and silage.

F. B.

Ans.—From the description given, we are inclined to think that the trouble is contagious abortion, although it may not be. Sometimes cows fail to breed, due to a disease of the ovaries, and when this is the case, nothing can be done, but it is scarcely likely that so many of your cows would be so troubled. Contagious abortion dies out in from two to three years as a general thing. Would, if possible, keep the cows which are carrying calves away from those not with calf. There is a possibility that the disease is spread by the bull, but would not advise cross-breeding. Carbolic acid is sometimes advised as a treatment. Feed it with their feed—25 drops to a pint of water, and mixed with bran once a day. This may be increased by a few drops from time to time. Some feed it three times daily for three days, then stop three, and feed again. A new treatment was outlined in our issue of Sept. 25. Look this up. Of course, as stated before, we could not be sure that this is contagious abortion.



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Shropshires and Cotswold Sheep In Shropshires there are 50 shearing wolds there are 25 shearing ewes, 25 shearing rams. Ram and ewe lambs of both breeds. My ponies are the kind which are in great demand, being well broken and reliable. Blairgowrie Farm. **JOHN MILLER, JR., ASHBURN, ONT.**

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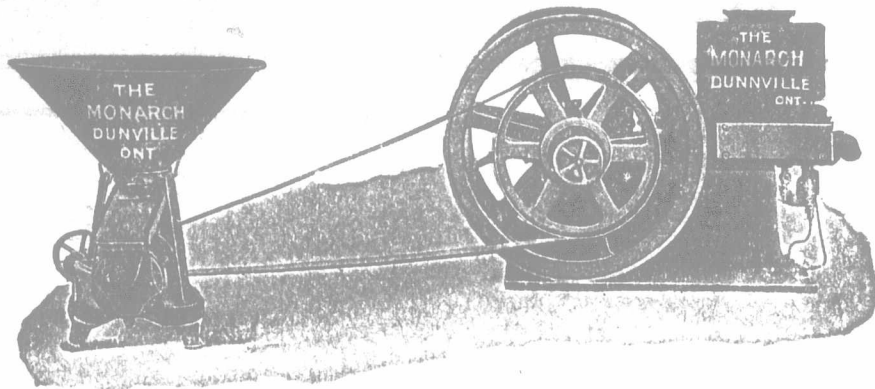
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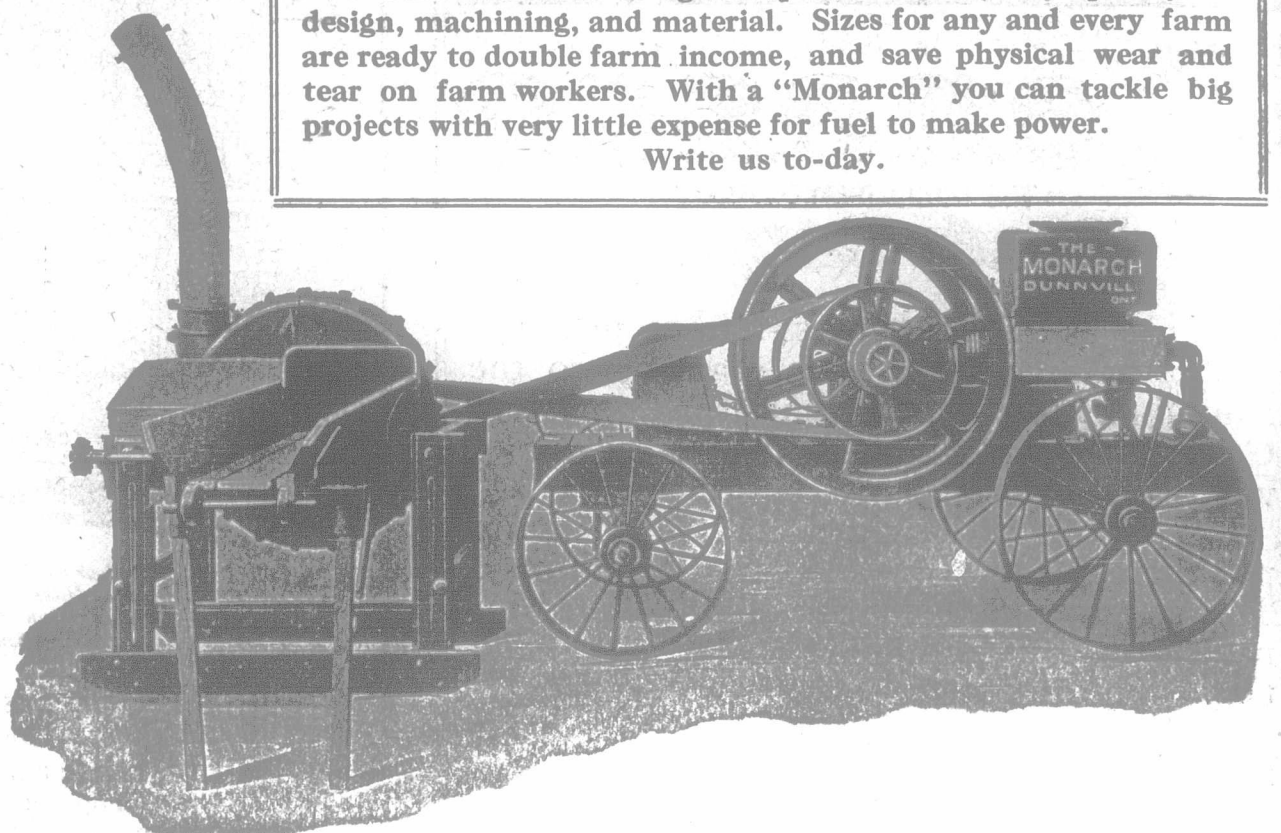


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