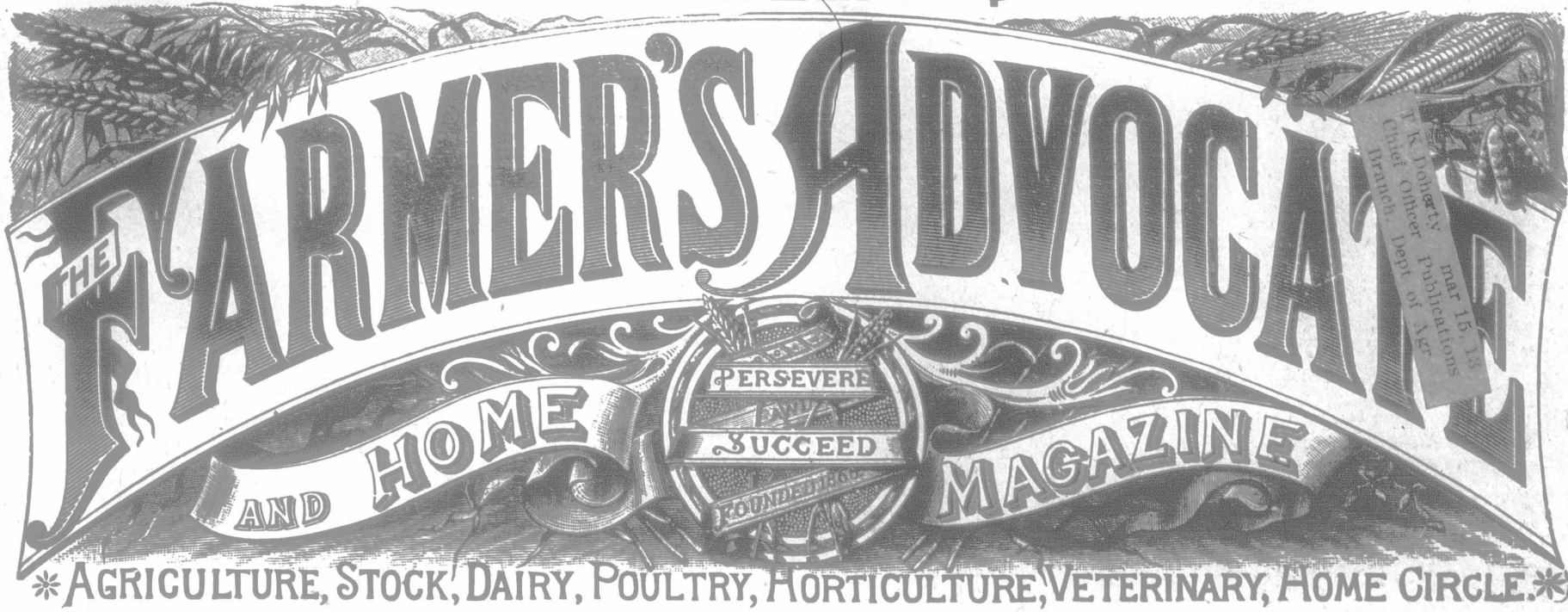


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VOL. XLVII.

LONDON, ONTARIO, OCTOBER 31, 1912.

No. 1049

FROST FENCE

RECOGNIZED STANDARD OF ALL FENCES.
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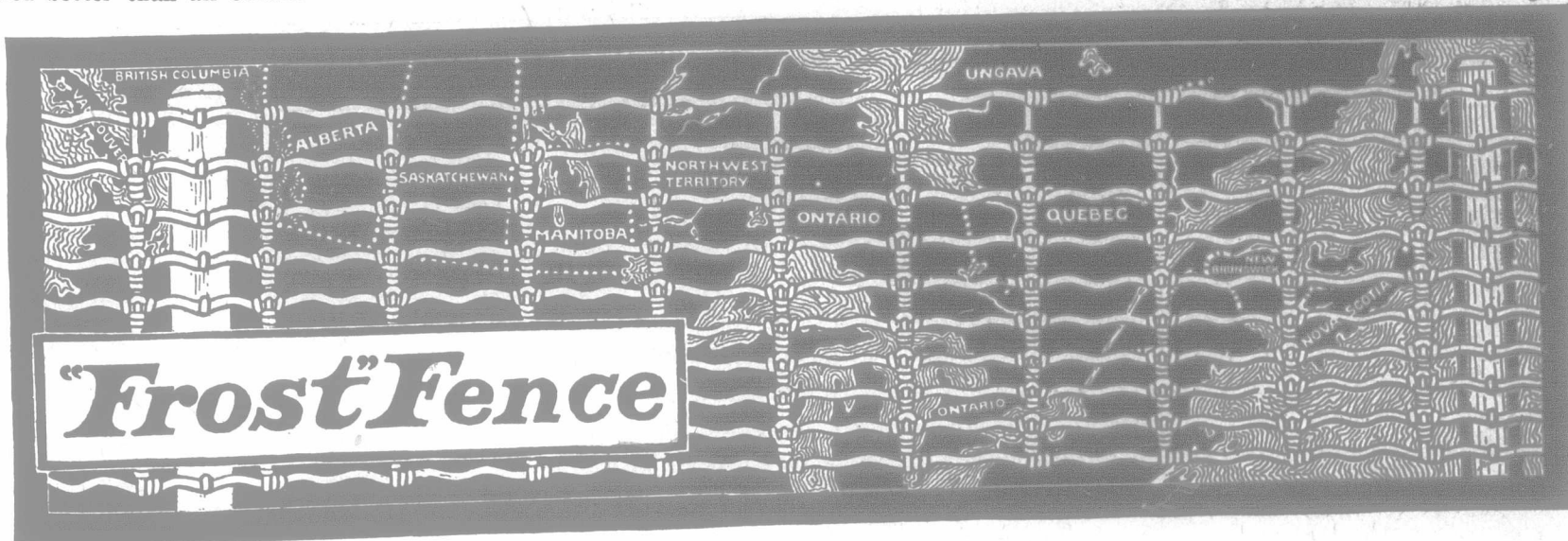
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The buyers and users of Woven Fence to-day recognize only two classes. The one class is known as Ring Lock Fence which comprises practically all other Woven Fences with the exception of the "FROST," the Fence in a class of its own, made from Canadian wire, with that neat, double-wrap, non-slip lock, which is so different that it cannot be imitated and at the same time is recognized better than all others.

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We do not ask that prospective purchasers of Wire Fence accept our word for the above, but what we do ask and what we think it is to every Fence buyer's advantage is this: let us explain fully to you just how Frost Fence is manufactured, how we look after every little detail, and if possible, we would be glad to have you see for yourself the different steps in turning out the proper article in the Fence line. If we have a chance to show you this, then we know that you will decide for yourself that Woven Frost Fence, carefully woven from exactly right Frost Wire, is the Fence that you most require.



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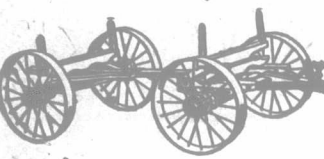
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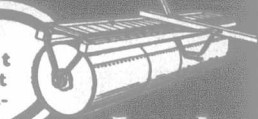
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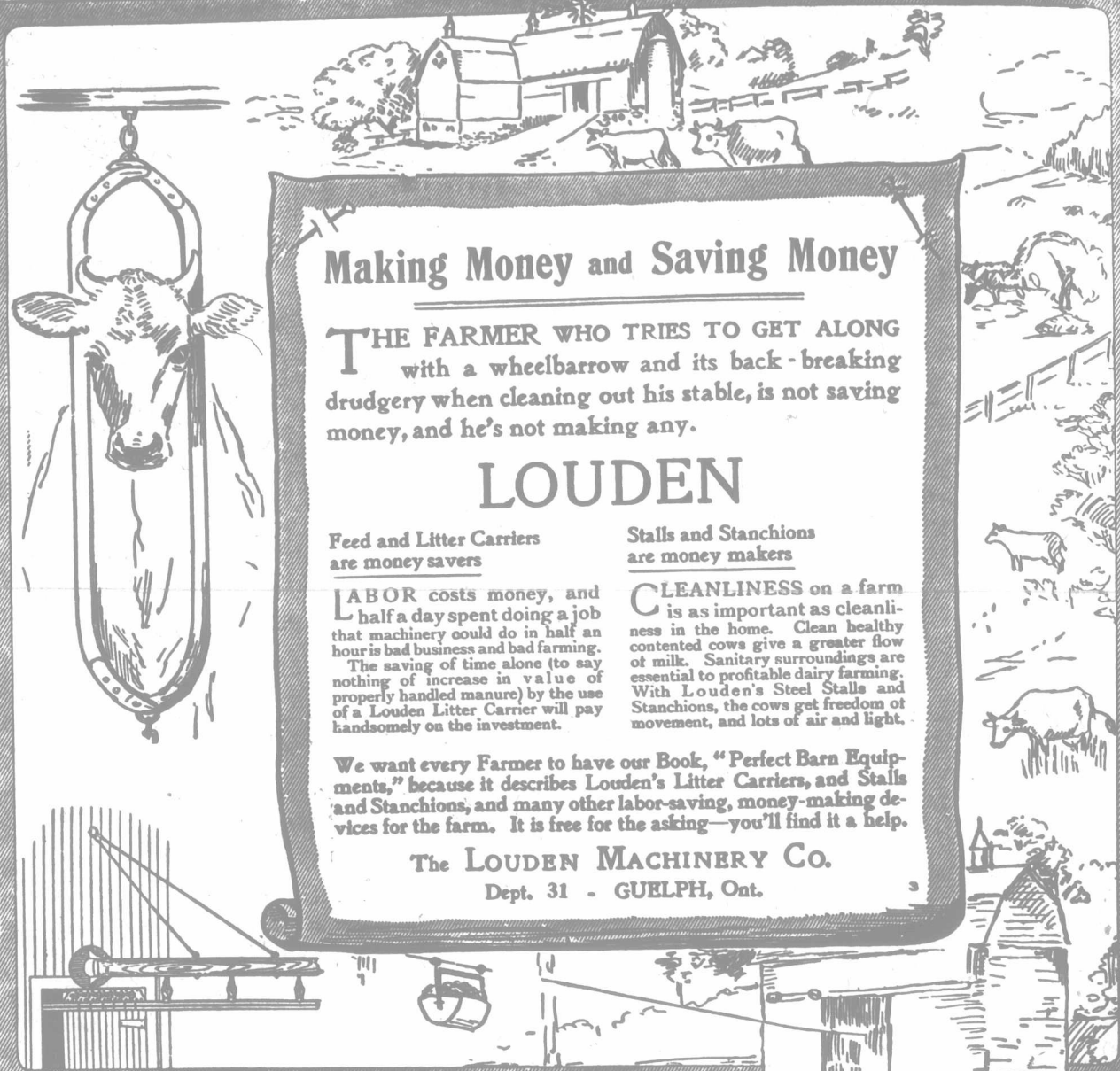
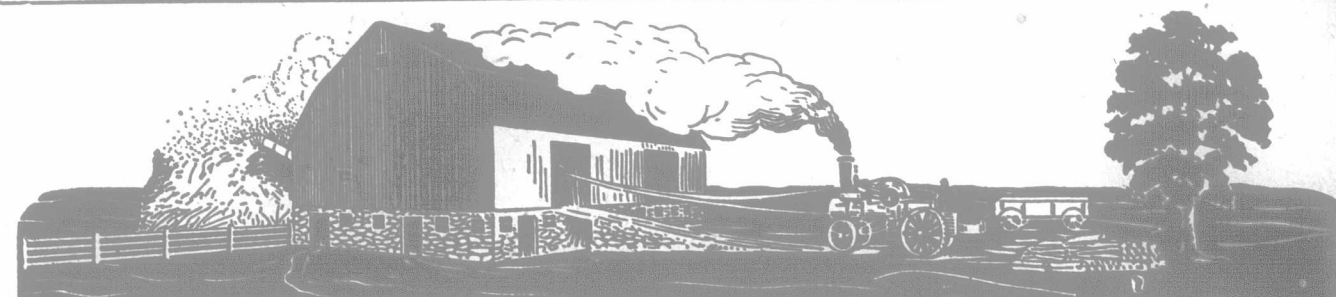
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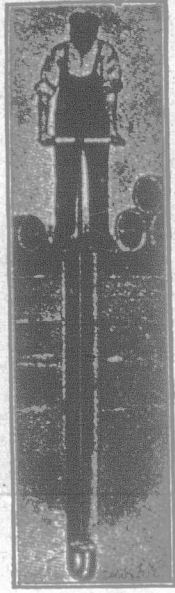
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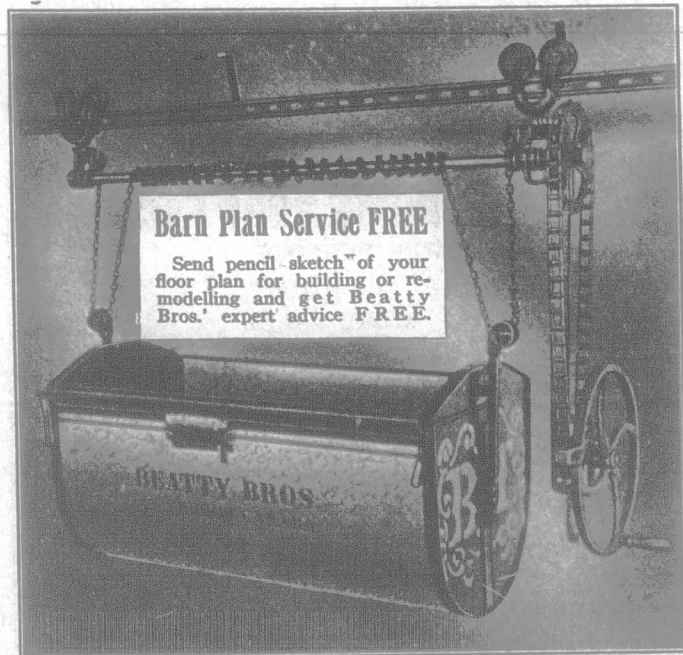
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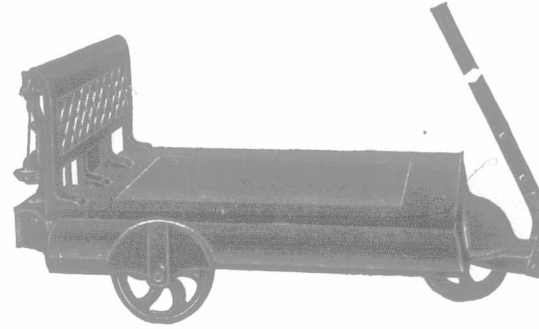
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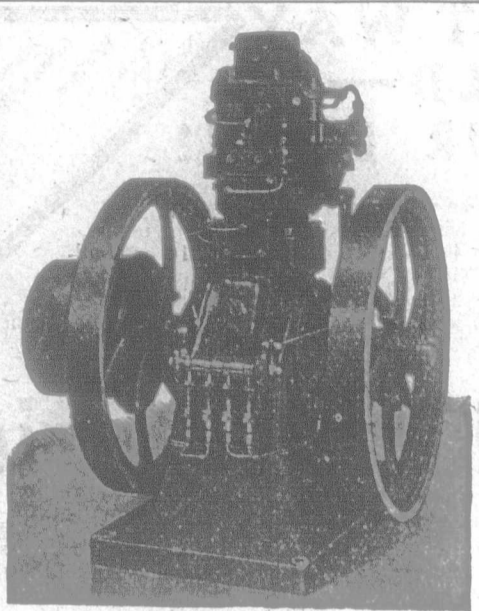
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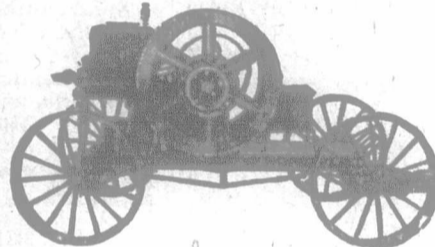
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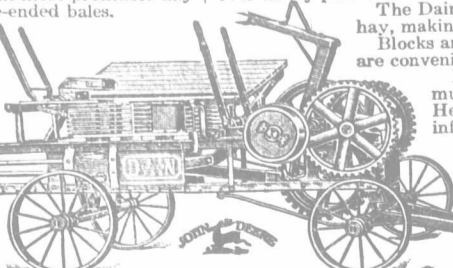
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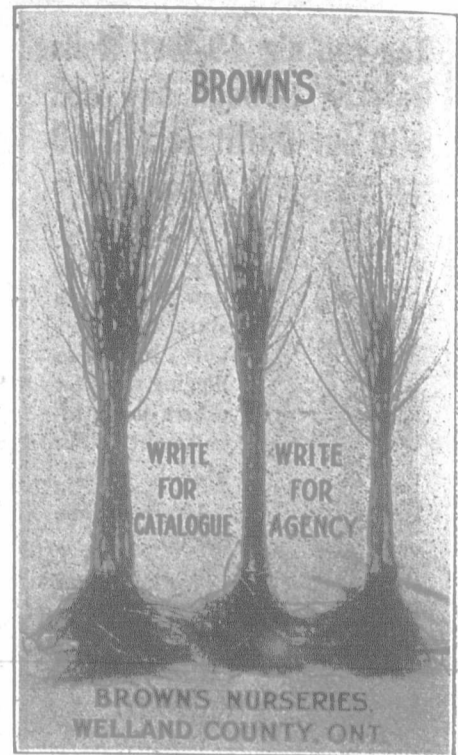
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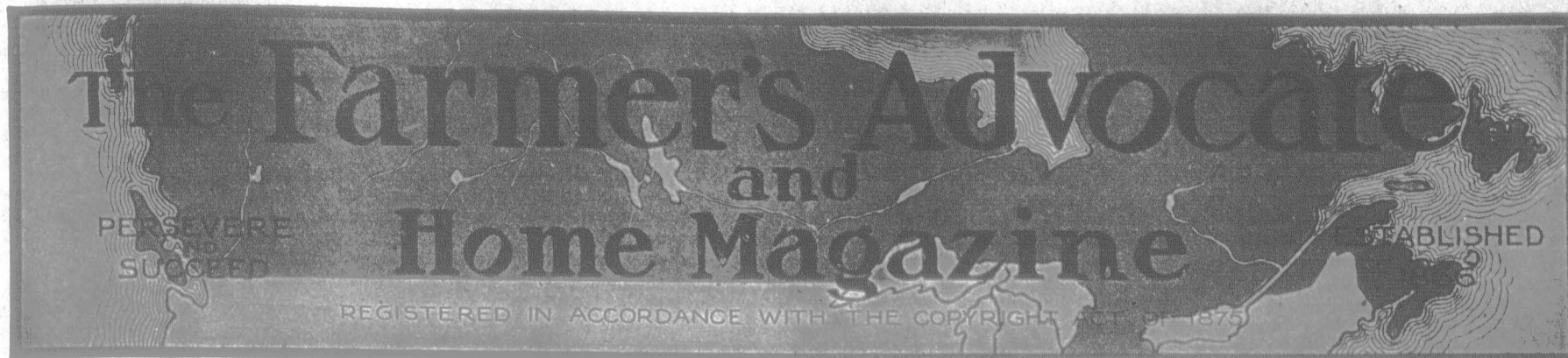
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Vol. XLVII.

LONDON, ONTARIO, OCTOBER 31, 1912.

No. 1049

EDITORIAL.

October silo-filling is kind of a poky job.

The best method of supplying nitrogen to the soil on the general farm is through leguminous crops or barnyard manure.

One great aim in the new education should be to train the head through the work of the hand, and character through both.

When a man conceives a bold but rational idea, he can afford to follow it unruffled by any amount of scoffing. Let those laugh who have nothing better to do.

It sometimes happens that the most profit is realized from despised sources, while the brightest hopes turn to ashes. The potato crop, which promised such a bumper yield, has been dug out of the mud only to rot and discolor in the pits or bins. But roots are fine.

Full mows, full silos, full granaries and full root cellars mean well-filled thrifty stock for the winter, and months of contentment to the owner. Nothing is more satisfying to the stockman than to see his stock well bedded and well fed, and nothing gives him more trouble than a feed shortage.

There is very little to promote health or discipline in either body or mind in shutting prisoners in dark cells for their entire terms. Farm work promotes both, gives work to the able-bodied inmates, and produces goods of great value for consumption. This scheme is working admirably in Ontario.

Very true words are these from "Scotland Yet," referring to the inbred Mertoun flock of Border Leicesters recently dispersed. "An aristocracy can run to seed among sheep, cattle or horses as well as among human beings. If you are breeding (beef) cattle or sheep, always remember the butcher's idea, and what he must provide for the public; if you are breeding (draft) horses keep the lorry in view. Thus only will you escape disaster."

Advanced opinion is veering strongly to the opinion that education should be made more practical. That is to say, it should have more direct relation to the things of everyday life. In rural communities especially it should be related as closely as practicable to agriculture and to rural affairs. Such lines of education will be continued into later life through vocational experience and necessity. Education along purely abstract or academic lines too often ceases with good-bye to the schoolroom.

The prices recorded at Cranford were not merely the prices of well-bred cattle, says our Scottish correspondent, they were the prices of milk-record pedigree Shorthorns. "While he was prosecuting his scheme, the late Mr. Taylor was sometimes laughed at, but the results of the dispersion show him to have been no idle dreamer, but a man with a well-founded rational idea as to what might be done to retain the dairying propensities of the Shorthorns recorded in Coates' Herdbook." The result was a complete vindication.

To What End?

From press and platform a vast amount of cheap advice has been tendered Canadian farmers for many years past, inciting them to swell statistics of production and of export by producing more pork, more beef, more butter, more cheese, more eggs, more poultry, more sheep, more wheat, more fruit, more vegetables—in fact more everything. Campaigns of "education" and propaganda have been systematically waged on Institute platforms, inspired by official generals who thought in totals, but sometimes overlooked the interest of the producer as an individual. In their anxiety to push agriculture, boom the country and bring to pass impressive percentages of increase in production of hogs or cheese, or what not, they failed to consider duly the probable effect of such increased production upon prices. "No fear of over-production," they would glibly assert. "The British market will take all you can raise." Which was true enough—with a proviso. They omitted to emphasize that a few dozen other countries were also catering to this same British market, and that custom could be wrested from these competitors only by superior quality or lower prices, or both. Quality being equal, an increased plenitude of supply, even to the extent of one or two per cent., is bound to make for depression of values. Take, for instance, hogs. How quickly prices drop when receipts run a few thousands heavier than usual, and how prompt the explanation that abundance of supplies in England has sent the bacon market down! A comparatively small augmentation of supply, even in world markets, often makes the difference between scarcity and abundance, between high prices and low. In local markets the effect is still more sharply and immediately discernible—as everyone knows who has marketed fruit, vegetables or other perishable products.

The Farmer's Advocate is by no means unsympathetic with well-considered efforts to enlarge production to a reasonable extent in those lines where expansion is likely to prove profitable to the individual farmer, but maintains that not a little such effort has been ill-judged because too much attention has been paid to eye-filling totals, too much interest to the secondary businesses depending upon farmers' purchases and too little attention to the profit-and-loss account of the individual farmer himself. We believe the bacon-hog boom was over-done and there have been times when the cheese business looked as though it had been, though matters have since readjusted themselves pretty satisfactorily in both these lines, as they always will in the end.

It is just as well that public officials should keep first principles in mind, and realize the true ends towards which they should strive. The everyday farmer is farming for profit, and it is not to his interest to have production enormously increased, thus slumping prices. It is to his interest to be shown how he, as an individual, can extract a larger revenue, and especially a larger profit, from his own particular farm. Also it is usually to his advantage to have the standard of quality raised, for that increases consumption, enlarges fastidious demand and generally swells prices. We are pleased to note that Governmental effort in Canada to-day is being largely directed towards improving quality and assisting the individual farmer to make the best use of his particular opportunities for produc-

tion, rather than towards extensive exploitation of this or that line of production. As farmers more clearly discern their own true interests, it will become increasingly and properly difficult to encourage production upon any ground but that of a broad and reasonable self-interest.

Farming as Prison and Hospital Labor.

In this issue there appears an article dealing with agriculture on the Prison Farm, Guelph, Ontario. This is the final of a series of four articles discussing agriculture on Government farms in this Province. It has always been a problem facing the Government how best to employ such misdemeanants as were physically fit to work and also those weak-minded who are not considered dangerous. The problem has been solved and agriculture has filled the gap, as it has done many another gap in the welfare of the individual and the country.

Dealing first with the hospitals for the insane and feeble-minded, confined in these institutions are hundreds of people whose labor may be, and is being, usefully employed in working farm land. There is nothing quite so beneficial for a person who is affected by disease of body or mind as light work in the open air in full communion with nature. Farm work offers such a variety of opportunity in the great diversification of tasks always on hand that large numbers may be employed at all times. Work under such conditions relieves the mind. The hospital becomes to the inmate more of a home than an institution of confinement. The freedom given encourages, and is the best medicine for mind and body. A healthy body aids in the cure of the mind, and the work on the land keeps the body physically fit. Besides, the inmates are doing a useful work, not only for themselves but for the institution. They are cultivating and reaping crops which are utilized as food for those in the institution. It requires no small amount of milk, meat, fruit, wheat and vegetables to supply the tables in these institutions annually, yet this is now being very largely done by the institutions themselves, and in time, as the scheme unfolds, will be produced entirely upon the farms operated by the inmates. This is not all. Some of the institutions are already selling large quantities of pork. Much different is the life of the man confined in a hospital for the insane to-day than it was in former times. He is now working for his own and for his benefactor's good, in comparative freedom, enjoying fresh air, sunshine and productive manual labor. He gets less chance to brood about his trouble, and his case is far more likely to yield to medical treatment than were he closely confined. May the good work continue to grow.

Prison labor has been even a more difficult proposition than hospital labor. Mechanics and artisans of all kinds are confined in our prisons, and many of them are not really bad, having yielded to temptation and been apprehended. Such men should labor, are the better of work, and, besides, there is little in corporal punishment to improve a misdemeanant. There are those who would do away with it entirely. This cannot be done in a day, if it is ever accomplished, but the prison-farm scheme for comparatively short-term prisoners is one of the best yet in the way of reforming rather than punishing those who are under the ban of the law. The principle is right, and we can do no better than quote

THE FARMER'S ADVOCATE AND HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL
IN THE DOMINION.

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JOHN WELD, MANAGER.

Agents for "The Farmer's Advocate and Home Journal,"
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the Provincial Secretary when he said: "Everybody but extremists is agreed that, from every point of view, physical or moral, practical or humane, prisoners must be put to productive work. The problem is to reduce the competition of convict-labor to a minimum, and especially to reduce the proportion of prison-made goods that are sold in the open market." The farm has accomplished this. It offers opportunity to utilize the work of the mechanics in making and repairing all kinds of machines and implements used. Architects, engineers, carpenters, masons, machinists, laborers, blacksmiths, all find profitable, congenial, health-giving employment on the large farm. Stone-quarries, rock-crushers, etc., aid to give diversified work. "The fresh-air cure for criminals" is a success. Prisoners who have no real occupation are taught useful work and go away better men, fitted for life's battles, physically and morally. Is it not much more desirable to teach these men something to help them in after life than to make them eke out their terms behind iron bars and walls of stone, to leave the prison dejected, morally degraded, and worse fitted to meet the problems of everyday life than when they went in? "Reformatory" is the word, and reformation is the aim of prison labor on the farm. It is doing its work and as the scheme progresses better things will come. "The boys," as the prisoners are known to the officials, enjoy comparative freedom, appreciate it, learn how to work, which will ensure them profitable employment when their terms expire, and go away useful men.

In the neighborhood of London a large number of corn-distributing pipes for filling silos have been made this year after the pattern of the one illustrated in The Farmer's Advocate of August 29th. Users of them have been more than pleased. That one little idea is worth double the subscription price to many a reader.

Any Education Better than None.

"Since the question of schools is up again, and you have pointed out what, in your judgment, are the defects of our present system, I fear that some will be using your arguments as an excuse for keeping their children out of school, which would be too bad. With all its need of improvement, the schools give an education a million times better than none at all, and, further, it is the best country parents will likely have an opportunity to send their children to. I should like you to say some things clear and plain on the need of making the best use of the school system we have."

This letter from a Niagara Peninsula reader, L. C. Wilde, is appropriate and timely. By all means let us make the best of what educational facilities we have until better ones are provided. Nothing has ever been published by The Farmer's Advocate with a view to disparaging education. We believe in it heart and soul, first of all for the personal culture and power and enlarged capacity for both private and public service which it confers. These benefits must never be ignored.

While some few men receive fairly broad education with little or no schooling, most of them realize vividly the handicap of their early deprivation and almost invariably see to it that their children are provided with the best training the schools can furnish. While there is in some quarters failure to appreciate the opportunities for self education that are open to youths of discernment, calibre and application, it is to be said that the vast majority of children require for normal mental development the advantage of systematic discipline under the authority and guidance of a trained tutor. Otherwise the precious hours of plastic youth are frittered away to inconsequential purpose, and the untrained young man or woman soon finds himself or herself under the necessity of earning a living hampered by a very circumscribed sphere of usefulness and deprived of any considerable chances of subsequent self culture save at the expense of vast exertion, which, as a matter of experience, is seldom put forth. Pathetic beyond words to describe was the remark of an old laborer with whom we were talking one day. A more than ordinarily observant man, he realized keenly his limitations. Asked to receipt his wages, he excused himself thus: "I can't sign my own name. I'm the most ignorant fellow you ever saw. I can't do nothing but dig."

Get education by all means, get all you can afford, and get it while you are young. Youth is the time to learn. Memory loses its grasp with age; faculties become gradually set and increasingly harder to exercise along new lines. The child uneducated is handicapped for life. The late A. P. Ketchen, favorably known as an Institute speaker, once said in an evening address: "If I had a son I would want to start him out in life with three things—a sound, healthy body, a good education and an empty pocketbook." Mr. Ketchen was right.

HORSES.

Straw is plentiful. Use sufficient bedding.

It is a good plan to keep salt in front of horses at all times.

Clean and oil all the plow harness before storing it away for winter. It will add to its life of usefulness and also to its appearance.

Winter is a good time to train the colts. However, when training or "breaking" is once commenced, daily lessons should be given until the colt is thoroughly "broken."

As the rush of work slackens reduce the grain ration. No horse should get as much grain when idle as when at heavy work; neither should the horse have all his grain feed cut off when work stops. Cut the ration down gradually.

Where at all possible, arrange to tie the colts which are running two or more together in a box stall while they eat. No two eat at the same rate, and it is necessary, especially with the grain ration, that each colt gets his allotted share.

Most farm-work horses are rather thin at this season, and it never pays the owner to place a thin horse on the market. Fat may or may not be a desirable quality in horses, but nevertheless it sells them.

Straw is often used as a winter feed for idle horses, and the practice is, under some conditions, justifiable and profitable, but only good clean, bright straw should be used. The water-soaked, dusty, discolored straw so common this year is not fit to feed horses.

Over-exertion one day, followed by several days of enforced idleness, is one of the common causes of faulty action. Action improves with use, provided the use is well-balanced. Regularity is important in work as well as in diet, and in exercise in the yard as well as in grooming.

Horse stables do not require to be over-warm. Horses stand a lot of cold without injury, but drafts are dangerous. If the stable is well-ventilated, a blanket will protect from the cold, even if it is at times somewhat severe, and a cold stable, well ventilated, is much to be preferred over a warm stable, lacking in fresh air.

Frequent and copious rains during the haying and harvesting months caused a large amount of dusty, and even musty, feed, both grain and roughage. It is doubly necessary that great care be taken in feeding the horses this winter. Great care should be exercised in starting them on this feed during winter idleness, and such hay should be dampened with lime water.

To Tell the Age of a Horse.

There are things which we may reason out, and others which to be remembered must be in a sense memorized. One of the latter is the method of telling the age of a horse. Most of our memories work best to rhyme, and the Aberdeen Free Press has used the rhyming method of telling the age of a horse. Here it is:

To tell the age of any horse
Inspect the lower jaw, of course,
The six front teeth the truth will tell,
And every doubt and fear dispel.

Two middle "nippers" you behold
Before the colt is two weeks old,
Before eight weeks two more will come,
Eight months, the "corners" cut the gum.

Two outside grooves will disappear
From the middle two in just one year,
In two years from the second pair,
In three the "corners," too, are bare.

At two the middle "nippers" drop,
At three the second pair can't stop,
When four year old the third pair goes,
At five a full new set he shows.

The deep black spots will pass from view,
At six years from the middle two,
The second pair at seven years,
At eight the spot each "corner" clears.

From middle "nippers" upper jaw,
At nine the black spots will withdraw;
The second pair at ten are white,
Eleven finds the "corners" light.

As time goes on the horsemen know
The oval teeth three-sided grow;
They larger get, project before,
Till twenty, when we know no more.

Stumbling in Horses.

Every man who has driven horses has had more or less trouble with stumbling. On this very important subject James McDonough, D. V. S., of Montclair, New Jersey, read a paper before the State Veterinary Association sometime ago, and it recently appeared in the American Veterinary Review.

The term "stumbling," as applied here, is considered by Dr. McDonough as misleading, as it would lead one to believe that the cause existed in the free limb, while as a matter of fact it will be found to exist in the fixed or supporting limb. We have different kinds of stumblers. Some horses will make what we call a "miss step," some will fall to the extent of striking one or both knees against the ground, while others will plunge forward, striking their nose and face, or even to the top of their heads. While this difference in stumbling is merely one of degree, it nevertheless is deserving of attention. When a horse stumbles, the toe of the free limb comes in contact with the ground at a time when it is being extended or carried forward as shown by the mark found upon the hoof at that point. There-

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fore we have always been led to believe that it was caused by the horse carrying his foot too close to the ground, and for this reason shod him with one of two objects in view, that is increase his action by applying a heavier shoe or shortening the toe by rasping away the hoof at that point.

When we now fail to stop him, as we usually do, we remind the owner of the old adage—"Once a stumbler, always a stumbler." But let us return and try to determine the cause of the difference in the degree of stumbling. The first thing noticeable is the difference in the marks found on the front of the hoof. Upon the hoof of the animal that made what we call a "miss step," you may not find any mark, but a little earth on the toe of the shoe. An examination of the hoof of the animal that nearly fell, will show a mark extending nearly the entire length of the toe. While the animal that fell will not only show a mark extending the entire length of the hoof, but also into the coronet above, and sometimes to the front of the ankle joint. This animal, while falling, may be seen to make one or more desperate efforts to regain his feet. His expression shows fear and excitement. The free limb, the one he was carrying forward at the time he stumbled, now seems to be fast and in a position where he cannot possibly extend it. It was fast from the beginning, otherwise his efforts to extend it would have been successful as was the case with the preceding animals. To those who have watched a stumbling horse fall, it became evident that the limb was forced into a position when the animal was powerless to release it. This could only be accomplished by the animal's weight having been thrown upon that side before the limb had reached a position to receive and support it.

As the fixed limb is extended to support all the weight of the front part of the body until the extension of the free limb is completed, its failure to do so, as shown by the animal whose free limb was forced against the ground, should influence one to look there for a cause, where we will usually find it.

If, when riding behind a frequent "stumbler" we closely watch the supporting limb, we will notice a slight flexion of the knee just as the animal stumbles. This is caused by the presence of some condition, either pathological or mechanical, that renders the limb unable to support the body weight with comfort, and as a result it yields to the pressure and permits the body to drop to the extent of allowing the toe of the opposite limb to strike the ground when being carried forward. The consequence will depend upon the position of the free limb at the time the supporting limb gave way. Should the free limb occupy a position just anterior to the supporting limb, the animal will make a quick move and get it forward in time to catch and support the weight of the body. We call this a "miss step" or slight stumble, and a little dirt may be found upon the toe of the shoe. Should the free limb occupy a position in a line with, or slightly behind the fixed limb, a portion of the front part of the hoof will be forced against the ground and the animal's efforts to regain his feet will be unsuccessful to the extent of allowing one or both knees to become injured, and we call this a "stumbler." Should the supporting limb give away at a time when the free limb was about to be extended, the position it now occupies causes that part of the limb from the ankle down to be forced against the ground, making a mark extending the entire length of the toe, also injuring the coronet and ankle joint. If we closely examine those injuries, we will often find they were caused by the foot having been forced in a backward direction or just the opposite to a condition that would be produced if caused by the animal pulling the limb forward. The animal will be seen to plunge, and while falling make several efforts to free the limb. He usually goes down by plunging forward, and if the driver pulls hard upon the "lines" in an effort to hold him up, he may prevent the animal from extending his neck, and cause him to strike upon his face or even the top of his head.

When the free limb reaches the ground and becomes the supporting limb, its direction is oblique from above to below, and from behind to before. During the extension of the free limb the body is moving forward upon the supporting limb, which moves first to a vertical, then to an oblique position from before to behind. As his change in the position of the fixed limb takes place, the work of supporting the body is transferred from one part of the limb to another, so that the part subjected to the greatest strain can be determined by the position of the free limb at the time he stumbles, and as the position occupied by the free limb can be accounted for by the degree of stumbling, we are led to believe that the supporting limb occupies a vertical position in all cases where the animal does not fall to the ground. This is usually caused by an unbalanced limb when the shape of the hoof or the position of the shoe is such as to force the ankle to either side. Of course, any condition that may render the limb unable to perform its work with comfort

will cause a horse to stumble. But in either case whether caused mechanically, or by some abnormal or diseased condition of the limb, our one object must be to change the weight to some other and stronger part. When it is caused by an unbalanced foot remember what was said upon the subject of interfering. If the ankle is inclined to the inside, increase its support in that direction by widening the shoe upon that side, when it will be found that the condition has been relieved. If not entirely corrected, and we dare not widen the shoe further to the inside, we will then fit it narrower upon the outside until the condition is entirely corrected.

When a horse loses all control of himself and falls, I do not believe that it is caused by any faulty condition of the limb, which seems to give way at the time it first comes in contact with the ground, and is probably caused by the animal stepping upon a loose stone or into a hole.

It is probable that 90 per cent. of all stumbling is caused by an unbalanced limb, for when a diseased condition is present it is likely to cause lameness and lame horses are not always "stumblers," for the animal will save the affected limb while traveling by preventing, to some extent, the weight of the body coming upon it by holding his head and shoulders up when that foot comes upon the ground, while the head and fore-

through its centre and through that part of the foot known as the quarters. It has now reached a position where the quarters must be depended upon to support it upon either side, and if for any reason insufficient support is given to the one side, the limb will suddenly be displaced in that direction, and the injury of the ligaments will often compel the animal to yield to the increased strain.

While considering the limb in a vertical position, if the distance of the two heels from the centre of the frog is not equal, the limb will drop in the direction of the narrow side. This also applies to pads, for if the centre of a pad is not under the centre of the frog, the limb will be inclined to the narrow side. It does not make the slightest difference how wide the pad is on the one side, if the other side is wider it offers more support to that side of the limb, and will cause it to lean in the direction of the opposite side, where it receives the least support.

So far as I know one has to depend entirely upon his eye when balancing a limb. The custom is to measure the foot at several places, but as the position of every part is dependent upon its shape, it leaves us without any fixed point from which we can take measurements. The better way is to pick up the opposite foot, thereby throwing all of the weight upon the limb to be

corrected, and if the ergot found back of the ankle occupies a position directly over the depression, between the bulbs of the heels, we can feel that the work of the limb is properly distributed.

Stumbling behind (breaking over) is usually caused by some condition existing on the inside of the hock joint that renders it unable to perform its work with comfort, and can often be accepted as an early symptom of an approaching spavin.

In most cases, the foot will be inclined to the outside, thereby increasing the work on the inside of the hock joint.

I have tried different methods of shoeing to overcome stumbling behind, and

have had the most success with a long shoe provided with low heels and toe, with a calk situated at either side under the quarters. When fitted, if the foot is inclined to the outside, it might be well to fit the shoe full on that side, or narrow on the inside.

LIVE STOCK.

Steers which make the best gains almost invariably have soft, pliable skins.

Shoot the dog if he worries the flock. A good sheep-dog never does this.

The young ram with the flock should get a ration strong in protein.

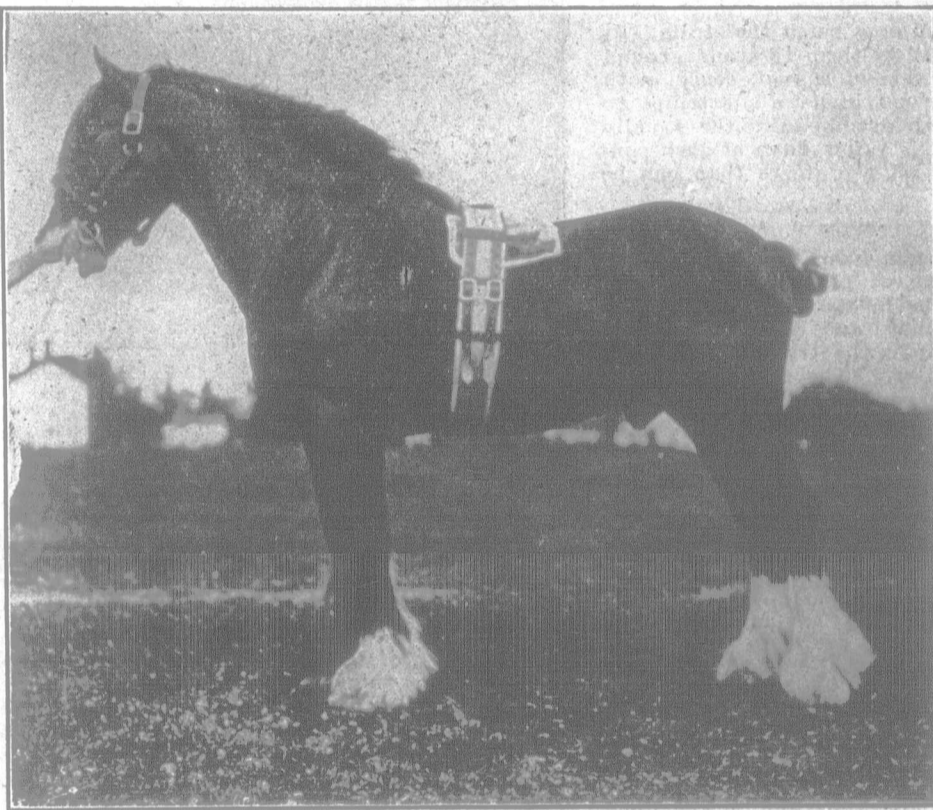
For the first two months of a suckling pig's life, it is possible for it to gain one pound daily.

Nervous cattle accustomed to roaming over large areas, seem to be handicapped in making gains under confinement.

All kinds of stock breeding may be made successful by the man who feels his way, makes haste slowly, and grows as his business grows.

Tying calves while they feed is a practice worthy of being followed. It at least ensures that each calf gets his allotted amount.

Arrange to feed the ewes a little grain through the winter. A small quantity fed regularly over a long period is better than large quantities fed after yeaning.



Baron's Best.

Clydesdale stallion, three times winner of first prize at the H. & A. S. Show in Scotland. Recently imported by Hon. Robert Beith, Bowmanville, Ont.

parts will be allowed to drop when the weight comes upon the good limb.

As many methods are employed by different people to balance the limb a few words upon this subject may be excusable. At every step when the weight of the body is transferred from one front limb to the other, the body is falling and nothing but the timely arrival of the opposite limb to a position where it can catch and support it, will prevent its falling to the ground.

The limb was intended to perform this work, and nature provided it with the necessary strength, not alone while in a given position, but so arranged and adjusted its many parts as to permit of a change in its position without detracting from its strength or comfort.

Inasmuch as we are now trying to adjust the parts in a way that will stop stumbling and not for the purpose of relieving lameness, there are some things that I wish to make plain. First, that the ligaments play a very important part in preventing, or, at least limiting motion of the joints to either side, while permitting in many cases extreme flexion and extension, while the muscles and tendons have full control over flexion and extension. Second, that the ligaments are non-, or very slightly, elastic and unable to adjust themselves to an abnormal position, while the tendons which are a continuation of the muscles possess the advantage oftentimes of being able, through the medium of the muscles, to adjust their length to the extent of escaping injury.

When the extended limb first receives the weight of the body, the direction of the weight is from above to below, and from before to behind with a tendency to force the limb backward and downward, and in the direction of the very strong and more or less elastic organs found there. The foot being fixed upon the ground, as the body moves forward, the direction of the limb approaches a vertical position, and the weight now passes

Experiments have shown that the greatest gains in feeding cattle are made with steers which measure large around the girths at the beginning of the feeding period, and size of middle girth is also an important factor in determining gains.

The sow which has the run of the barnyard, and is housed in a comfortable pen at night during the winter months, is far more likely to produce a strong healthy litter, than the one which is continually confined to a small pen in the same building with the fattening pigs.

Soaking pig feed for twelve hours in a clean, sweet barrel is good practice. It prevents waste in feeding. The feed should be fed quite thick. With too much water added it is too sloppy, and the pigs get too much water, which must be heated up at the expense of the blood.

Reporting the great Cranford sale of milking Shorthorns, the Farmer and Stockbreeder remarks that "Verily it was a triumph for the new state of affairs, and more than ever a strong vindication of the value of milk records. To breed upon that basis is the only system which will secure the confidence of the breeder in the future."

Feeding steers should now be in the stalls. It is a grave mistake to allow them to stand around humped up on the lee side of a snake-fence, with their hair standing on end in a vain attempt to keep out the cold which accompanies the squally weather of this season. A few days of such conditions will take more off the steers than can be replaced in weeks.

When the sheep come in from the fields do not make the fatal mistake of placing the breeding ewes and the ewe lambs in the same pen. This is never fair to the lambs, and the future of the flock depends largely upon the treatment of the ewe lambs the first winter. They never get their share of the feed when compelled to rustle for it with the older ewes.

Winter shelter is necessary for all live-stock, but it is possible to overdo it just as it is often neglected. Too close housing is not conducive to vigor, especially where the stables are kept too warm as a result of poor ventilation. Fresh air although it is cold is not detrimental to animal health, provided it does not come in drafts. Shelter should not mean hot-housing. Exercise in the open air and fresh air all the time, are two of the secrets of health of animals.

The stock breeder who is working with grade stock, has the fixing of the type in his own hands. Utility should be his only aim, and in reaching his objective he will find it to his advantage to mate animals of as nearly the same type as possible. Better results come when the various characters, which each animal possesses, are not too much diversified, but are more nearly identical. It is seldom indeed that good results come from violent crossing.

Variety in winter feeding has a marked influence upon the amount of feed an animal will consume. Variety also increases palatability, and palatability promotes digestibility, and digestibility favors animal increase. If an animal's appetite is greater and the food is more digestible when fed in variety, then as a result of an increased amount taken into the body and an increased amount absorbed, the animal must grow or fatten more quickly, and at less expense. Variety is one of the big problems in winter live-stock feeding where maximum returns are aimed at.

Owing to wet, unfavorable weather, a great deal of grain in the Prairie Provinces has been harvested in poor condition. Almost half of the wheat inspected at the market is put down as no-grade. In fact on some days there is even more than one-half of the spring wheat in this class. What must the producer expect to obtain for such produce? While from a nutrition point of view this wheat has a high value, it must realize a greatly depreciated price on the world's market.

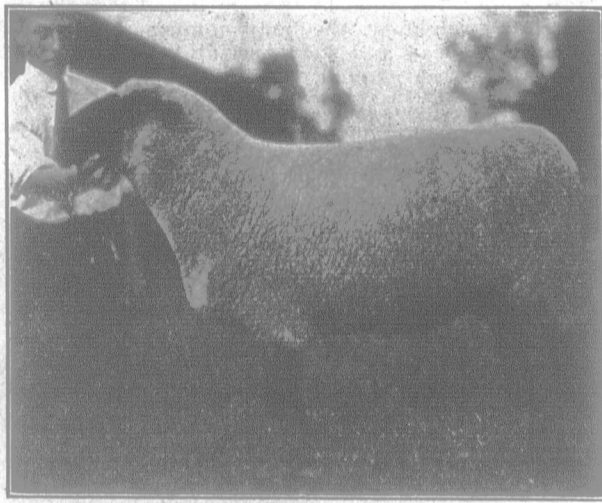
In order that the producer may obtain his just share for the value of food constituents sold off his farm, our Western contemporary recommends that hog-raising be taken up.

Over-nutrition and a lack of sufficient food both work against fecundity in live-stock. Some of the most highly fitted show animals are not sure breeders, and some of those very low in flesh do not conceive readily. All life, plant and animal is much the same as regards breeding. Take for instance a rose bush, and feed that bush an extra large amount of fertilizer and it will

grow luxuriantly, but will not flower as well as if less food were given. The same bush in very poor soil with no fertilizer might put out a few small withered flowers, and would sicken and die. It is the same with out domesticated live-stock. "Good breeding condition" is a term often heard, but it requires some skill to feed the calf, the colt, the pig or the sheep up to breeding age, and on through its breeding life without at some time impairing, to some extent, at least, its usefulness as a progenitor of its race.

Catching and Holding Sheep.

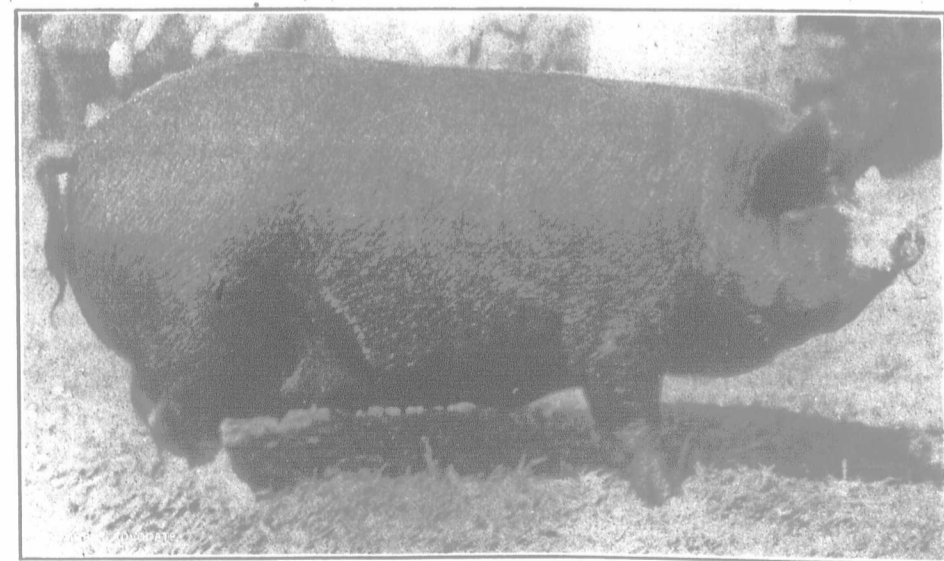
There is a right way and a wrong way to do everything, and it is astounding how many times the simplest of operations are performed the wrong way. Few except breeders and experienced shepherds know how to catch and hold a sheep, and it is amusing sometimes to watch a "new" man attempting to control a live yearling as it bucks, rears and pulls in an effort to free itself from the awkward hold of the inexperienced man



Hampshire Ewe.

This two-shear ewe, owned by John Kelly, Shakespear, Ont., was champion of the breed at Toronto, 1912.

in charge, who by his tugging and pulling at the poor victim's fleece is causing it considerable pain. While the wool makes a very good hand hold, it was never meant for that purpose. It seems an easy matter to rush amongst the covering flock in one corner of the pen or yard, and bury one's hands in the fluffy back, and literally lift the sheep off its feet while it paws the air in a vain endeavor to escape its captor. This is surely the wrong method and never should be tolerated in the flock. If a sheep so caught is killed and dressed soon afterwards, a black mark or bruise will be noticed on the carcass where the wool has been pulled in holding the sheep. There are two places to catch the sheep, by the hind leg above the gambrel joint, or just in under the jaw.



Berkshire Sow.

First prize and sweepstakes at Toronto and London, 1912. Owned by John S. Cowan, Donegal, Ont.

The best place is under the jaw, as the sheep will then stand comparatively quiet, struggling very little to be free as no pain is experienced, and the sheep is fast. Don't grab the sheep by the top-knot when holding it, and don't hang to its throat as if you were choking it. The hand held loosely under the jaw is all that is necessary after the sheep once realizes that it is caught. When using a crook don't catch them too low on the hind leg, it is dangerous. A sheep properly managed is the most docile of animals, and unless roughly or improperly handled soon yields to being caught and held without trouble.

Silage and Alfalfa in Economical Beef Production.

In a bulletin on economic beef production of the Nebraska Agricultural Experiment Station, an experiment is reported where a heavy feed of shelled corn and alfalfa was compared with a heavy feed of shelled corn, alfalfa and corn stover. When the stover was introduced, the average daily gain made by the ten steers was 2.4 lbs., as compared with 2.3 lbs. made by the ten fed corn and alfalfa alone, and the cost of 100 lbs. gain was \$6.49 with stover, and \$6.89 without, the stover being figured at \$2.50 per ton and the alfalfa at \$6.00. The following year, when a light feed of snapped corn was used, the daily gain was 0.1 lb. less with alfalfa and stover than with alfalfa alone, but here again the cost of producing 100 lbs. of gain was 50 cents per cwt. less by the use of both stover and alfalfa for roughage and the profits correspondingly greater. From the results it would seem less necessary to use stover when snapped corn is fed, very likely because the husk and cob serve to some degree the same purpose as the stover, lessening the tendency of the cattle to scour, and at the same time giving more variety to the ration.

Following this, the next step was to determine the most economical proportion of corn to alfalfa—whether a heavy feed of grain, a medium feed, or a light feed, with correspondingly more alfalfa. Three experiments were made dealing with this problem. In the first, a little more than half a feed of shelled corn (13.9 lbs. daily to each steer) was compared with a full feed (22.3 lbs.), the roughage consisting of alfalfa and corn-stover. In the second, three different quantities of grain were used, 12, 17 and 19.8 lbs., and in the third, 12, 15.6 and 18.8 lbs. The same kind of roughage was used in the second as in the first, namely, alfalfa and shredded stover, the latter being more convenient to weigh and feed than the unshelled stover. In the third, only alfalfa was fed for roughage, and corn-meal was substituted for shelled corn.

In the first experiment, in which the roughage consisted of alfalfa and corn-stover, the light-fed steers gained 0.41 pounds less per day for a period of twenty-four weeks than the heavy-fed steers during a period of twenty weeks. The average gain of each steer of the two groups—one fed four weeks longer than the other—was the same, viz., 339 lbs. At the prices of corn and alfalfa and stover on the farm at that time (which were much less than now), the net cost of producing gains was 27 cents per cwt. less with the light grain ration than with the heavy.

When the second experiment was made, corn was worth half as much again as when the first was made and alfalfa had risen one dollar per ton and stover \$1.50 per ton in value. With the higher prices, the cost of producing gains was again least on the light feed of corn, but the profits were somewhat higher on the heavier-fed cattle, because they were all fed the same length of time and sold on the same date, the light-fed cattle bringing 25 cents per cwt less than the heavier-fed cattle. Had the light-fed cattle been fed an extra month, they would have undoubtedly shown as much condition of flesh, and would then have brought as much per pound.

The last experiment gave the best showing for the light-fed cattle. In this case, the corn was ground. On corn-meal, a full grain ration for two-year-old steers seemed to be about three lbs. per day less than on shelled corn. From this it might be inferred that a steer's capacity is limited by the amount of grain assimilated rather than by the amount fed, as much corn passes through undigested when the whole grain is used. In this experiment, corn was figured at \$1.07 per cwt. and alfalfa at \$7.00 per ton, and the cost of gains on the light-fed steers was 81 cents per cwt. less than on the medium-fed group and \$1.67 less than on the heavy-fed group. The heavy fed steers were at a disadvantage, however, as alfalfa was used exclusively in their roughage ration. With a heavy feed of clear corn and alfalfa, cattle seem to be affected to a consider-

able degree corn-stover cattle were quence they daily gain crage daily 26.5 lbs. medium-fed group. T alfalfa hay r twelve pou steers will

From th it is indic per bushel, the barn, market, ne using but than a m pondingly fourths of and a cor will give cattle will an equal l per pound consume, at a reduc fits to the alfalfa at \$ cents per full feed of feeder is i or two lo ration (th Lengthen extent the ed and the ations, bu the manu ket is pro is profitab for harvest tons to th yield), w valuing th low value \$300 per

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Neither quite clear still rem had no cattle. in view ties which disease fr Cumberla got quite ported th land has men of cause to towards by far th bitter, th land on berland s up again on the E were stat tures wer enough s lish side break, b thorty's and end way poss pasture a this paid while the making a

able degree with scours, much more so than when corn-stover, hay or cane is fed with it. These cattle were off feed several times, and in consequence they consumed less and made a smaller daily gain than the medium-fed cattle. The average daily consumption of grain and hay was but 26.5 lbs., as compared with 30.7 lbs. for the medium-fed group and 29.2 lbs. for the light-fed group. The records showed that with good alfalfa hay remarkably good gains may be made on twelve pounds of corn and all the alfalfa that the steers will eat.

From the results of this series of experiments it is indicated that when corn is above 35 cents per bushel, and alfalfa is worth \$7.00 per ton at the barn, the old method of fattening cattle for market, namely, that of crowding with grain and using but little roughage, is much less profitable than a more moderate use of grain and correspondingly more roughage. Not to exceed three-fourths of a full feed of corn (or other grain), and a correspondingly larger quantity of alfalfa, will give practically the same daily gains; the cattle will take on quite as good a finish during an equal length of time, and will bring as much per pound as when given all the corn they will consume, and these things will be accomplished at a reduced cost of production, with larger profits to the feeder. With a good quality of alfalfa at \$6.00 per ton or less, and corn above 50 cents per bushel, something approaching half a full feed of corn is still more profitable, if the feeder is in a position to keep the cattle a month or two longer than the usual time on a full grain ration (that is, all the grain they will eat). Lengthening the feeding period increases to some extent the interest charges on the money invested and the labor connected with the feeding operations, but with the more liberal use of alfalfa the manure is more valuable and a larger market is provided at the farm for a hay crop, which is profitable to grow. Allowing \$1.50 per ton for harvesting the alfalfa, a field yielding four tons to the acre (not by any means an impossible yield), would give a net revenue of \$18 per acre, valuing the alfalfa at only \$6.00 per ton (a very low value), which is six per cent. interest on \$300 per acre.

From the results of this series of experiments it would seem advisable to make a larger use of roughage and less grain than has been done in the past. Former experiments also show the advisability of feeding with alfalfa some cornstalks to lessen scours, to furnish variety and to lower the cost of production by the utilization of a cheap feed.

These experiments were carried on with stover and with corn as the grain feed. Silage is just as good, and in many cases much better, feed than corn-stover, and the other grains fed in this country take the place of the shelled corn, which forms the greater part of the grain ration where these experiments were carried out. It is safe to say that with good silage or corn-stover and good alfalfa or red-clover hay beef may be produced with a minimum of grain, and maximum returns made. It may be found profitable to add a few roots to the ration, but the point is, an abundance of well-balanced roughage is more economical in beef production than a maximum grain ration and little roughage.

Our Scottish Letter.

Neither England nor Ireland has as yet got quite clear of foot-and-mouth disease. Scotland still remains immune, and for four years we have had no contagious disease of any kind among our cattle. This result is all the more remarkable in view of the fact that the two English counties which have been worst hit by the imported disease from Ireland have been Northumberland and Cumberland. The latter seems, happily, to have got quite rid of it, no outbreak having been reported there for several months. Northumberland has not been so fortunate, and indeed the men of the northeast of England have good cause to cherish anything but kindly sentiments towards their Irish neighbors. They have been by far the worst hit, and to make their lot more bitter, three prominent flockmasters who hold land on both sides of the Cheviots have been fined for removing their sheep from the Northumberland side to the Roxburgh side. They were up against a very stiff proposition. Their grass on the English side was very bare and the stock were starving; on the Scottish side their pastures were going to waste because there were not enough stock to eat it. Their farms on the English side are 20 miles from the scene of the outbreak, but they had to conform to the Local Authority's orders. They were in a very tight place and endeavored to get out of it in the simplest way possible. They brought the sheep to the pasture and were fined for their pains. Probably they paid them better than starving the sheep while the pasture was wasting. Irishmen are making a deal of noise, and have wrung some

concessions from the Board of Agriculture and Fisheries, but if they had to suffer as the flockmasters in question, they would very quickly change their tune. As things are at the moment, Mr. Runciman, the President of the Board, has allowed store cattle from immune districts in Ireland to be landed at five specified ports in England, but not unconditionally, and he has also promised to secure liberty to ship pedigree stock from Scots ports to places abroad. How he ex-



Shoulder of Mutton.

pects to harmonize the two positions is not quite apparent, but doubtless he will pull through. What he has done is a bit risky. Its success will be its justification, but its failure may spell ruin to many things, including Mr. Runciman's reputation as an administrator. For sheer intellectual force he is the ablest President of the Board of Agriculture and Fisheries since the office was created.

MR. TAYLOR VINDICATED.

The past fortnight has demonstrated the mar-



Miss Brae 38th.

First-prize junior yearling and grand champion Hereford heifer, Toronto, 1912. Owned by L. O. Clifford, Oshawa, Ont.

vellous buoyancy of British stock-breeding, even under the shadow of the foot-and-mouth disaster. We have had a series of sales of Shorthorn cattle, which have illustrated in a truly marvellous degree the vitality of that interest. Through the lamented death of its owner and founder, George Taylor, Cranford, Middlesex, his celebrated herd of dairy Shorthorns was brought to the hammer in the closing days of September by John Thornton & Co., London, and the wonderful result was obtained of an average of £82.17.3 for 187 head of all ages, shown in ordinary condition right out of the fields. Mr. Taylor had no children, and

left instructions just before he died that everything was to be sold off, in the interests of Mrs. Taylor, before the 29th September. The instructions were hurriedly carried out, with the amazing result just indicated. Some very high prices were recorded. The top figure was £525 paid by Sir Gilbert Greenall, Bart., for the fine cow Waterloo Baroness. Her heifer calf was bought by an Irish gentleman at £168. Two cows of the famous Darlington Cranford tribe were bought by the Duke of Devonshire at £262 10s. each. Wild Eyebright V. made £210, and there were other cows at the same figure. Others made £205 5s. and £157 10s. each. It was altogether the most successful sale of Shorthorns of the Bates type, and largely of Bates breeding, sold in Great Britain since the collapse of the Shorthorn boom after the Dunmore dispersion in 1879. Its secret lay in the fact that for years Mr. Taylor had labored to build up a herd of pedigree Shorthorns in harmony with accurately-kept milk records. The prices recorded at Cranford were not merely the prices of well-bred cattle; they were the prices of milk-record pedigree Shorthorns. While he was prosecuting his scheme, the late Mr. Taylor was sometimes laughed at, but the results of the dispersion show him to have been no idle dreamer, but a man with a well-founded rational idea as to what might be done to retain the dairying properties of the Shorthorns recorded in Coates' Herd Book. Unhappily, Mr. Taylor's vindication came too late to be enjoyed by himself, but it is none the less conclusive.

OTHER SHORTHORN SALES.

In our judgment, the sanest pedigree record in Christendom is Coates' Herd Book of Shorthorn Cattle. Within its four corners there is room for the Cranford dairy Shorthorns, with their milk records, and the Aberdeenshire Cruickshank cattle, avowedly bred for the production of beef, with a minimum regard for fancy points. Amos Cruickshank bred commercial cattle on pedigree lines, and this week we have seen those who followed in his footsteps, reaping a nice reward. At the Collynie sale of William Duthie's bull calves on Tuesday an average of £377.8.7 for 24 was recorded, and one calf, Collynie Cupbearer, was sold at £2,100, to E. N. Casares, for exportation to the Argentine. Another, named Collynie Golden King, went at £1,050; and a third, Collynie King Royal, at £997 10s. The sire of the highest-priced calf was the Missie bull, Merry Stamp, bred in the north of Ireland, by the late Sir H. H. Smiley, Bart., and now owned by James Coly, Larn, from whom Mr. Durno hired him for two seasons with an interval between. Six bull calves got by him made an average of £562.5.6 on Tuesday. The most successful sire used at Collynie in recent years, however, has been Adbolton Regal King, a richly-colored, dark roan, with a deal of Bates' blood in his veins,

and bred by A. W. Hickling, Adbolton, Nottingham, from whom Mr. Durno hired him for one season. As a result, on Tuesday, 13 bull calves after him were sold at an average of £385. 15.1, and we understand there are at Collynie something like quite as many heifer calves of the very first rank which claim him as their sire. Adbolton Regal King was to a large extent impregnated with Bates' blood. His sire, King Christian of Denmark, was a very fine, stylish bull, which Mr. Hickling bought at the Ruddington Hall dispersion. He has certainly made a splendid cross with the Cruickshank cows, which constitute so large a proportion of the Collynie herd. Mr. Duthie's own stock bull at present is Stravan Clarion, for which he paid a very long price at a Birmingham sale. He sold four bull calves off this sire on Tuesday at an average of £62.9.6, and one heifer calf at £378. John Marr, who now occupies the famous farm of Uppermill which adjoins Mr. Duthie's farms, has a very fine collection of cows. His main stock bull is the home-bred Royal Leader, a sire with perhaps the best dam of any. He sold eleven bull calves off this sire at £53.1.5, and six heifer calves off another bull named Newton Clipper at £55.2.6. At

the Loanhead sale on Wednesday, when the cattle of the Messrs. Gordon were disposed of, £420 was paid by an Irish gentleman for a heifer calf by Newton Crystal. This is relatively as high a figure as the £2,100 for the bull calf, and illustrates the extraordinary buoyancy of the Short-horn market. At Aberdeen, on Thursday, a joint sale was held of consignments from tenant-farmer breeders in Aberdeenshire, Inverness-shire and Ross-shire. One hundred and seventy-two head, mostly calves, of both sexes, made an average of £45.6.10. The highest price was 290 guineas, paid for a yearling heifer bred by Lord Lovat, Beaufort Castle, Inverness. Relatively the best demand was experienced for heifer calves. These of the Butterfly, Rosewood, Clipper, or Non-pareil families, could almost command any price. This week's sales, more than any we can recall for many years, were characterized by strenuous buying on pedigree lines. The votaries of the Cruickshank cult are rapidly emulating the votaries of the Bates cult in the seventies. It is well to recall this, and to suggest that such buying can be overdone.

Highland cattle have been selling at Oban, and with excellent results. On account of the death of Countess Dowager of Seafeld, her fold at Castle Grant, in Strathspey, was brought to the hammer. Thirty-two head made an average of £25.15.11. Another fold, that of Dunach, in Argyllshire, was also dispersed. Thirty-four head from it made an average of £13.12.7, and on the whole day's sale of pedigree Highlanders at Oban eighty-four head made an average of £18.14.6. Everybody is pleased with these results, a fact which suggests comparisons between the relative value of Shorthorns and the breed upon which Thomas Bates sought to model his breed of Shorthorn heifers.

CLYDESDALE VALUES IN SCOTLAND.

Clydesdales have also been having a great week. Canadians buy so many that they will be anxious to know the actual market value of what they get, in the native home of the breed. At Perth, on 16th September, 103 head made the good average of £55.4.10. These were almost wholly fillies and mares. This week we have had a three days' sale at Lanark. On the first, H. B. Marshall's fine stud of 15 head was dispersed, and made an average of £147.8.5. The noted prize mare, Sarcelle, by Everlasting, was sold to William Dunlop, Dunure Mains, at £656 5s. She is sure in foal to her own grandson, Baron's Pride, and the colt or filly she carries is either own brother or own sister to the splendid two-year-old, Baron's Crown, which was second at the H. & A. S. to The Dunure. If she foals all right, Sarcelle will be quite a good investment at 625 guineas. At the same Lanark sales a colt foal by the Cawdor Cup champion made £331, and a new sire, named Union Jack (16120), fairly established a record. His produce won first prizes in both colt and filly classes of foals. The colt foal sold for £190, and the filly foal for £130. The average price of yearling fillies was £49.7.6, and of 13 brood mares £56.15.5. We have also had a Hackney and pony sale at Fallside, Bathgate. Forty-eight head made an average of £46 4s. Twelve by the celebrated sire, Mathias, made an average of £85.17.0, the highest price of the sale being 205 guineas, paid for a three-year-old filly by this horse.

THE LESSON OF MERTOUN.

The world-famed Mertoun flock of Border Leicester sheep was dispersed a few weeks ago. Three hundred and seventy-nine head of all ages and both sexes made an average price of £5.1.3. Twenty-six four-crop ewes, that is ewes which have produced lambs four years in succession, made an average of £7.2.0; £24 each was paid for a pair of these, and this was the highest price for ewes or ewe lambs. The actual highest price was £25 for the stud ram, Invincible Stamp. The Mertoun flock was once at the head of the Border Leicester breed. It was bred within itself for about half a century, and its appearance at the dispersion was an emphatic condemnation of this method of in-and-in breeding. The flock herd or stud does not exist which can be successfully maintained without the infusion of new blood from outside itself. An aristocracy can run to seed among sheep, cattle or horses as well as among human beings. The Mertoun flock as seen at the dispersion read apostles of the in-and-in breeding cult a sharp lesson, which they would do well to lay to heart ere it be too late. If you are breeding cattle or sheep, always remember the butcher's idea, and what he must provide for the public; if you are breeding horses, keep the lorry in view. Thus only will you escape disaster.

SCOTLAND YET.

October 12, 1912.

There is more in the strain of the breed than in the breed itself, in more than one class of farm stock. Everyone familiar with stock-breeding has seen good and poor individuals of some

of our best known breeds. Because a certain herd may be composed of very inferior cows, it is not saying it is the fault of the breed. It is more the fault of the breeding. Because pigs from a certain breed of sows do not feed well that breed cannot be condemned. In every instance, if the records of the breeding of the animals were traced out, it would be found that it was not the breed that was to blame, but it was the breeding or the strain of the breed.

THE FARM

Raise Your Own Seed.

Editor "The Farmer's Advocate":

For years past the leading agriculturists of our Province have been striving by both precept and example to induce the farmers to raise their own seed grain and potatoes. A small percentage of our farmers have benefited by this timely advice, but they are the exception to the rule, and it will be found that the large majority throughout our Province depend on P. E. Island, Ontario, and the Prairie Provinces for their seed grain. This should not be so. Surely a country with such agricultural possibilities as Nova Scotia has, should not be dependent to a greater or lesser extent on the tender mercies of any country for such an important commodity as its seed grain, especially when we can raise equally good, and perhaps better, grain than we can buy. It shows a lack of interest on the part of the farmers in their chosen profession.

The value of sowing none but home-grown or Government-inspected seed was, perhaps never brought so sternly to the notice of the farmers of Nova Scotia as it was this year. The Government-inspected seed could not be had; many had no home-grown seed, so they had to take what they could get and run the risk, which resulted disastrously for the harvests and pockets of many of them. Hundreds of farmers in the counties of Colchester, Pictou and Antigonish were defrauded by the notorious "Anchor Elevator" oats. These oats had been kiln-dried at a Western elevator to prevent them from heating and mustering and were thus rendered worthless for seed. Sold originally for feed, they were brought East by the train-load and represented as No. 1 seed. Farmers bought and sowed them in good faith. To an inexperienced eye they looked like first-class seed; they were plump, of good size, clean, and weighed heavy to the bushel, but they lacked germ vitality, which the farmers found out to their sorrow and the depletion of their pockets when they had been sowed long enough to produce results. In some cases the farmers had their money refunded, but that did not help their ruined harvest any. But this is not the only instance in which sowing home-grown seed would have paid better. Every year there is being brought into the country grain infested with weed-seeds which, when sown, produces the result too often seen in the grain fields of our Province. The writer took the trouble one day this summer to pick over a fair-sized handful of oats which had been bought for feed and represented as double-screened grain. In that one handful there were found 203 weed-seeds, 133 seeds of other grains, a large percentage of unfilled hulls, and a considerable amount of worthless material, such as chaff, damaged grain, etc. Of the 203 weed-seeds, 52 were those of noxious weeds, such as Rib Grass, Curled Dock, Catch-Fly, Field Bind-weed, and others. Some of the above mentioned

oats run through the fanners and compared with home-grown seed, were found to contain about ten times as many impurities as the home-grown seed. Numerous farmers in the writer's locality bought these oats and sowed them without cleaning them, and the reader can imagine the result. The instances I have cited are only two of many. Every year the farmers are being imposed on, and they have themselves to blame. Rather than raise and clean their seed, or buy only that which has been Government-inspected, they buy at random, and get such worthless stuff as has been exposed in the former part of this article. Every farmer should have a copy of the "Seed Commissioner's Report," which can be had for the asking from the Seed Branch, Dept. of Agriculture, Ottawa. All grain should be cleaned in a reliable fanning-mill, and treated for smut prevention with the formaldehyde treatment.

It is not only the raising of our own seed grain that will pay us. Present prices amply justify the raising of our own timothy seed, and perhaps clover as well. The writer is glad to be able to report a vast increase in the number of farmers in his locality who raise their own timothy seed. This has been especially noticeable during the past season, and it is to be hoped that it will continue. The importation into the Province of seed potatoes is not so extensive, but that it is carried on to a certain extent is seen in the introduction from Europe this year of the deadly "Potato Canker," a disease which threatens the potato crop with serious results unless the farmers co-operate heartily with the Department of Agriculture in the prompt effort it is making to stamp out the scourge. Raise your own seed and it will pay you every time.

Colchester Co., N. S.

"BLUENOSE."

Note.—This article brings out another important point in connection with seed of all kinds, and that is that it should be tested for germination before it is sown in large quantities. Had the Western seed been tested before it was sown in the fields, the poor germination would have been apparent, other seed purchased and the crop saved.—Editor.

Modern Seed Corn Requires Special Care.

By way of explanation for the special stress laid nowadays upon the care of seed corn, Wallace's Farmer says: "So long as we grew long ears with comparatively wide spaces between the rows, there was no trouble about the corn growing; nor will there be as long as we select ears of that type. But the minute we begin to select those with deep grains, well filled out at tips and butts, the rows close together on a small cob, then trouble begins, for the simple reason that this corn can not dry out nearly as readily as old-fashioned scrub corn. This, then, is the penalty that we pay for improvement. We must take greater care with our seed corn; and the better the type, the more care we must take."

One of the greatest secrets in pasturing red clover or in fact clover of any kind, is not to allow it to be eaten off when too young. Let it become comparatively well grown before turning upon it. Seventy hogs pastured from July first until the middle of October on a five-acre field at the Guelph Prison farm this season, and did well. And the clover was growing well at the latter date. Young clover is very sappy, and is not so good a feed, and is trampled down to a greater extent than the more mature.



Modern Dairy Barns.

Home of A. C. Hardy's fine herd of Holstein cattle, Leeds County, Ont.

THE

It would articles on Provincial work in co the Provin Farm, Gue had scarce 1907; con vncial Sec courage t Farm bec April the which now economic, misdemean vncial Go purchased and it was the first number, u the experi farm, or cure for c oners, will proved a moved fro Guelph ha present ti work for under the oners coul prisoners and no fi paid guar prisoners no misde They hav fully un havior. all sleep i suits. T tematically with an is not but h acts. ter fitted grapple w make a s dragged o and bars The ide chased co considering price. F such an i supplied l erty. Or inion is s stone in a lime for roads and poses. by no m soil pecul ing as it clay to sand or for all c fied syste the only land and north slo west slop crop, and both as The fr thing is buildings ers them ing, but The ston ment tile ing and outside little cit ties of t munity i The p tion are tion bui house an chical A cen er was o premises with wa ties desi manence take a l No fr director. last spr the Ont.

AGRICULTURE ON GOVERNMENT FARMS—IV.

THE PRISON FARM AT GUELPH.

It would not be fitting to close a series of articles on agriculture as it is carried on at our Provincial institutions without a resume of this work in connection with the greatest of all these, the Provincial Reformatory or Central Prison Farm, Guelph, Ontario. Born of an idea, which had scarcely reached the embryonic stage in 1907; conceived by the Hon. W. J. Hanna, Provincial Secretary, the man with ideas and the courage to carry them through, the Prison Farm became a reality in 1910, when in April the first of the several smaller holdings which now comprise the 840 acres devoted to the economic, social and moral welfare of Ontario's misdemeanants became the property of the Provincial Government. Each of the several farms purchased had its own quota of farm buildings, and it was in one of these stone farmhouses that the first consignment of prisoners, fourteen in number, under two guards, were housed during the experimental stage of prison labor on the farm, or as it has been ably put, "the fresh-air cure for criminals." Few men, even among prisoners, will betray their trust. The experiment proved a success, and the number of prisoners moved from the cells in Toronto to the farm at Guelph has been gradually augmented until at the present time upwards of 300 are doing profitable work for themselves as well as for the Province, under the best possible conditions in which prisoners could labor. Few guards are needed. The prisoners are their own guards to a large extent, and no firearms are carried by any of the few paid guards in charge. "The boys," as the prisoners are known to all the officials, stand for no misdemeanors on the part of their fellows. They have privileges which they appreciate, and fully understand the penalty for misbehavior. Consequently, although they at present all sleep in one large room, no "rough house" results. They go about their work quietly, systematically and cheerfully, laughing and chatting with an interest in the work in hand, which cannot but have an elevating effect upon their characters. They go away from the institution better fitted physically, mentally and morally to grapple with everyday life and far more likely to make a success of it than if their terms were dragged out in cells behind thick walls of stone and bars of iron.

The idea was a sane one. The 840 acres purchased cost an average of \$75 per acre, and, considering the advantages, was cheap at the price. Few better sites could be conceived for such an institution. An abundance of water is supplied by the Speed River traversing the property. One of the best stone quarries in the Dominion is situated on the place. Dolomitic limestone in abundance furnishes work for many, and lime for building purposes. Rock is crushed for roads and limestone is ground for fertilizing purposes. Railways run through it, and last, but by no means least, the farm proper consists of soil peculiarly well suited for such a farm, ranging as it does all the way from a fairly heavy clay to gravel, and, in some places, even to sand or sandy-loam consistency. Superb soil for all classes of crops makes a widely diversified system of agriculture possible, and this is the only system for such a farm. There is high land and low land, heavy land and light land, north slopes and south slopes, east slopes and west slopes, all good land for some particular crop, and all to be utilized to best advantage, both as regards prison labor and farm output.

The farm is complete within itself. Everything is accomplished by prison labor. The new buildings now going up are built by the prisoners themselves. Not only do they do the building, but they manufacture the building material. The stone is quarried, the lime is burnt, the cement tile are made; the mason, carpenter, finishing and all other work is accomplished with little outside assistance. It is an independent little city on a farm, where all the necessities of the little community are met by the community itself.

The permanent buildings now under construction are two large dormitories, an administration building, guard-house and cell-fronts, bath-house and laundry and a large industrial or mechanical building.

A cement arch bridge spanning the Speed River was one of the first large undertakings on the premises. Every iota of work connected therewith was done by prison labor, and municipalities desiring to build bridges of beauty and permanence would do well to inspect this one and take a lesson in architecture and workmanship.

THE FARM PROPER.

No farm is a success without a practical farm director. Seeing this need, Mr. Hanna secured last spring S. E. Todd, B. S. A., a graduate of the Ontario Agricultural College, and placed him

at the head of Government farms in Ontario. He has now over 5,000 acres under his surveillance, and the Prison Farm is one of the most interesting propositions of the entire undertaking. About 730 acres comprise the farm proper and of this 200 acres is now old pasture, not a permanent pasture, for although much of it is rough, it is gradually to be forced to yield to the advance of the cultivator. At present the farm is being operated on the plan of a four-year rotation of crops, two years in hay or pasture, followed by a hoed crop and then a grain crop. This is to gradually give way to a three-year system, eliminating one of the hay crops. This year twenty-eight acres of alfalfa were grown, and this has been increased for next year by fifty acres of new seeding, at twenty pounds per acre. Fifty acres of corn, forty-five acres of potatoes and twenty-five acres of mangels and other roots are grown annually. Red clover is one of the strongest features of the farm, and some of the best catches of new seeding were noticed here that the writer has ever seen. While this was a very favorable season for seed catches, Mr. Todd believes that a good deal of the success is due to a fairly heavy seeding, twelve pounds of red clover and six pounds of timothy being sown per acre. There is no doubt but that a good many fields of clover seeding have to be broken up each year as a direct consequence of sowing too little seed. While much of the red clover has a very large top for the first season's growth no bad results from snow-smothering are looked for, but the new seeding of alfalfa has been clipped, as it was deemed necessary to take this precaution to save it from this danger.

While the elevation at Guelph and the situation, being so far inland, are not the best suited for fruit-growing, an eighteen-acre orchard was planted last year, and the trees have done remarkably well. The filler system was used, the rows of trees being set thirty-five feet apart, and the trees in the rows 17½ feet, every second tree being a filler of the Wealthy or Duchess variety. The Baxter, McIntosh, Snow and Alexander varieties have been extensively planted, being hardy trees, and good bearers of fruit of high quality. Few Northern Spys were set, as these do not stand the climate well in that district. Plums, cherries, pears and bush fruits also have considerable place in the plantation.

The horse and hog barns and farm buildings other than the dairy barn are not yet built, the old buildings on the original farms being used for the purpose of accommodating these classes of stock. The pigs kept are all of the Yorkshire breed, and a better type of bacon brood sows, young pigs and shoats is seldom seen. The pigs are fed off as economically as possible. Pasturing is resorted to during the summer months, and to show what is possible in this connection, we cite the case of seventy hogs which have been pastured on five acres of red clover since July first, during which time they have received only twenty-five pounds of grain daily, and at time of writing were as fine a lot of hogs ready for the finishing touches as any feeder could wish to own. The secret of the clover standing the pasturing so well was that it was not turned upon too early in the season. It had got past the soft, sappy stage before the hogs commenced feeding upon it, and consequently it withstood their onslaught much better than it otherwise would have done.

THE DAIRY BARN A COW PALACE.

The casual observer of farm outbuildings pays little or no attention to architecture, yet architecture is supposed to be an expression of national life and character. Such was the Gothic, the Greek, the Roman, the Mediaeval and Renaissance architecture. It is true, however, that a

farmer's outbuildings are more or less of an indication of his character. The dairy barn on this farm is something entirely new in design and for neatness and outward appearance has few equals. It is like the whole scheme, a result of ideas, not only of the Provincial Secretary, but also of his assistant, S. A. Armstrong, whose fertile brain conceived many entirely new practical devices in connection with the barn, as well as in the erection of the other buildings at the institution. The barn or barns are T shaped, the feed storage barn being placed across the end at right angles to the dairy barn proper, and in each of the corners where these two join a cement silo, eighteen feet by thirty feet, is erected as part of the wall of the main building. This gives the silos the appearance of being a part of the main building, which they are, and their large, round walls and nicely pitched, round roofs would vie in attractiveness with the bay windows on a fancy city residence. The silo is not a detached or semi-detached portion; it is an integral part of the structure. To protect the silage from freezing the inside walls of the two silos are to be lined with four-inch hollow-cement tile. The painting of the building adds much to its general appearance, there being no conglomeration of colors thrown together, the body of the building being simply a dark green, trimmed with white, and the roof amber colored. These blend well together and have a good effect.

The cow stable is 162 feet long and 39 feet wide, and has stalls for eighty cows. The stable is a one and one-half storey structure, the first storey being of hollow-cement tile, eight inches thick, which insures proper insulation. The wall is strengthened by buttresses, being simply cement tile poured solid with concrete, the upper portion clap-boarded. At the extreme end of the stable there is an annex the full width of the building and 35 feet long, one side of which is to be divided into four maternity box stalls, eight feet by fourteen feet. The other half of this annex is to be used as an outlet for the manure, four openings being left, into which wagons or manure spreaders may be backed, and the litter carriers emptied directly into them. The manure is to be drawn away as fast as made.

The feed barn is 80 feet long and 44½ feet wide. It is built on eighteen-foot posts and is of clap-board construction. It is entered by a single drive floor, and on either side in front are bays for grain, hay and straw. The space between and beyond the silos, above the cow stable, is used as a granary, and the entire space above the cow barn proper is used as a general storage room for implements, machinery and farm tools.

The cow stable is divided into two rows of stalls and four sections. Each row accommodates 40 head and each section 20 head. The stalls are graduated according to the size of the cows, being from four feet nine inches to five feet nine inches in length and three feet six inches wide. The stalls are floored with cork brick—a mixture of cork and asphalt—which is non-absorbent, perfectly dry, never slippery, and, compared with cement, warm. The cows stand facing the light, with the litter passage, 11 feet wide, in the center of the barn, and the feed alleys, five feet wide, along the outside walls. The mangers are built of cement, with the bottom corners rounded, and the fronts about a foot higher than the floor of the feed passage to prevent feed being wasted. The mangers are continuous, and the cattle are watered from them, but between each stall hang galvanized-iron manger partitions, fastened on a continuous angle iron and hung in weights, so that they may be dropped into the manger before feeding the cows, and thus keep each cow's portion entirely separated from her nearest neigh-



The Dairy Barn on the Prison Farm.
One of the most complete dairy barns in America.



Interior of Dairy Barn.

Cattle stand back to back. Each side is divided into two sections, 20 cows to a section.

bor's, and when the cows are through with the feed, they may be pulled up to allow the mangers to be thoroughly flushed out. All the cows are tied with stanchions.

The system of disposing of the drainage or liquid manure is an up-to-date one. Drains carry this material from either end of the stable to the center, where they join into one large main, leading out to a large concrete cistern, with a tight concrete top. This cistern is fifteen feet deep, eighteen feet in diameter. From it the liquid is pumped into a tank and applied to the land as required.

Light is undoubtedly one of the greatest factors in the prevention of disease, and it is well considered in this barn, where there is a window every five feet on either side containing twelve lights ten inches square, the uppermost row of panes being separate from the main window as a fan-light or transom. Besides being used for light, these windows are the inlets of the ventilation system. The windows and the fan-lights are hinged at the bottom; the windows are placed about two and one-half feet from the floor of the stable, and are so hung as to open into the stable about ten or twelve inches at the top, being held there by a simple device, and thus the incoming fresh air is turned upward in the stable to prevent direct draft. The system is known as the Armstrong window-valve system, and is the design of the Assistant Provincial Secretary. The outlets are placed every eight feet in the hollow cement-tile wall directly opposite the solid buttress, built up on the outside to strengthen it. These hollow tile carry the foul air up to the ceiling of the stable, where they connect with galvanized pipes running to the ventilators on top of the barn.

A space of twenty-three feet ten inches between the cow stable and feed-barn basement is used as a mixing room. This is directly between the two silos, which have chutes built up them to be utilized for hay and straw, as well as for the silage.

The calf and bull stalls are under the feed barn, one end being used for the calves, the other for the bulls. There are six calf stalls, with stanchions to tie forty-eight calves. The calves are all tied while drinking or feeding. This has been found to be a sure preventive of the bad habit of "sucking." All that is necessary is to keep them tied about twenty minutes after they are fed. The calf mangers are of cement, just wide enough to set a pail in. Milk and water is fed from the pail. This is to ensure cleanliness. The partitions between each two stalls are removable to make one larger stall if desired. The bull stalls are eight in number, built with removable partitions and galvanized-iron mangers. The entire fittings are metal.

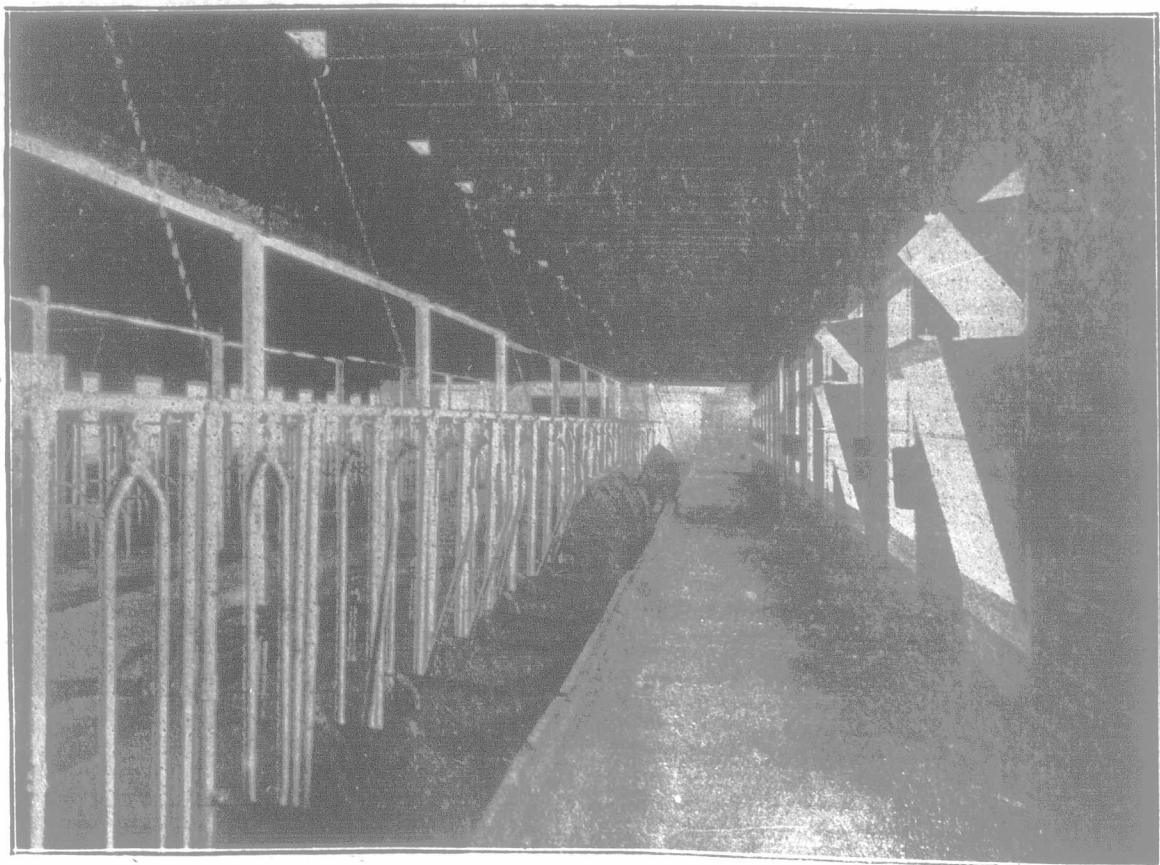
The root cellar is situated under the barn approach. At present this is all whitewashed, and is being used as a dairy, the butter being manufactured by prison labor in this room.

THE HERD AND FUTURE PLANS.

The dairy herd as at present constituted consists of fifty cows in milk and fifty-five promising young heifers coming on of grade Holstein breeding. This herd has been established

only a short time, but individual milk records are being kept, and the butter-fat test is used as well in the determining of the good and the poor cows. The herd is being improved by judicious culling on this basis, and in the near future the Guelph Prison Farm will have one of the best and one of the largest herds in America, for it is intended to build another barn, the duplicate of the one now constructed, and to put up a modern butter factory between the two, where butter will be made for all the Government institutions in the Province. The milk from the cows will be placed in cans on a steel track, leading directly from the stables to the factory, where it will be pasteurized, separated, cooled, the cream ripened and churned, the butter made up and placed in a refrigerator to remain until needed. This factory will be completed by the New Year.

A new material is being used in the stuccoing of all the cement structures inside and out. It is called alca-plaster, and is an alumina-magnesia-calcium, made up of 85 per cent. hydrated lime and 15 per cent. alca, and capable of holding up to six parts of sand to one of the combination. It makes an economic finish of granite-hardness, waterproof, at less cost than plaster.



Feed Passage in Dairy Barn.

Showing mangers with galvanized partitions hung on angle iron and held by wedges. Also the window-valve system of ventilation, windows hinged at the bottom.

THE VALUE OF THE WORK.

This is the beginning of the work on the farm. This fall a large portion of the plowed land is being ridged up for the winter. The farm is to be operated on a strictly practical economic basis. Experiments will be conducted on a large scale, under conditions as they obtain on the average farm. Nothing will be bought that can be produced on the place. For instance, shade and ornamental trees and shrubs are needed, and all these are being propagated in a two-acre nursery on the farm. During the next few months new pig-pens, horse barns and other farm buildings will be erected with just as much concern as was exercised in the building of the dairy barn. All the work will be done with the labor at the farm and in another twelve-month it will likely be the best equipped 840 acres in Ontario.

The work that Mr. Todd and the superintendents and farm managers of the several Provincial institutions in Ontario are doing is a work which farmers generally would do well to follow. For an example, this year has been particularly favorable to the spread of potato-blight, and many growers have lost heavily. The potatoes at these institutions have been kept thoroughly sprayed, and the blight was checked to such an extent as to do little or no damage. This spraying was not done on one acre, or ten acres, but on hundreds of acres, situated in several parts of the Province. Surely spraying is effective in the control of potato-blight. In this connection it may be mentioned that the Delaware variety has proven very successful and is of finest quality.

Another instance of a good example for farmers was in the mustard spraying as carried on at the Brockville institution. This farm, recently purchased, was badly overrun with wild mustard, and last spring over one hundred acres of this was sprayed with blue-stone solution and destroyed without injury to growing crops.

The four articles, of which this forms the final, have dealt with agriculture on the farms of as many Provincial institutions. A good and lasting work is being done both for the inmates and in the advance of agriculture. People are good imitators, and while it is impossible to follow all the agricultural undertakings as they are worked out in connection with these farms, there are many commendable features which may be imitated on a smaller scale by the man on a fifty, one-hundred or two-hundred-acre farm. It isn't the magnitude of the work that should appeal to the average farmer most, while this is a strong point in favor of the project as it applies to the economic and curative side of the undertaking, but it is the system. No farm should be operated without a system. Rotations are necessary on every farm. Dairy records are the only true measure of the herd. Light, ventilation and sanitation are necessary in every stable. Weeds and diseases must succumb or the crops will. The right crops must be grown on each field to produce most suitable feed. Spraying, pruning and orchard cultivation are absolutely necessary to success. These are a few of the points touched upon in these articles. There are others. Ideas in constructing buildings and lay-

ing out fields may be appropriate. There is a culture as farms.

Co-operative

Editor "The Farmer's Advocate"
I have an article on "The Farming of the Grown Root" in your issue.

I have an Ottawa Branch of the Association, executive of all know, success or failure of the seed the of the root while the chiefly bought.

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ing out fields have been brought out. All these may be applied on the general farms of the country. There are practical lessons for all in agriculture as it is carried on at our Government farms.

Co-operative Buying of Seeds.

Editor "The Farmer's Advocate":

I have just read with much interest, your article on page 1198 of the Oct. 17th number of "The Farmer's Advocate," in reference to Home Grown Roots, and wish to comment somewhat on it.

I have been for five years, Secretary of the Ottawa Branch of the Ontario Vegetable Growers' Association, and for three years a member of the executive of the Provincial Association, and as all know, our members are dependent for their success or failure, very largely on the quality of the seed they secure. We are aware that the bulk of the root crop seeds are procured from Europe, while the onions, corn, melons, cucumbers are chiefly bought in the U. S.

Now if there is anything we can learn about seeds, we are anxious to hear it, and we have been anxious for many years to get all the information we can get on this subject. Some of the information we have got tells that most of the Canadian seedsmen are reliable and honorable men, and we believe as a rule buy the very best seed they can get. And we believe that there are large old established growers of all kinds of seed, who cannot be tempted to substitute or send out poor quality seed. Then how does it happen that we buy one year, from a certain seedsman White Belgian Carrot seed, and get one of the finest crops it has ever delighted one's eyes to look upon, while the next year from the same variety, bought from the same seedsman, sown on the same field, only on a fresh plot, we get almost every variety known to commerce. Now we do not believe any seed grower ever sent that seed out in that form. And we never heard of a seed dealer destroying his old seed, we believe that when the new crop comes in, he simply adds to it, the "left overs" from the previous season, and this done year after year, thus we get some fresh seed, some two years' old, some three, some four and so on. Now I do not say they are to blame for this, for I admit that there has been a great tendency among planters to buy cheap seed, and they can afford to sell cheaper when they have no waste, but I believe this practice is chiefly responsible for the poorly germinated crops throughout the country. I think all will admit that a dollar thus saved, generally means many dollars lost.

However, the members of the Ottawa Branch of the Ontario Vegetable Growers' Association are mostly men who understand the very great importance of good seed, and are willing to pay the price if it would be a guarantee of good quality, but it is not always, and we have been fooled so often that we decided as an Association to buy a few seeds direct from one of the largest growers in Europe, and consequently sent to Denmark for our cabbage, cauliflower, and some of our root seed. The result was a marvel. Cauliflower seed that cost us \$2.00 per ounce before, cost us only 80 cents an ounce, and the other seeds were equally low in price, while the vitality was by long odds the highest we had had for many years.

We were encouraged to try the experiment again, and sent the next season for most of our requirements in the lines usually bought there, and were surprised to hear that our order had been held up by the Canadian seed dealers, from whom we had been buying previously, and paying them big profits, for which often proved very poor seed. They had successfully blocked our order, and it then being too late to order elsewhere in Europe, we bought from a small Canadian Grower. In placing our order we tried to impress on them that we wanted the best obtainable, and that if the seed proved satisfactory we would give them most of our trade, which annually amounted to several hundreds of dollars. But they fell down sadly, and sent us the worst dose we ever had. Some lines were so full of stems and dirt we could not sow them with the drill, others were mixtures of nearly everything they ever had, and in several cases not a single seed germinated to tell us what it was. This cost our members several hundreds of dollars in loss of crop.

Last year we found another grower in Europe, whose business is world-wide, and so extensive that they refuse to be held up by any combination of dealers, and we bought from them the Snowball cauliflower at 62 cents per ounce. Canadian dealers' prices were \$2.00 per ounce. We bought

Chantenay carrot seed for \$1.10 per pound, Canadian dealers' prices, \$2.50 and \$2.25. We bought Hollow Crown parsnip seed for 14 cents per pound, Canadian dealers' price \$1.00, other things were equally low, and the only complaint I have heard was that the vitality was too high, and the crop was too thick. One of our growers said that "far more seed grew than what he had planted."

By buying our seed co-operatively, from the growers, direct, our Branch would save fully \$500, and get besides an average, I am sure, of \$1,000 more crop from our land. In other words, the Ottawa Branch, by co-operation will profit in the future, to the extent of about \$1,500 annually.

Then why not the farmers all co-operate through their clubs and if they would only stand together, they could dictate to those who supply them, and get a share of the profits made on the sale of seeds, as well as be reasonably sure of getting a good quality.

The above are not the only advantages we derive from our organization. We meet every month during summer in two or three of our gardens, where we see the various varieties bought from various sources, as they grow, and we also learn many most valuable lessons in variety, cultivation, labor-saving methods and machinery, etc., but most important of all, we are cultivating the most important crop—brotherly love and respect for and confidence in each other, and we have one of the most harmonious organizations in Canada, whose members work together for each other's good, thus reaping for themselves the rich harvest of satisfaction, and confidence and respect of our fellow members.

But I agree with the article in your paper, that it is a good idea (in some cases) for the farmer to grow his own seed, but in this age of high cost and poor quality of hired help, most farmers will find no time to spend growing the few dollars worth of seed they require, if they can buy good quality from the large growers at such prices as we are able to buy at, especially when we get such high quality. But there are cases where the boys may be given an interest in agriculture, by having them grow enough seed to supply the farmer, and some to sell for pocket money. But if properly grown and cleaned so as to run through the drill properly, it means work, more than there is much money in.

The co-operative purchasing of such important commodities as seed is in my opinion of very great importance, in the production of good crops, and in cementing the farmers together in a spirit of good-fellowship, and brotherly love, if the proper course has been followed.

Carleton Co., Ontario.

W. J. KERR.

All agriculture rests upon soil fertility. The plant food in most soils is not inexhaustible. That which is year after year taken away in crop production must be returned or future crops will not be so abundant.

Make a record of needed repairs to machinery as it is being stored for the winter, and see that the repairs are made before the next cultivating and reaping season is upon us.

THE DAIRY.

Cost of Producing Milk in Ohio.

The people of cities who complain about the high price of milk may be interested in knowing what it costs to produce good marketable milk. An investigation made last year by the Dairy Department, the College of Agriculture, Ohio State University, shows that the average cost of producing a gallon of milk in Ohio is about 25 cents, or 6.25 cents per quart, allowing 3,200 pounds per cow per year as the average milk production. This takes into consideration the cost of feeds, labor, interest on investment, maintenance, insurance, taxes, etc. When the average milk production per cow is increased the cost is decreased. The average cost of distribution is 3½ cents per quart, making a total of 9.75 cents per quart as the cost of producing milk and delivering it to the consumer. This means that when milk retails at 10 cents a quart, the average producer and distributor is making little or no profit in the transaction. Where high producing cows are kept, and economic methods of handling and distributing on a large scale are employed, the above figures are greatly reduced, and there is a fair profit in the dairy business. However, it is the average producer, who keeps average cows, the increasing cost of feeds and labor, and the greater demand for sanitary conditions that are contributing to the high price of milk.

Fat Content and Milk Price.

Editor "The Farmer's Advocate":

The proposal of a new milk-products factory being established is to pay prospective patrons for their whole milk at the rate of 40 cents per pound butter-fat. As I understand the patrons are to pay for or draw their own milk to the factory, it will be advisable for us to consider carefully, in view of the high standard quality of milk necessarily required, what would be a fair rate in these days, when the cost of production has risen so high, and the cheese factories on which we have depended mainly for so many years are giving us such satisfactory returns. It might be well to have some discussion on this subject in The Farmer's Advocate, and also on the home use of the Babcock test. We must remember that 40 cents per pound of fat rate will mean for three per cent. milk only \$1.20 per 100 lbs.; for three and one-half per cent. milk \$1.40 per 100 lbs.; and for four per cent. milk, which I fear few herds will nowadays reach, \$1.60 per 100 lbs. And then the patrons receive no by-product, like skim milk or whey for feeding, which means less valuable manure for the fields which will then have to be procured by purchase if the fertility of the soil is to be kept up. Returns for the whole milk must be larger to provide for this. The taking of samples and making the fat test will become important factors in determining the returns the patrons will receive.

Middlesex Co., Ont.

LAETA.

Note.—For a change, why should not the patrons, by concerted action, decide what they should receive for their milk, and then stand together?—Editor.



Three English Dairy Maids

To one dairy Shorthorn cow. Photo by "Sports and General," at London Dairy Show.

Roots for Dairy Cows.

The Edinburgh and East of Scotland College of Agriculture has conducted some experiments with sixty dairy Shorthorn cows to ascertain the value of roots in feeding dairy cows. Twenty cows were used for this purpose in 1909, twenty-two in 1910, and eighteen in 1911. Two rations were used, one called the turnip ration, the other the concentrate ration. The turnip ration was made up of 2 lbs. bean meal, 2 lbs. bran, 112 lbs. turnips, and 15 lbs. of hay; an albuminoid ratio of 1 to 14, and a total dry matter in the ration of 28.6 lbs. The concentrate ration consisted of 2 lbs. bean meal, 2 lbs. bran, 4 lbs. pea meal, 2 lbs. dried brewers' grains, 14 lbs. turnips, and 15 lbs. hay, an albuminoid ratio of 1 to 7.6, and the dry matter 26.7 lbs. Straw was supplied to each lot of cows. The turnip ration had only four pounds of concentrate material, but it had the most dry matter. The results of the three years' experiment showed that in yield the concentrate ration gave better results than the turnip ration, but in the amount of fat produced in the butter the turnip ration scored a success.

The following conclusions were arrived at:

1. The feeding of a ration containing a large quantity of water does not increase the percentage of water in the milk or reduce the percentage of fat.
2. In all the experiments the greater yield of milk was obtained from the cows on the concentrated ration. On the other hand, the milk from the cows on the turnip ration contained a higher percentage fat and a greater total weight of fat was recorded in the milk.
3. The cost of production, when allowance was made for the percentage of fat in the milk, was less in the case of the turnip ration.
4. At the end of the experiment the condition of both lots of cows was satisfactory.
5. While the milk of individual cows frequently contained less than 3 per cent. fat, the percentages of fat and solids, not fat in the mixed milk of both lots, practically never fell below 3 per cent. and 8.5 per cent., respectively, during the course of the experiments.

GARDEN & ORCHARD.

Storing Vegetables.

A writer in the American Cultivator gives the following advice to vegetable growers.

If the farmer will construct a root cellar away from the buildings and cover it with earth, he can keep many of his vegetables until late in the spring, and sell them at an excellent profit.

Few house cellars are adapted to storage purposes. In order that vegetables may keep well, they should have a uniform temperature, darkness and some degree of moisture. A temperature of about 40 should be maintained as far as possible.

In mid-winter the aim should be to keep the cold out and in the spring to keep it in. One or two lighted lanterns will help to increase the warmth, and a heavy blanket of manure or straw, as the sun gets higher, will aid in keeping the frost in the ground until late in the season.

Probably the best storage cellar is made with roof, sides and floor of cement. Such a cellar covered with earth will give the utmost satisfaction. A stone cellar will also prove efficient, and one built of boards is much better than none at all, although a little more care will be required to keep the conditions right.

It is always well to lay tile drains with proper outlets under a cellar of this kind, and to provide a ventilator. It is important, too, to have the door wide enough to push a wheel barrow through, but after the vegetables have been stored for the winter, as little light as possible should be admitted, and the temperature should not be allowed to rise above forty. Too much warm air is sure to result in loss.

The earth covering is important for two reasons—it aids in keeping the cold out in winter and the heat in spring, and it supplies just about the right amount of moisture. Such a cellar may be built anywhere, but of course there is some economy in labor if it is placed on or rather in a side hill.

Advantages of Fruit Growing for Small Farms.

"In addition to the many other advantages which are possessed by a section of country devoted to the growing of fruits of various kinds is the tendency to sub-divide large farms into smaller holdings," says Wm. H. Bunting, concluding his recently-published report on fruit-growing conditions in Canada. "Professor Warren, of Cornell University, head of the Department of Farm Management, after a thorough survey of two of the more important counties of New York State, devoted largely to general farming, sums up the limit of profitable farm management as being in inverse ratio from the smaller holdings to the farm of at least two hundred acres, under which the greatest efficiency may be obtained with a minimum of expense. He shows by actual data that 90 per cent. of the farmers in these counties whose farms do not exceed thirty acres in extent, receive less than \$500 per annum net for their labor. On the farms of 200 acres and over, only one-third of the farmers receive \$1,000 and over as a reward for their labor in the course of the year.

"When we come to compare these figures with the average returns from a well-managed fruit plantation, one year with another, there is a marked difference. Net returns from \$50 to \$200 per acre and even more are not at all unusual and it is safe to say, from a perusal of the replies received from over one hundred and fifty correspondents in all parts of Canada in answer to an enquiry on this subject, that at least \$50

per acre, net, may be counted upon in this country for the area under fruit. In many sections farms of one and two hundred acres, which were returning their owners not more than a comfortable living while devoted to general farming, are now supporting from six to twelve families who are devoting their energies to fruit culture, and doing so successfully.

"Fruit-growing furnishes pleasant and profitable employment to all the members of the family, encourages the sub-dividing of the land into smaller holdings, gives social and educational advantages, leads to the establishment of many allied industries in the district, and in many other ways adds materially to the substantial wealth of the community."

Fruit Growing in Canada.

A year ago the Department of Agriculture at Ottawa, through the Branch of the Dairy and Cold Storage Commissioner, undertook an investigation of the fruit growing conditions throughout Canada. The enquiry was entrusted to Wm. H. Bunting, an extensive fruit grower at St. Catharines, Ont., who secured as much information as possible on the following points:—

1. The possibilities of an extension of the fruit growing industry of Canada in the different localities visited.
2. The tendencies in the matters of the planting and growing of different kinds of fruit, and with regard to apples, the varieties which are being most extensively planted in the different districts.
3. The difficulties which are likely to be encountered in the further development of the fruit growing industry.
4. Methods of production and orchard management which have been most successful in the different districts, and the probabilities of over-production.
5. The conditions under which British Columbia, Ontario and Maritime Province fruit is marketed in the prairie Provinces as well as the character, and the effect of American competition.

The enquiry was concluded in due time, and the report has been printed for general distribution. It contains a large amount of detailed information gathered in every province, making it an invaluable guide to persons who desire to take up fruit growing as an industry.

In his general conclusions Mr. Bunting points out that while the growing of fruit offers ample reward to the man of energy, patience and perseverance, there is perhaps no phase of agricultural endeavor which requires to be more closely studied, and in which a wider range of information is more desirable and necessary. The future of the industry, he states, was never brighter than it is to-day, the prospects never more attractive, nor the field of extensive effort in all fruit growing provinces more inviting.

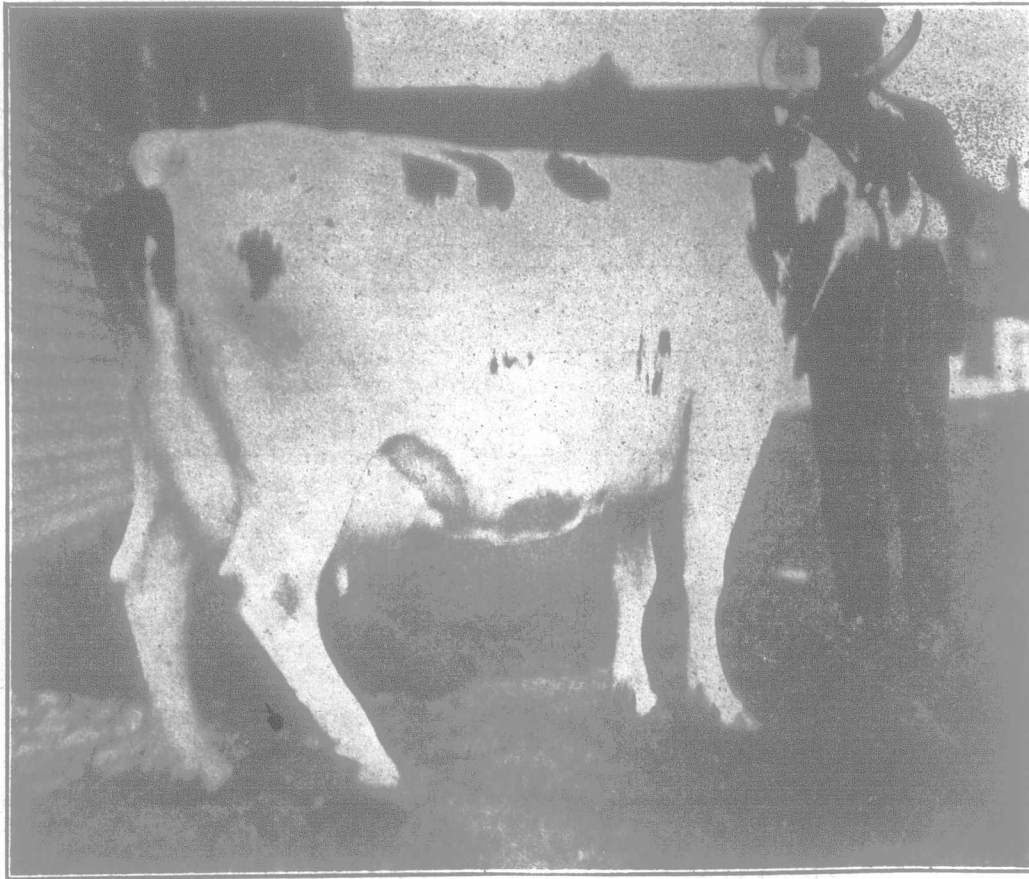
The report which contains eighty-four printed pages and many illustrations, is available to all who apply for it to the Publications Branch of the Department of Agriculture, Ottawa, Ont.

Onion Rots in Storage.

Bulletin 214 of the Ohio Experiment Station dealing with onion rots, says: Onion rot is a serious matter with onion growers, and onion dealers as well. It has been found that particular varieties of onions in our climate are susceptible to special diseases. For this reason we must consider white onions, such as White Silverskin, White King, etc., in a separate class from the rots of red and yellow onions, such as the Globe and Wethersfield varieties.

With the white onions the problem is partly a field problem at harvest time and partly one of storage. The growers are in the habit of gathering the white onions before the tops fall and topping them immediately, instead of throwing together in heaps for absorption of the substance of the tops by the onion bulbs, as is practiced with the riper red and yellow varieties. After topping, the white onions are placed in slatted crates, and these crates are stacked in the field or open sheds, where they are kept dry. Often the loss from rot during the six weeks following harvest may reach 60 per cent. of the crop, and, as shown by investigations in Connecticut and Ohio, it has not always been clear why these losses are so large. Recent investigations lead us to believe that the green onion neck of white onions handled in this way affords entrance for the organism of rot.

The sclerotium rot (*sclerotium cepivorum*) appears to be the most serious, although smudge or anthracnose of the onion (*Vermicularia circinans*) may sometimes cause large losses. It is believed that both these rots may be handled by disinfection of the onions immediately after harvest. This disinfection may be carried out as described under the Maine formula for formaldehyde-gas treatment, which consists of commercial 40 per cent. formaldehyde, 3 pounds; potassium permanganate crystals, 23 ounces, sufficient for 1,000 cu. ft. of space occupied by crates or trays.



Bellsland Nan 4th (imp.) —2489—

Ayrshire cow; champion female of the breed, at Western Fair, London, 1912. Owned by Alex. Hume & Co., Meigs, Ont.

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Enclose open tiers or piles of slat crates filled with dry onions, potatoes, etc., in tight room or oiled tent of canvas buried in earth about the base. Generate the formaldehyde gas in a flat-bottomed dish or pan of adequate capacity by placing one of the materials, as the liquid formaldehyde, in the pan, and adding the other the last thing before retiring. Applicable to fumigation of seed potatoes for scab, sweet potatoes for rot troubles, and to newly-gathered, dry onions before storing for winter.

The object of immediate disinfection is to prevent the entrance of these organisms, particularly the sclerotium rot, through the green neck of the newly-topped onions. The exuding juices offer favorable culture conditions for the fungus to develop.

When no fumigation is practiced following harvest the onions which are found to be sound and delivered for storage at the close of the season may very profitably be treated in this way before winter storage. Both these rots are essentially dry-rots of onions. In addition, we have wet-rot of white onions, which may be either due to bacteria or to the same fungus as the wet-rot of Globe or other onions mentioned below.

The rots of yellow and red onions are of both the wet-rot and dry-rot types, but the wet-rots are much more serious with these varieties. Doubtless as in all vegetables held for a long time in storage, we have many cases of wet-rot in onions where some of the common decay bacteria are the chief cause. These find entrance through wounds as in topping, and, under conditions favorable for their development, invade the tissues of the onion and cause decay.

In addition, however, to the wet-rots, due to bacteria of undetermined species, we have a specific wet-rot of onions due to *Fusarium* species. This wet-rot fungus belongs to the same group as the potato dry-rot, and is liable to infect soils in which onions are grown year after year. Rotted onions will show external developments of the pink fungus, and may be detected in that way as well as by the use of the microscope. The chief factors of control with onions of this kind are in the methods of culture followed to produce the crop. The best temperatures for onion storage are about 38 to 42 degrees F.

This season has been one which has served to bring before many apple growers the need of a Fruit Grower's Association in their district. Where well managed associations are in operation, good prices and ready sales have been obtained, but where the grower was forced to rely upon the apple buyer the price offered has been very small, and he has experienced difficulty in getting the apples picked and packed. If the need has been felt in your locality, now is the time to organize. Strike while the iron is hot. Call a meeting and talk the matter over, then if sufficient interest is taken, organize at once, and be ready to handle next year's crop. Better fruit and better marketing facilities will result.

One of the best ways to increase the demand for apples or fruits of any kind is to encourage the people to use more of them, and the best means of increasing consumption is to put up nothing but the best quality in the different grades.

A single apple tree will not infrequently yield more cash profit than an acre of land devoted to general farm crops.

POULTRY

To prevent drafts, a solid partition should be placed in long poultry houses every fifty feet.

A two-year-old or three-year-old hen is safer to breed from than a pullet.

For curtain-front poultry houses, a good rule is one-third glass, one-third cloth and one-third boards.

The chief objection to curtain-fronts is dirt, which clogs the curtain and prevents the circulation of air.

Two hundred birds to the acre is just about the limit where they are to remain year after year.

Where mixed farming is carried on, a flock of 100 laying hens is about enough per 100 acres of land.

Kill or dispose of all the cockerels not needed for breeding purposes. It costs about \$1.50 per annum to feed each male bird.

In some large poultry plants the labor required to care for the poultry is figured at one-quarter of the cost of feed.

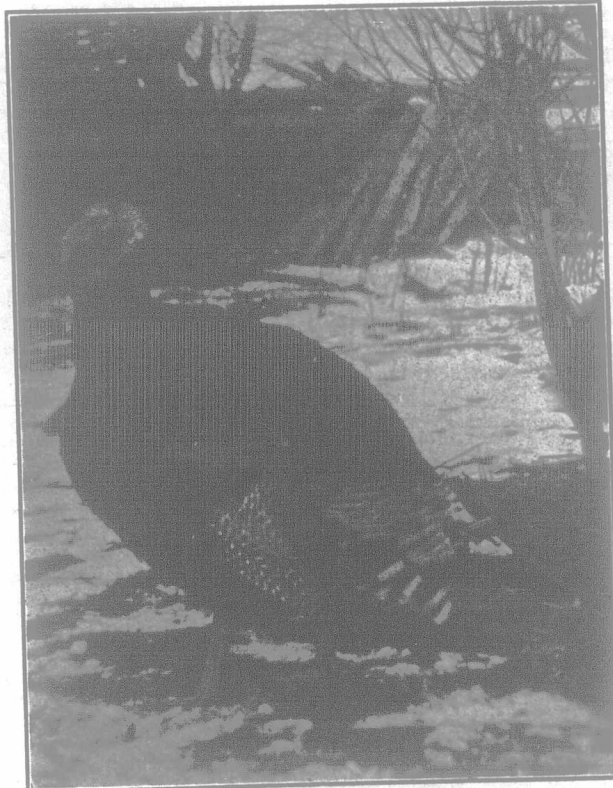
Poultry Notes.

Editor "The Farmer's Advocate":

In the scratching shed for your fowl there is nothing better than straw chaff or clover tops, and this should be at least eight inches deep. All the whole grain should be fed in this litter to induce exercise. Dried leaves are also suitable and have the advantage of being exceedingly cheap. Some poultry-keepers make a point of gathering sufficient leaves in the autumn to last the whole winter and store them away in sacks or barrels.

A point often overlooked is that mongrels cost as much to keep as pure-bred fowl, and the present month is an excellent time to arrange a purchase of next year's stock, if you have not already good stock. Young stock if purchased now will have matured and settled down in their new quarters before winter sets in. Ordinary utility stock, even from a trap-nested, pedigreed strain is not very expensive, but it is wise to pay a reasonable price for well-bred birds rather than to attempt to secure a bargain at cheap rates. Many poultry-keepers make a practice each year of killing off or disposing of all unnecessary stock during this month to provide room for growing stock, and splendid bargains may often be secured from them. The greatest mistake is for the beginner to commence operations with mediocre stock—a policy which usually ends in failure and disgust. A first purchase often makes or mars a poultry-keeper whether he starts in on a large or a small scale.

When the first season is crowned with success he is enthusiastic and stimulated for further effort, whereas a failure the first year very often leads to more failures the next year and the ultimate "dropping out" of what might have proved a first-class poultryman.



Sensation.

Bronze turkey, winner of first prize in turkey classes, and grand champion over all varieties of poultry at the Ontario Winter Fair, Guelph, 1911. Bred and owned by W. J. Bell, Angus, Ontario.

The culture of pure-breeds will add to one's storehouse of knowledge and with comparatively little trouble or outlay gives one pleasure and profit.

I might also add that when a business man retiring from active life, when old age comes upon him, has a poultry-yard, be it large or small, on which to devote his time and advance it towards a standard of excellence, he will find an enjoyable occupation closely associated with ample remuneration for his labors.

If the young pullets' combs grow well and they redden up before the bird is matured enough for laying, it is a good plan to remove them from one run to another about once a fortnight to prevent them laying too early, as they will lay better later if not allowed to lay till well matured.

A little aperient is most helpful to fowls which frequently suffer from partial indigestion; much illness would be avoided if more care were taken in this respect.

It is most essential that young stock should have a liberal supply of sharp flint grit, as nothing causes sluggish liver so quickly as lack of this; fowls of any kind cannot do well if their digestive organs are not acting freely, as the gall

becomes overcharged and disease frequently follows.

House scraps should always be utilized for the fowls, and these boiled up with water or milk, and mixed into a crumbly mash with shorts or provender, make an economical as well as an excellent breakfast for the fowl. NONA.

Carleton Co., Ont.

Ducks.

Readers of The Farmer's Advocate have recently had their attention called to the habits of ducks by articles written by Peter McArthur, also by "A Poem to Order on Ducks." Now ducks are a part of the poultry crop on many farms, and they are usually found profitable. A writer in one of our American contemporaries thus describes ducks: "It takes four weeks of profound uncertainty to hatch ducks, after which they proceed to grow up, sectionally, in the following order—(1) their bills, (2) their feet, (3) the duck proper.

"If anything had been created in vain, ducks would prove that it wasn't by eating it.

"Each shining hour seems to be plenty good enough just as it stands for ducks. For as often as they catch the busy little bee improving it, they swallow him on the spot.

"The duck never lays a golden egg, being no such goose."

THE FARM BULLETIN.

Likes the Distributor.

Editor "The Farmer's Advocate":

The corn-harvester, as compared with the back-breaking sickle, is, in my experience, almost equalled by the corn-distributor in the silo as an efficient labor-saving contrivance. When I went to a tinsmithing establishment in our town to enquire for such an outfit, I found that the foreman had a sheet from a back number of The Farmer's Advocate pinned up over his desk in the make-room, showing plan and description of the distributor used last year in the Weldwood silo. The curve, or elbow, given the hood at the top, which receives the stream of cut-corn from the blower pipe, had, he said, proved to be a decided advantage in lessening the wear on the back from the steady impact. He said they had turned out a lot of them from the pattern, with the best of satisfaction. I finally ordered one of 24-gauge galvanized 8-inch iron pipe, six sections, each five feet in length, joined with rings and snaps, and the elbow complete, for \$14, rather steep, I thought, but since filling the silo I don't begrudge the outlay, for one man with a distributor can make a better job more easily than two men with forks. One man should handle the distributor pipe and another do the tramping, and the silo will be well filled. The grain and stalks will be evenly mixed, which is hardly possible with forks. The sections are removed as the mass of corn rises in the silo, and care need be taken that when hanging suspended, the corn should not be allowed to rise above the opening of the discharge pipe, choking it up and liable to occasion a burst in the blower. I am greatly indebted to Weldwood and The Farmer's Advocate for calling my attention to such a simple and sensible plan in silo-filling. To be relieved of the constant pelting from the falling cobs and stalks by the old process is enough to commend the new, even if it had no other advantage. It's a good scheme. Thanks! ALPHA.

Ohio's Largest Consolidated School.

Jackson Township, Pickaway County, boasts of being the largest centralized school district in the State, comprising as it does an area of over sixty square miles. A new school building, costing over \$30,000, was recently dedicated by the people of the township. It has eight rooms, an auditorium, a chemical and physical library, and an office for the superintendent. Scientific apparatus and books for the library have been purchased to the amount of \$500. The building is equipped with running water and all other modern conveniences, including sanitary drinking fountains. A gasoline engine is used to pump the water supply. Eleven schools in the township have been closed by centralization. The buildings have already been sold at auction, as the people have no idea of ever returning to the old system. Two hundred and twenty-five pupils are enrolled in the school, thirty of which are in the high school. Ten wagons are used to haul the pupils to and from school. Excluding the cost of the high school, the expenses are less than under the old plan. J. H. Cook, Jr., is the superintendent.

Rounding Things Up.

By Peter McArthur.

I see by the papers that they are having a dry-farming congress out West. It sounds good to me, though I do not know exactly what it means. This summer I have had my fill of wet-farming, and I think I'd like a little dry-farming for a change. As I look back I seem to see things through a veil of rain. It was wet in the spring, wet in the haying, wetter in the wheat harvest, wettest of all in the oat harvest, and during the apple-packing we are having a deluge. I think we shall welcome the frost this year, if it will only harden things up and let us know again what it feels like to have something firm underfoot. Lowell speaks somewhere of the joy of being "knee-deep in June," but I guess he had no reference to the sensations we feel on being knee-deep in October. If there is any oldest inhabitant who knows of a wetter season than this let him now speak or forever after be silent. When I reach the point where I shall be sitting in a warm corner talking about the weather "we used to have," I expect to put everything else in the shade with my accounts of the summer of 1912. I shall probably be telling that before it was over a lot of farmers in this district had developed web-feet like the ducks and that the cattle in the pasture in some cases sprouted fins. A vivid imagination working on the kind of weather that we have had this summer should be able to produce some pretty fair-sized whoppers. At present, however, the wet is too much of a stern reality to stimulate any play of fancy. My imagination is just about as water-soaked as everything else in the country.

No shipwrecked sailor standing on one foot on the wave-washed top of a peak of rock in mid-ocean ever welcomed a rescuing vessel more gladly than I did the appearance of a man who could be coaxed, wheeled and hired into finishing the job of packing my apples. For five days I had packed from morning till night doing my own sorting and pressing. No, I am not going to tell you how many barrels I packed in those five days. It wouldn't look as big in print as it seemed when I was doing it. I didn't know there were so many apples in the world as I found in that orchard when I had to handle them one by one, look them over carefully for worms, spots and blemishes, and then place them gently in the barrel. To add to my discomfort, the press I had bought was one of the kind that is made to sell and not to work with, and when the real packer came to the orchard he refused to have anything to do with the wobbly toy. He had to get a real press, and as I look at him heading up a barrel, I feel like going and blowing up the foundry from which I got the press that made apple-packing such a ticklish job for me. As nearly as the weather will allow, the apples are being sorted and packed at a workman-like rate, and long before this is on the press I hope that they will all be snugly stored in a fruit car and on their way to Edmonton. After they are once shipped I shall do my best to forget them for a couple of weeks. Even at the best speed it will take them that time to reach their destination. I shall also avoid reading the weather reports, though provision has been made to have the car heated in case it should strike frosty weather. But even if I can't keep from worrying, there is one comfort in the fact that I will have my worries bunched. All the results of my experiments at farming, I mean the financial results, will be bound up in the fate of that car.

The barrels, picking, packing and freight are costing me something more than I am getting for the hay, pasture and oats, and if the venture fails everything will go down together. The great advantage of this will be that I can do my sorrowing all at once and get done with it. If, on the other hand, the venture goes through properly, I shall get my returns all in a lump, and it will look bigger and more encouraging than if it came in dribs and drabs. When that car is started on its way I shall have time to wallow through the potato ground and see what has been spared by the rot, but I mustn't think about that or I shall be quoting from Joel, the son of Pethuel, who apparently wrote his prophecy in one of the worst years for farming known to history. Anyway, the celery looks good, and so far it has escaped all bugs, blights, fungi, and other pestilences that walk in the night. If I get it nicely pitted before it is frost-bitten there will be some good eating ahead for the winter. Visiting scientists say it is the finest piece of celery they have seen this year, and there are about fifteen hundred heads in the patch. Even if that carload of apples does not realize all that it should, we shall still have the garden to fall back on, and if there is time we can put up a few barrels of sauerkraut. But I do hope it will stop raining some time soon.

Apparently good apples are not so plentiful in the cities as we were led to suppose earlier in the season. During the past few days I have received orders that I cannot fill for about fifty barrels. One order from Ottawa offered three dollars f.o.b. at Appin for twenty-four barrels of Spies, and the others all expressed themselves as willing to pay whatever I asked. I think it would be an interesting experiment another year to run a small advertisement in some city paper so as to get orders direct from the customer. The great difficulty about this would, no doubt, be that all the customers would want Spies, nothing but Spies. A few of my correspondents have been indefinite enough to say that what they want is a barrel or two of good cooking apples, but most of them are quite explicit in saying that they want No. 1 Spies, Baldwins, or Greenings. If I yielded to their requests I would, no doubt, be obliged to keep all the Peewaukees and Ben Davises, for, besides being good apples, the Spies can be used as a lever in moving the inferior varieties. Right here, it seems to me, that there is a point worth laying to heart. The people of the country are being educated to the fact that only the best apples are worth paying big prices for, and the man planting out a young orchard would be foolish to put out any but the established standard varieties. No matter how wonderful new varieties may look in the lithographed catalogues, it may be hard to dispose of them to a properly-educated public. There is little danger that such standards as the Baldwins and Spies will be supplanted by any other variety, though I have heard it said that in a few generations they may possibly run out, just the same as potatoes run out. A prominent fruit-grower was telling me some time ago that he has a couple of Rhode Island Greening trees that are over a hundred years old, and that were grafted from stock that went back almost to the original tree. He told me that these Greenings are almost a different apple from those now offered for sale, and his explanation was that the Greening has run out, just like the Early Rose potato, but I seem to have read somewhere that good potatoes are not going to be allowed to run out any more. The process is being reversed. By careful selection better potatoes are produced each year, and new strains are being developed that are superior to the parent stock. I wonder if it is possible if the same thing can be done with apples, so that instead of having them run out they will improve in quality. Of course working with grafts is a different matter from reproducing from the seed, but I am getting to have a good deal of faith in the scientists, and shall not be at all surprised to hear that some Burbank has discovered how to improve even our best apples, by some kind of grafting selection.

Death of Simpson Rennie.

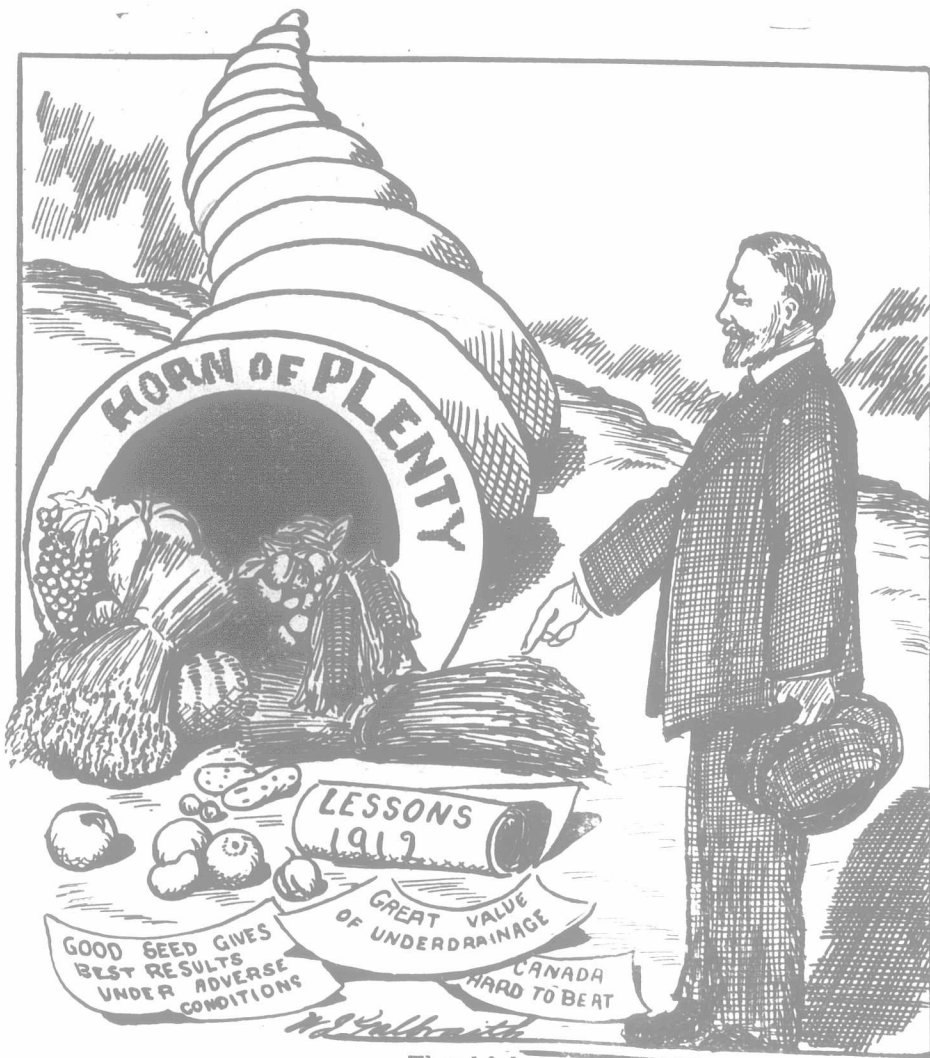
The demise of Simpson Rennie, formerly of Scarboro Township, Ontario, and widely known as a veteran farmer of the very best type, removes a man who was highly respected by all having the pleasure of his acquaintance. He was certainly one of the most skillful farmers in Canada, as anyone having been privileged to visit his farm will cheerfully acknowledge. His pride in his farm was as boundless as his efforts to continue improving it were untiring. He was a member of the Agricultural Club, formed in Scarboro Township thirty-five years ago, and attributed much of his success as a farmer to his association and exchange of thought with other farmers, which to him was a pleasure, and he generally gave more than he received. In 1883, he won the gold medal for the best-kept farm in a "good farms competition." Three years later, he captured the sweepstakes prize for all Ontario in a similar competition. He retired from active farming a few years ago, and resided in the city of Toronto, but was frequently prevailed upon to lecture at Farmer's Institute meetings throughout the Province, and the illness which resulted in his death is said to have been contracted in Western Canada while he was judging in a crop competition. He was born in Scarborough, in March, 1840, and was in his seventy-third year when his death occurred. Mr. Rennie was a man of sterling character, whose word was as good as his bond. He was a brother to William Rennie, for several years superintendent of the Ontario Agricultural Farm at Guelph, who died two years ago. He is survived by his wife, two sons and a sister.

A Churchless Community.

In the United States a great deal of careful research is being made in the conditions prevailing in rural communities. From Vermont, a territory is reported seven miles by thirteen miles in area where there is only one place of Christian worship, and that is a schoolhouse, there being no church building. In this territory, during the past fourteen months, there were two murders, three suicides and 13 illegitimate births. It is also declared that almost every house in this district covers some one who is regarded as "a little off" mentally, either a member of the family or a farm hand.

With good feed and care, it costs about ten to eleven cents per month to keep hens of the general-purpose breeds, and about nine cents per month for those of the non-sitting breeds.

October 1st to November 15th according to latitude is given as the best time for sowing oats in the United States Cotton belt.



Canadian Farmer—Plenty and to spare, and the Year has taught valuable lessons. Thankful.

Poles Us

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BIG SHIP

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Poles Used in Canada, 1911

The Forestry Branch of the Department of the Interior has lately finished the compilation of statistics dealing with the poles purchased in Canada during 1911. The total number of poles purchased was 585,708, a decrease of 25 per cent. from 1910. The total value of these poles at point of purchase was \$1,056,277, and the average price of poles was \$1.80, greater by 47 cents than the price per pole in 1910. Steam railways, telephone and telegraph companies, used almost ninety per cent. of these poles, the remaining ten per cent. being used by electric railway, power and light companies. Over ninety per cent. of the total consumption were cedar poles, which, for their cost, give better service than any other wood. At present, practically none of these poles are treated or preserved by any method, in which respect Canada is far behind the United States. The United States, using in 1910, 3,870,694 poles, found that it paid them to use preservative methods. During the last four years, the treatment of poles has advanced rapidly; in 1910 over 21 per cent. of the total number were treated by the creosote or other methods. This is an increase of some 45 per cent. over the number treated in 1909. At present, the United States have a large number of timber-treating plants, while Canadian pole-users are only now beginning to treat their poles. It is to be hoped that this great inequality will soon be done away with, and that pole-users in Canada may take up this cheap and rational method of securing greater service from the poles used, and thus lessen the drain on the forest.

Fire Insurance Decision.

Chief Justice Mulock has entered judgment for \$2,951.70 in favor of George Patterson, of East Zorra, against the Oxford Farmers' Mutual Fire Insurance Co. The plaintiff's barn and implement shed was destroyed by fire a year ago, and the company refused to meet his claim on the ground of non-disclosure of an incumbrance upon his property in favor of his mother. The declaration that there was no incumbrance was in the agent's writing, and there was no proof as to what authority he had for it. Chief Justice Mulock holds that the probability is that the company would have accepted the risk even had the incumbrance been known.

GOSSIP.

BIG SHIPMENT OF HIGH-GRADE AYRSHIRE COWS.

Tuesday was a red-letter day for Ayrshire-breeders in Howick and the adjoining district. The occasion was the shipment of the largest lot of high-grade Ayrshire cows ever exported from Canada. The 217 cows, similar in color and type, together in one herd, was a sight not often seen in Eastern Canada, and a number of spectators were on hand to see this large herd, which is being taken to the Brier Cliff Manor Farms, Pine Plains, N. Y., where certified milk is produced for the New York trade. The cows, ninety of which are in milk, the others due to freshen in the near future, together with a registered Ayrshire bull, Burnside White Cocade, purchased from Robert McNeil, Ormstown, were loaded on twelve cars, and were taken through Grand Trunk and New York Central Railways, by special train, to their destination, expecting to make the journey in twenty-six or twenty-eight hours.

While D. T. Ness was commissioned to make the purchases, the President of the Company, Geo. W. Tuttle, or the Manager, Mr. Sackett, personally inspected the animals before purchasing, and supervised the testing with tuberculin, and loading of the animals. To save delay at Malone, the port of entry, Dr. Main and U. S. Customs Officer Harman, came to Howick to inspect the animals as they were loaded. A clean health bill was given with the animals, as there is no contagious disease in the district. Of 222 cows tested, only one reacted to the tuberculin test, which is a record any district may be proud of, as these cows were selected from the many choice herds in the Counties of

Chateauquay, Beauharnois, and Huntingdon. The sellers were principally dairymen who produce milk for the Montreal market, and the going out of so many winter milkers will have a tendency to cut down the city supply. Many who sold cows, did so reluctantly, but were desirous of helping to institute what may be a big trade in the future, as city milk companies in New York find the milk from Ayrshire cows quite suitable for their customers.

Israel Groff, Elmira, G. T. R., Waterloo Co., Ont., in a change of advertisement in this issue, offers for sale choice young Shorthorn bulls, cows, and heifers, of show material, some of the cows having calves at foot. His herd ranks among the very best in breeding and character.

ON THEIR HONEYMOON.

It was their honeymoon; the happy pair had gone to the Lakes for their trip, and spent the first day boating. "Oh, George," exclaimed the bride, "isn't it heavenly; let's send a telegram to pa and ma telling them what a glorious time we're having." An hour later a telegram was laid on the breakfast table of the parents. The old man read it and sadly shook his head. "Ah," he said dolefully, "they've begun already, my dear." "What is it?" inquired the fond mother. "Listen to this, dear: 'Grand row before breakfast.' Well, well, I suppose it had to come some time or other."

SCOTTISH SHORTHORN SALES.

Following the annual Collynie sale of 24 Shorthorn bull calves for an average of \$1,890, and 12 heifers for an average of \$360 as reported in our last week's issue, were the usual consignment sales in the Aberdeen and adjacent districts. On October 9th at Loanhead, Inch, were sold 50 head from the herds of A. M. Gordon, of Newton and A. T. Gordon, Loanhead. The top price of the sale was \$2,000 paid by Captain Ogilby of Dungiven for A. M. Gordon's roan heifer calf Charity 15th, by Newton Crystal. The second highest was \$1,000 for the red Loanhead bull calf Sittyton Marquis purchased by R. Copland, Ardlethen. Four others sold for prices ranging from \$500 to \$950. The average for the 88 head from the Newton herd was \$375, and for the 11 head from the Loanhead herd \$290.

At the Aberdeen joint sale the following day, 172 head consigned by 37 breeders brought an average price of \$245. The highest price was 290 guineas (\$1,450) paid by the Edgecote Co., Banbury, for the yearling roan heifer Pride of Rothes V., bred by Lord Lovat, and got by Cherry Victor, bred by Mr. Parkin-Moore, and out of a Beaufort Pride cow. The next best price was 260 guineas, about \$1,300, paid by the same company for the red heifer calf Nonpareil Blossom VIII, bred by lady Gordon Cathcart, Cluny Castle, and got by Dunglass Commodore, out of a Bapton Senator Cow. Mr. Anderson, Saphock, got \$1,000 for the red heifer calf Nonpareil Lily, by the Duthie bull Proud Emblem, purchased by Mr. Cornelius, from Cheshire. The highest price for a bull was \$1,000 for the roan yearling Woodend Stamp, consigned by Alex. Crombie, and purchased by George Campbell, Harthill, who also paid the highest price for a bull calf, \$375 for the roan First Lord, from Geo. Watson, Old Craig, Wartle.

The following conversation once took place between two Quakers:

"Martha, does thee love me?" asked a Quaker youth of one at whose shrine his heart's holiest feelings had been offered up.

"Why, Seth," answered she, "we are commanded to love one another, are we not?"

"Ah, Martha, but does thee regard me with the feeling the world calls love?"

"I hardly know what to tell thee, Seth. I have greatly feared that my heart is an erring one. I have tried to bestow my love on all, but I may have sometimes thought perhaps that there was getting rather more than thy share."

CAT AND RAT SKINS.

A very good satire on wild-cat-investment prospectuses is the following circular letter received by a Canadian banker from a friend in England. The proposition outlined is only a trifle more absurd than many that are gravely designed to separate fools from coin. Imagination is a splendid asset in certain lines of business. The letter reads: Dear Sir,—Knowing that you are always interested and open for an investment in a good, live, business proposition, I take the liberty of presenting to you what seems to me to be a most wonderful business in which, no doubt, you will take a lively interest, and perhaps write me by return mail the amount of stock that you wish to subscribe towards the formation of the company.

"The object of this company is to operate a large cat ranch in or near Golden, Colorado, where land can be purchased cheap for the purpose. 'To start with, we will collect about, say, one hundred thousand (100,000) cats. Each cat will average about twelve kittens a year. The skins run from 10c, each for the white ones, to seventy-five cents (75c.) for the pure black. This will give us twelve million (12,000,000) skins a year, to sell at an average of 30 cents apiece, making our revenue about ten thousand dollars (\$10,000) a day gross.

"A man can skin fifty (50) cats per day for two dollars (\$2.00). It will take 100 to operate the ranch, and therefore the net profit will be about nine thousand eight hundred dollars (\$9,800) per day.

"We will feed the cats on rats, and will start a rat ranch on an adjacent farm. The rats multiply four-times as fast as the cats. If we start one million rats, we will have, therefore, four rats per day for each cat.

"We will feed the rats on the carcasses of the cats, from which the skins have been taken, giving each rat a fourth of a cat.

"It will thus be seen that the business will be self-acting and automatic all the way through. The cats will eat the rats, and the rats will eat the cats, and we will get the skins.

"Awaiting your prompt reply, and trusting that you appreciate this opportunity to get you rich very quickly, I remain, Very truly yours."

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.

COW WITH COUGH.

I bought a cow from a farmer for feeding purposes about two months ago. I paid a good stiff price for her. A few days after I had her I noticed a cough, which has grown rapidly worse. I asked the man about it soon after, and he said the cow had the cough for some time, but he had no anxiety about her.

1. Was he liable in selling me the cow in this condition, as I now believe her to have tubercular trouble?

2. If, after veterinary examination, I find her with tubercular trouble, what redress can I get from a legal aspect?

3. Supposing her to be affected, could I legally sell to drovers? Ontario.

Ans.—1. We think so; but you should have promptly tendered a return of the cow to the vendor and demanded a refund of the money paid for her. This should have been done at least immediately upon your receiving from the vendor his admission that he knew of the cough at the time he sold you the cow.

2. We doubt if there is any for you. Such examination should have been had as soon as you noticed the cough. If after examination and report by veterinary to the effect mentioned, you were to make tender back of the animal with

demand of refund, and be refused same, then, in the event of your suing the vendor, it is just possible that the Court might give you a favorable judgment, but we doubt it very much.

3. No.

FENCING BUSH-LOT.

I have a stock farm, and my neighbor owns a bush-lot which is not fenced in. Can I compel him to keep his half of the line fence up, so that my cattle will be kept in? AN ENQUIRER.

Ontario.

Ans.—No.

MATERIAL FOR PLANK-FRAME BARN.

As I intend to build a barn in the near future, about 36 x 72 feet, I have been very much interested in discussions through "The Farmer's Advocate" about plank-frame barns, and believe I would build one, but have two difficulties in the way. First, no one around seems to know how to build one. They think they could, but never built one, so could not find a carpenter that really knew how. In the second place, we would have nearly all elm, which, of course, is more or less shakey, which would make good squared timber, but would hardly do to saw in plank. Under these circumstances, which would you advise? If you advise plank-frame, how much material would it take for a barn on a basement 36 x 72 ft., 16-ft. posts, and built with an 18-ft. straw mow, another 18-ft. straw mow, a 12-ft. drive floor, and a 24-ft. mow above granary? SUBSCRIBER.

MATERIAL FOR PLANK-FRAME.

36 x 72 x 16 ft.

Material for one interior bent.

- 4 pieces 2 x 8-in. x 16-ft. side posts.
- 4 pieces 2 x 8-in. x 27-ft. 9-in. purlin posts.
- 2 pieces 2 x 8-in. x 27-ft. 6-in. roof supports.
- 2 pieces 2 x 6-in. x 10-ft. 6-in. sub. supports.
- 4 pieces 2 x 4-in. x 3-ft. struts.
- 2 pieces 2 x 8-in. x 4-ft. 10-in. main ties.
- 2 pieces 2 x 8-in. x 4-ft. 3-in. sub ties.
- 2 pieces 2 x 6-in. x 3-ft. 3-in. minor ties.
- 2 pieces 2 x 12-in. x 3-ft. 4-in. collar ties.
- 2 pieces 2 x 6-in. x 5-ft. 8-in. braces.
- 2 pieces 2 x 8-in. x 36-ft. cross sills.
- 2 pieces 2 x 8-in. x 2-ft. short sills.
- 2 pieces 2 x 6-in. x 17-ft. roof-support stiffeners.
- 2 pieces 2 x 6-in. x 20-ft. 10-in. purlin-post stiffeners.
- 4 bolts 11 ins. long, 1-in. diameter.
- 14 bolts 7 ins. long, 1-in. diameter.
- 24 lbs. 5-in. spikes.
- 6 lbs. 4-in. spikes.

Material for one end bent.

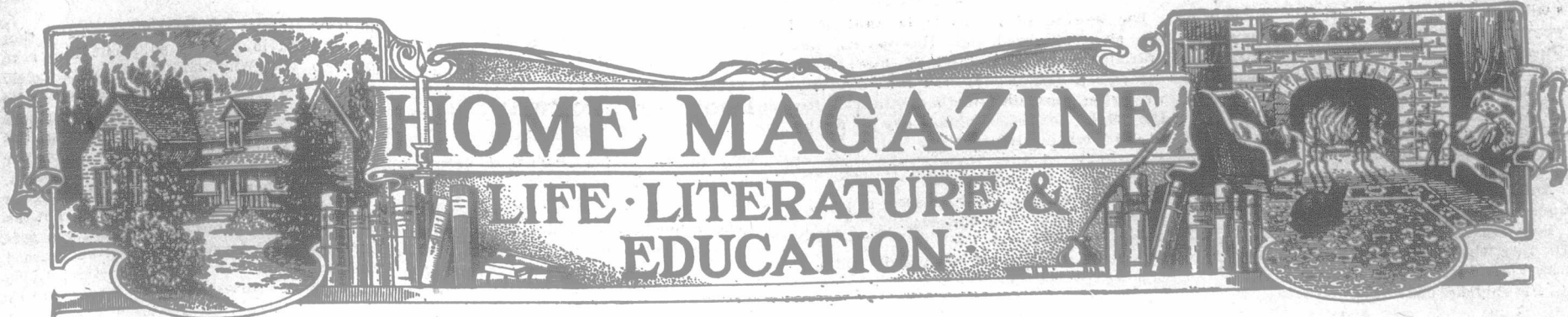
- 10 pieces 2 x 8-in. x 16-ft. posts.
- 4 pieces 2 x 8-in. x 27-ft. 9-in. purlin posts.
- 4 pieces 2 x 8-in. x 18-ft. cross sills.
- 4 pieces 2 x 8-in. x 18-ft. cross beams.
- 1 piece 2 x 10-in. x 24-ft. beam stiffener.
- 3 pieces 3 x 6-in. x 16-ft. post stiffeners.
- 2 pieces 2 x 6-in. x 12-ft. purlin braces.
- 2 pieces 2 x 8-in. x 18-ft. gable stiffeners.
- 14 pieces 2 x 6-in. x 16-ft. end girths.
- 2 pieces 2 x 6-in. x 18-ft. end braces.
- 4 pieces 2 x 6-in. x 17-ft. gable girths.
- 4 pieces 2 x 6-in. x 15-ft. gable girths.
- 4 pieces 2 x 6-in. x 13-ft. gable girths.
- 1 piece 2 x 6-in. x 20-ft. gable girths.
- 2 pieces 2 x 8-in. x 18-ft. end truss.
- 2 pieces 2 x 4-in. x 15-ft. post fillers.
- 8 bolts, 1-in. x 8-in.
- 30 lbs. 5-in. spikes.
- 10 lbs. 4-in. spikes.

To give each and every piece of timber in a plank-frame is unnecessary, so I now only give a list of one interior bent and one end one, from which the others can be calculated, and the side timbers are simply the length of the distance from centre to centre of posts, and are usually four feet apart.

The plates are made of two planks on top of the posts, and one down the outside.

The purlin is two planks on edge, as has been often shown in "The Farmer's Advocate," and must reach from bent to bent.

Use hemlock or spruce for the frame. The lower rafter rises 18 inches in a run of 12 inches, and the upper 8 inches in the same run. The span of each lower is one-fifth the width of the barn, and the upper the remaining three-fifths. A. A. G.



Death of an Illustrous Canadian.

Robert Barr, the novelist, died at his home in Surrey, England, on October 21st. Although he was born in Glasgow, Scotland, and had lived for several years in England, Mr. Barr was practically a Canadian. When he was but five years of age his parents came to this country, and settled first in Middlesex Co., Ont., removing later to Windsor. The novelist attended Normal School at Toronto, and subsequently became principal of a school in Windsor, but in 1876 gave up teaching to join the staff of the Detroit Free Press. In 1882 he went to England, where, with Jerome K. Jerome, he founded the successful "Idler" magazine, but devoted a great deal of his time to writing works of fiction. Among these were the well-known "In the Midst of Alarms," "The Victors," "The Strong Arm," "Strangleigh's Millions," "Cardillac," and "The Sword Maker." Mr. Barr had reached the seventy-second year of his age.

"In the Amazon Jungle."
(Concluded.)

Mr. Lange writes enthusiastically of the beauty of the scenery, both by night and by day, up the Itcoahy,—the endless forests of tropical luxuriance, the still water, the flashes of distant lightning illuminating all.

After going on thus for many days in the little river-steamer, crowded to suffocation with rubber-workers, the Javary rubber region was reached, and the first stop ashore, memorable for a dinner of roast tapir, was made. . . . On again, with a final disembarkation at Floresta, the largest rubber estate in this district, owned by Coronel da Silva. Mr. Lange has nothing but praise for the hospitality of these Brazilians, whose ever courteous salutation to the visitor is, "This house is at your disposal."

From the house of Coronel da Silva, Mr. Lange went out at various times to see the rubber-gatherers at their work of gashing the trees and collecting the milk in tins in a fashion somewhat similar to that in which maple sap is collected in this country. Afterwards the milk is coagulated by heat in the huts, into the crude balls of rubber which are to be shipped.

Here he got his first experience of the actual forest, which becomes almost a reality to us as we read his vivid descriptions of tree and foliage, concluding, "But there is little charm about it. . . . There is no invitation to repose, no stimulus to quiet enjoyment, for the myriad life of the Amazon's jungle forest never rests. There is always some sound or some movement which is bound to stir in one the instinct of self-preservation. You have to be constantly alive to the danger of disagreeable annoyance from the pests that abound, or of actual bodily harm from animals of the reptilian order. . . . The few sounds of birds and animals are, generally, of a pensive and mysterious character, and they intensify the feeling of solitude rather than impart to it a sense of life and cheerfulness. Sometimes in the midst of the noon-day stillness a sudden yell or scream will startle one, coming from some minor fruit-eating animal set upon by a carnivorous beast or serpent. Morning and evening the forest resounds with the fearful roar of the howling monkeys, and it is hard even for the stoutest heart to maintain its buoyancy of spirit. The sense of inhospitable wilderness, which the jungle inspires, is increased tenfold by this monstrous uproar. Often in the still

hours of night a sudden crash will be heard, as some great branch or a dead tree falls to the ground. There are, besides, many sounds which are impossible to account for, and which the natives are as much at a loss to explain as myself. Sometimes a strange sound is heard, like a clang of an iron bar against a hard, hollow tree; or a piercing cry rends the air. These are not repeated, and the succeeding stillness only tends to heighten the unpleasant impression which they produce on the mind."

We have quoted at length from Mr. Lange's description of the forest, because it is the one outstanding characteristic of the country, the one feature which presses upon the mind and burns itself into the memory, which figures in one's dreams of the Amazon ever after. It is the great fact in the lives which the rubber-workers must live.

Passing over Mr. Lange's accounts of "sport" with gun and rod, of creatures never seen elsewhere, of "sting-rays," and the huge 200-lb. pirarucu fish so largely used there for food, of malignant diseases which carried off 82 per cent. of the population of Floresta during the month of September, let us accompany him to the last chapter of his journey,— "The Fatal March Through the Forest."

One morning Coronel issued the order that certain of his men were to venture out far beyond the explored territory to locate new caoutchouc trees. The men knew what this meant, but quietly they prepared for the inevitable,—six of them. The chief of the party, Marques, again tried to dissuade Mr. Lange from going, but in vain.

For a time the traveling was along an old, but almost indistinguishable trail, marked by tambos or huts at which stops were made; then was reached

He was buried, and it was decided to divide the party, three attempting what might prove to be a shorter route, in order to bring help for the rest.

Staggering on, Mr. Lange, the Chief—Marques—and Jerome, attempted to follow the trail, and on the second day of the return, met a naked Indian savage, armed with a blow-gun, bow and arrows, and a pouch of the wonderful wourahli poison which, when put on the arrow tip, causes the almost instantaneous death of the animal struck, while leaving it still fit for meat.

The Indian departed, but Mr. Lange was to see more of him before many days had passed.

Soon afterwards, Marques was found with a look of mortal anguish on his face. Silently he pointed to his foot on which appeared the marks of the fangs of one of the most poisonous serpents of the region. That little mark meant certain death, and although every crude measure at hand was taken, there was nothing to be done but sit and wait for the brave man's death. He, too, was buried, and sick and starving, for provisions were almost done, the two remaining again forced on. "The jungle no longer seemed beautiful or wonderful to me," says Mr. Lange, "but horrible—a place of terror and death."

Jerome had complained for some time of numbness in hands and feet. Now the unmistakable signs of beri-beri appeared, and before long he, too, was laid away in a shallow grave.

"I know that at times I raved wildly as I staggered on," continues the writer, "for occasionally I came to myself with strange phrases on my lips. When these lucid moments brought coherent thought, it was the jungle, the endless, all-embracing fearful jungle, that overwhelmed my mind. No shipwrecked sailor, driven to madness by long tossing on a raft

their great communal house, 150 feet in diameter, with a single roof supported by innumerable poles, under which the entire population of the tribe, 150 souls in all, dwelt. In a corner of this great primitive structure, he was gradually nursed back to life, though with what misgivings upon his part may be understood when it transpires that before long he was forced to look on at a cannibal feast. He had, indeed, been befriended by one of the cannibal tribes of the Amazon, but he had no reason to fear for his personal safety, for the Mangeromas eat only their enemies.

Interesting indeed is the chapter of his life among these people, but he could take no pictures of them, for, on that terrible journey through the forest, the camera, with all other impediments, had been thrown away.

Finally, he was taken back to the Floresta headquarters, and eventually found his way again to Remate de Males, where, after another attack of fever, he was carried aboard the river steamer that bore him once more towards civilization and "God's country."

In this review, necessarily, no space can be given for quoting in full the many adventures with which Mr. Lange met. For these, our readers who may chance to be interested, must go directly to Mr. Lange's book, which we can confidently recommend as one of the most interesting and instructive among recent books of travel.

The Celebration of Hallowe'en.

[An address given by Mr. W. B. McEwan, President of the Dunedin Burns Club, New Zealand.—From the Otago Witness.]

It must be confessed that even in Scotland these old rites and sports are rapidly dying out, and it may not be out of place, therefore, to make some reference to their origin and manner of celebration. Hallowe'en, or All Hallow's Eve, is the night before All Saints' Day, the night when ghosts, witches, warlocks, and fairies, are most likely to wander abroad, the night of all nights in the year when supernatural influences prevail; and the season of a variety of superstitions and other customs. The observation of Hallowe'en dates from pagan times, when the Druids held their great autumn festival, and gave thanks to the sun god for the harvest. One of the chief characteristics of their celebrations was the lighting of bonfires to frighten away the witches who assemble on this night to do "their deeds without a name." Red appears to be a color peculiarly obnoxious to witches.

Rowan tree and red thread
To gar the witches dance their dead—

to make them dance till they fall down and expire.

In the Homeland, nuts and apples play an important part in the ceremonies of the evening. In the North of England, Hallowe'en is known as Nutcrack Night. In Cornwall, in the South, it is known as "Allan Day," when it would be deemed a great misfortune to go to bed without the time-honored apple hid beneath the pillow. In Scotland, it is celebrated by the burning of nuts and the ducking for apples. Thus indicating the predominance of these articles in making up the entertainments of the evening.

Various writers, both in prose and poetry, have attempted to describe the ceremonies of Hallowe'en, but nowhere do you find them so aptly set forth as in the poem by Robert Burns. In it you have all the principal charms and



A sewing-machine from New York in a hut built in a tree, in the heart of the rubber-region.—From Lange's "In the Amazon Jungle."

the virgin forest in which every step of the way had to be hewn out with an axe and machete. It was impossible to sleep much because of ants and mosquitoes; the heat of the day, notwithstanding the impenetrable gloom, was fearful; there were encounters with jaguars; the poisonous exhalations of the swamps began to tell upon first one and then another of the party, among them the author, who became delirious for a time with fever.

At last Brabo, the youngest, died, just at the point of the return journey.

at sea, ever conceived such hatred and horror of his surroundings as that which now came for the fresh, perpetual, monotonous green of the interminable forest."

Half-unconscious at last, the solitary survivor fell forward through an opening of the trees. He was discovered by a little dog, whose barking brought to the spot some Indians belonging to a tribe of Mangeromas, the one to which the young Indian with the blow-gun belonged. For some reason they chose to receive him kindly, and carried him to

spells of that night expressed in such a way as to be easily understood even by those who are unacquainted with the customs and traditions usually associated with the festival. He tells us that

Among the bonnie winding banks,
Where Doon rins wimplin' clear;
Where Bruce ance ruled the martial ranks,
An' shook his Carrick spear;
Some merry, friendly country-folks
Together did convense,
To burn their nits, an' pou their stocks,
An' haud their Hallowe'en
Fu' blythe that night.

In his notes the poet says "the first ceremony of Hallowe'en is pulling each a 'stock' or plant of kail (a kail runt). They must go out hand in hand, with eyes shut, and pull the first stock they meet with: its being big or little, straight or crooked, is prophetic of the size and shape of the grand object of all their spells—the husband or wife."

Then, first an' foremost thro' the kail,
Their "stocks" maun a' be sought ance;
They steek their een, an' grape an' wale
For muckle anes, an' straught anes.
Poor hav'rel Will fell aff the drift,
An' wandered thro' the "bow-kail,"
An' pout, for want o' better shift,
A runt, was like a sow-tail
Sae bow't that night.

Youths, maidens, and the children join in the fun:

The vera wee-things, toddlin' rin,
Wi' stocks out owre their shoulder.

In Wales there is a custom in which the youth of both sexes seek for an even-leaved sprig of ash, and the first of either sex that finds one calls out "Cyniver," and is answered by the first of the other that succeeds, and these two, if the omen fails not, are to be joined in wedlock. Nuts, as I have already said, play an important part in the evening's entertainment. The custom is thus described by the poet Gay:

Two hazel nuts I threw into the flame,
And to each nut I gave a sweetheart's name;
This with the loudest bounce me sore amaz'd,
That in a flame of brightest color blaz'd;
As blaz'd the nut, so may thy passion grow,
For 'twas thy nut that did so brightly glow!

But I must again quote from Burns' poem:

The auld guid-wife's weel-hoordet nits
Are round an' round divided,
An' mony lads' and lasses' fates
Are there that night decided;
Some kinde couthie side by side,
An' burn thegither trimly;
Some start awa wi' saucy pride,
An' jump out owre the chimlie
Fu' high that night.

Jean slips in twa, wi' tentie e'e;
Wha 'twas she wadna tell;
But this is Jock, and this is me,
She says in to herself;
He bleezed owre her, an' she owre him,
As they wad never mair part;
Till fuff! he started up the lum,
And Jean had e'en a sair heart
To see't that night.

After the nuts have been burned, and the lads and lasses have found their faithful lovers, other spells are tried. One of these is the celebrated spell of eating an apple before a looking-glass with the view to discovering the inquirer's future husband. You will remember Burns introduced this spell into his poem. A little maiden wishing to try it is thus represented:

Wee Jenny to her graunie says,
Will ye go wi' me graunie?
I'll eat the apple at the glass,
I gat frae unce Johnnie.

But the request rouses the indignation of the old lady.

Ye little scelpie-limmer's face!
I daur ye try sic sportin',
As seek the foul thief ony place,
For him to spae your fortune;
Nae doubt but ye may get a sight!
Great cause ye hae to fear it;
For mony a ane has gotten a fright,
An' liv'd an' died deleeret
On sic a night.

The sowing of hempseed is another of the rites observed on Hallowe'en, and grannie goes on to tell of how, when she was a lassie, one, Rab McGraen, was wrong in his mind for many days after the fright he got. This story is doubted by Fechtin Jamie Fleck, who

Swoor by his conscience,
That he could saw hempseed a peck,
For it was a' but nonsense.

He gets a handful of hempseed, and out he goes to try his luck:

Hempseed I saw thee,
An' her that is to be my lass
Come after me, an' draw thee.

But he is a coward at heart:

He whistl'd up "Lord Lennox" March,
To keep his courage cheery;
Altho' his hair began to arch,
He was sae fley'd an' eerie;
Till presently he hears a squeak,
An' then a grane an' gruntle;
He by his shoulder gae a keek,
An' tumbled wi' a wintle
Out-owre that night.

He roar'd a horrid murder-shout,
In dreadfu' desperation!
An' young an' auld come rinnin' out,
An' hear the sad narration;
He swoor 'twas hilchin Jean McCraw,
Or crouchie Merran Humphie—
Till stop! she trotted thro' them a';
An' wha was it but grumphie
Asteer that night?

It is somewhat remarkable that the sport of ducking for the apples is not mentioned by Burns. Perhaps the ceremonies have changed, but there is no doubt one of the most laughable is the "dookin' for apples," providing as it does, great fun for the youngsters.

There is one much practiced on Hallowe'en which provides good fun—namely, "The Three Dishes or Luggies." Two of them are respectively filled with clean and foul water, and one is empty. The luggies are ranged on the hearth, when the parties, blindfolded, advance in succession, and dip their fingers into one. If in the clean water, they will marry a maid; if into the foul, a widow; and if into the empty dish, they are destined to be either a bachelor or an old maid.

In order, on the clean hearth-stane,
The "luggies" three are ranged;
An' ev'ry time great care is ta'en
To see them duly changed;
Auld Uncle John, wha wedlock's joys
Sin "Mar's-year" did desire,
Because he gat the toom dish thrice,
He heav'd them on the fire
In wrath that night.

The old chap lost his temper at the want of success in what he most desired.

Another rite is to wet a shirt-sleeve, hang it up to dry before the fire, and lie in bed watching it till midnight, when the apparition of the future partner for life will come in and turn the sleeve. In "Tam Glen," one of the songs of Scotland's national poet, you have these lines:

The last Hallowe'en I was waukin',
My droukit sark-sleeve, as ye ken;
His likeness cam' up the house staukin',
And the very gray breeks o' Tam Glen!

All these rites seek to produce the same effect—the appearance of the future husband or wife of the experimenter. And, in conclusion, ladies and gentlemen, I cannot do better than to advise those who want a fuller description of the customs of Hallowe'en to read for themselves the poem by Robert Burns, from which I have so largely quoted.

A lady living in a fashionable quarter has a bit of statuary bearing the inscription, "Kismet." The housemaid was dusting the room the other day when the mistress appeared. "Shure, mum, what's the manin' of the writin' on the bottom of this?" asked the maid, referring to the inscription on the statue. "Kismet" means "fate," replied the mistress. Bridget was limping painfully when out with her sweetheart not long afterward, and he asked, "What's the matter, Bridget?" "Faith," was the answer, "I have the most terrible corns on my Kismet!"

Hope's Quiet Hour.

Looking Backward and Forward.

The things which happened unto me have fallen out rather unto the furtherance of the gospel.—Phil. 1: 12.

Last Sunday I attended morning service in a church which I used to attend as a school-girl. Sitting in the place which was so familiar and homelike, and yet so strange, I was considering how wonderfully God had led me, as He led the Israelites in the wilderness. When the preacher gave out his text, I was quite startled, for it was the one you see above. I had been considering how the things that happened unto me had fallen out for my own good, and the text revealed how poor and selfish my feelings were. My chief interest was evidently in my own furtherance, my own advance in holiness; but St. Paul's pleasure in looking backward came from the fact that the things which happened to him had helped forward the kingdom of God in the world. This letter to the Philippians was written when he was a prisoner at Rome. He speaks of his bonds and of the possibility of execution. Does he grumble and lament over these things? Far from it, they only add to his joy. His imprisonment opened the way for the gospel to be preached even in the court of the emperor, his bonds gave him the opportunity of preaching Christ to the various soldiers who were chained to him, and his bold example inspired many weaker Christians "to speak the word without fear." If death should end his imprisonment, he would "be with Christ; which is far better." If God caused him still to abide in the flesh, it would be possible for him to help his brethren as he wished. Whatever happened, his gladness went on like a river, serene and untroubled. His cheery language was: "Rejoice in the Lord alway: and again I say Rejoice." He was delighted with the loving messages and gifts sent by his friends in Philippi; but his delight was not because he desired a gift, but he wanted them to have the privilege of giving. He needed nothing. Though a poor prisoner, he was rich and free that he could say contentedly: "I have all, and abound." In this short letter to the Philippian church, he uses the words "joy" and "rejoice" over and over again—about fifteen times in all. Evidently the Apostle cared so much more about "the furtherance of the gospel" than about his own personal comfort, that if his sufferings helped forward the cause of Christ he was more than satisfied.

It is not likely that any of us are so in love with a high and glorious purpose that our own pain is a matter of little consequence to us; but we can all make steady progress in that direction, if we try. We are nearing the end of another year, a time when we usually look back over the past and forward in anticipation of the future. What about the things that have happened to us? Have they helped or hindered the cause of Christ and our own growth in holiness? If we have the life of God within us, then anything that happens is clear gain. If we care only about our own comfort, then trouble will make us bitter or depressed, and pleasure will make us selfish and covetous.

But some of the things that happen are black and evil. Looking back on the sins of the past, it does not seem possible to turn them into means of furthering the gospel, either in our lives or in the world about us, does it? And yet—strange as it may seem—the blackest sins have often thrown the door widest open for the entrance of the Saviour. The sinner is filled with horror and loathing when he sees his own wickedness, and feels it an intolerable burden. Only One Saviour has ever offered to cleanse from the guilt of sin. We all need Him, but sometimes we have to fall into some sin black enough to open our own eyes to our need of cleansing, before we really plead for forgiveness for the past and strength for the future.

Once the Teacher, Who was the center of interest in Palestine, was invited to the house of a Pharisee. The rich and

influential host evidently considered that the invitation was sufficient honor to pay to one Who had until very lately worked in a carpenter's shop. He omitted entirely the usual courteous forms of welcome; the kiss, the anointing of the head with oil, the water for the hot and dusty feet. But a woman, who knew herself to be a sinner, gave these things in fullest measure; not as an empty form, but as the natural acts of love and repentance. She washed His feet with her tears—how terribly she must have sorrowed over her sins to have wept like that!—kissed the feet of the Saviour she had found, and anointed them with the precious ointment, which she delighted to lavish on Him. She was sent away in peace, with sins forgiven. She stood perfectly clear in God's sight, able to start fair once more. Looking backward, she saw her sins—sins forgiven. The blackness of the evil she knew herself to be capable of, would make her always humble and watchful, would keep her prayerfully looking up to God for the help which could alone keep her from falling. The things which had happened to her were terrible indeed, but they had turned out unto the furtherance of the gospel. So, even our past sins may help us to seek and find the Saviour. The "gospel," or "good news," is God's message of salvation from sin itself, not only from the punishment of sin. Indeed, the punishment is one of the proofs that our Father is trying to check our careless or wilful sins. It is one of the things for which we should try to be very thankful.

Then there are the temptations which have happened to us. We pray: "Lead us not into temptation"; and yet St. James tells us to count it all joy when we fall into divers temptations, because the testing of faith makes it grow stronger. When a woman is trying to bring up a much-loved son, she usually does her best to shield him from temptation. If she could succeed entirely, he would almost certainly grow up weak and unmanly. Having never fought against evil, his goodness would be second-hand, and negative in character. It is good for us to find out our weakness by being forced to battle against temptation. If we fall under it, we may learn to lean for the future on God's strength. I am not advising the reckless thrusting of a young man into the midst of temptation; but when he is a man he should be trusted as a man, not watched and guided and supervised as if he were a little child.

Then there are the painful things which have happened to us, the sorrows and sufferings which are not the result of our own fault. There is the greatest difficulty in some minds in believing that God is a loving Father, when there is so much undeserved suffering always in the world. I think we must find the heart of our Father first, and then we shall learn to trust Him when He hurts us most deeply. I know a loving father who straps the tender foot of his little son in a hard and painful contrivance for straightening its deformity. Just because the father loves his child, he will not give way to his tearful desire to be let alone. We are only children in knowledge yet, and cannot expect to always understand our Father's dealings with us—but we can see already that good has come from some of the pain, and we can wait trustfully for the rest. It was the sad idea of a heathen that Death was most terrible because it was "the end." We know it is not the end, and when death comes we still look forward. Not one pain, trustfully accepted, can possibly fail to work for us "a far more exceeding and eternal weight of glory." We can face the winter cheerfully, knowing that spring and summer will certainly come in good time. The leafless trees and bare earth need not depress us—they will soon be beautiful and young again. Old age simply brings us nearer to an eternal spring and summer. Why need we fear it or the renewing sleep of death? We shall awake refreshed and vigorous. The Israelites could look backward on their wilderness journey and see how wonderfully God had led them and had provided for all their real needs. Then they could look forward in hope and trust, feeling quite sure that He would guide them in the right way, would give them food and drink

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Dear Pu taken "Th three year paper he I live on There is and we go have three and I and sisters go dam now, four hives 27th of Au Father se I am ten 5th class a Closter,

Dear Pu first time taken "The years, and liked them near school like to wa the water. I is getting Amberstb

even in barren places, and would help them in their fight against enemies. It would have been very bad for them if they had never had any difficulties to meet and overcome; and it would be ruinous to us if life were made too easy. We also can look back and see that God has helped us to conquer difficulties, has led us wisely and tenderly, and has given us everyday happiness even when we were forced to bear a heavy load of sorrow. What He has done in the past we may expect for the future; so we can look back thankfully, and look forward hopefully and trustfully. If we are honestly placing ourselves and all we have at God's disposal, He can use us ever more and more for "the furtherance of the gospel," whether we work as a missionary or as a scrub-woman.

Has the sun gone down in your life, and darkness come apparently to stay?

"Sad soul, take comfort, nor forget
That sunrise never failed us yet."

DORA FARNCOMB.

Star-Led to the Heights.

A Christmas story, by Dora Farncomb (author of "Hope's Quiet Hour" and "The Vision of His Face"). Price, 35 cents, postpaid, or three copies for a dollar. The William Weld Co., London, Canada.

The Beaver Circle.

OUR JUNIOR BEAVERS.

[For all pupils from the First Book to Junior Third, inclusive.]

October's Party.

October gave a party;
The leaves by hundreds came—
The Ashes, Oaks and Maples,
And those of every name.

The sunshine spread a carpet,
And everything was grand,
Miss Weather led the dancing,
Professor Wind the band.

The Chestnuts came in yellow,
The Oaks in crimson dressed;
The lovely Misses Maple
In scarlet looked their best.

And balanced all their partners,
And gaily fluttered by;
The sight was like a rainbow
New fallen from the sky.

Then, in rustic hollows,
At "hide-and-seek" they played,
The party closed at sundown,
And everybody stayed.

Professor Wind played louder;
They flew along the ground;
And then the party ended
In jolly "hands around."
—Our Dumb Animals.

Our Junior Beavers' Letter Box.

Dear Puck and Beavers,—Father has taken "The Farmer's Advocate" two or three years, and thinks it the best farm paper he gets.

I live on a farm of about thirty acres. There is a brook running through it, and we go fishing and catch trout. I have three sisters and three brothers, and I and one other brother, and two sisters go to school. We are building a dam now. We keep bees and we have four hives, and one swarmed on the 27th of August.

Father said I could be bee man. I am ten years old, and passed in the 5th class at school.

HUGH McBAIN.
Closter, N. J.

Dear Puck and Beavers,—This is the first time I have written. We have taken "The Farmer's Advocate" for two years, and I have read the letters and liked them very much. I live on a farm near school, beside the Detroit river. I like to watch the boats and paddle in the water. I think it is fun to go to school. I guess I will close as my letter is getting long.

HAROLD SHEPLEY.
Amherstburg, Ont. (Aged 9, Sr. II.)

Dear Puck,—I am staying with Mr. Jones, a friend of mine who takes "The Farmer's Advocate." I enjoy reading the Beaver Circle very much, and thought I would like to join and tell you about the farm things. We have four horses and a colt called "Patrick." On Sunday the colt kicked our dog, Carlo, in the eye, and he has not been well since. We have five cows, lots of chickens, ducks and turkeys. We have

we were having dinner and after dinner I let it fly away again, and the next day when I was going out to the field I found it on the hay-rack and I caught it.

I have a little sister Janet and a brother Gordon. Our teacher's name is Miss Beclon, and we like her very much. I tried for the second class but I failed because I had the scarlet fever and was out of school two months and a half. I went up to Grandma's and over to Uncle

young robins would not hatch out. I think I will close for this time as it is bed time.

LORNE SNYDER.
Waterloo, Ont.

You are a kind boy, Lorne, when you refused to help to rob the nest. I hope most of our Beavers are as thoughtful.

Dear Puck and Beavers,—Last spring a cat came to our place. She had three kittens, one black one, and two grey ones. She had her nest in the hay mow. When the kittens were born, we used to go and pet them, but soon their mother got angry. She moved her nest again under the binder. We did not know where the kittens were until they were big. One day my father found them. He showed them to my brother and one of my sisters, my sister showed me them too. They were pretty large then. I was away then for three days. When I came home two of them were dead. I did not know for a few days after, then my mother told me they died when I was gone. I felt very sorry for the kittens. We feed the old cat and kitten every morning and night when we milk the cows. Mother said she saw the cats with a big rat this morning. My letter is getting long so I must close, wishing Puck and the Beavers every success.

TERESA BROHMAN.
Ponsonby, Ont. (Age 9, Jr. III.)

Dear Puck,—I have four pets, a dog, a colt and two cats. One of the cats is grey and white. We call her Kitty. She was four years old last spring. She is a good cat to catch mice and rats. One day I got some very small fish. Next morning I gave them to her. She ran off with them to her kitten. They both love fish. She has a few tricks to play on birds and mice. One day I was going for the cows and she followed me.

CORA SKELTON.
Blyth, Ont. (Age 9, Sr. II.)

Don't let your cat catch the birds, Cora, if you can help it.

Dear Puck and Beavers,—We take "The Farmer's Advocate," and I like to read the letters. As this is my first attempt I will not make it long. I live a mile and a half from school, and ten miles from London. I have a little colt named Bobbie, and a little black-and-white cat named Tidy. I have to feed the hens in the morning before I go to school, and gather the eggs and feed the hens when I come home.

I go to school nearly every day, and like it fine. Our teacher's name is Miss Ward.

Well Puck, I will close.
MACKEY GRAY.
Ferguson, Ont. (Age 9, Sr. III.)

Riddles and Circle Notes.

Around the house and around the house and sleeps in a corner at night.—Ans.—A broom.

What has a million eyes and can't see a bit?—Screen door.
Sent by Elgin Webb.

Shipka, Ont.

Ladies tell me, if you can,
Who is that highly-favored man?
Although he marries many a wife
He lives a bachelor all his life.

Ans.—A Clergyman.
Sent by Mabel Gillie, Pakenham, Ont.

Dora Jensen (Age 10), Salmonhurst, Victoria Co., New Brunswick wishes some of the little Beavers to write to her.

Out in the Fields with God.

The little cares that fretted me,
I lost them yesterday
Among the fields above the sea,
Among the winds at play;
Among the lowing of the herds,
The rustling of the trees,
Among the singing of the birds,
The humming of the bees.

The foolish fears of what might happen—
I cast them all away
Among the clover-scented grass,
Among the new-mown hay;
Among the husking of the corn,
Where drowsy poppies nod,
Where ill thoughts die and good are born—

Out in the fields with God.
—Elizabeth Barret Browning.



Oo—ooh!

a nice lot of canaries, four young ones and more hatching. Good-bye.
NORAH MASKELL.
Jordan, Ont. (Aged 9, Jr. III.)

Jack's for my summer holidays. I will close as my letter is getting rather long.
RUTH CAMPBELL.
Duncrief, Ont. (Age 8, Sr. Pt. II.)

Dear Puck and Beavers,—We always enjoy reading the letters of the Beaver Circle very much, so I thought I would write to you. I have a pet dog, and a pet hen, and a pet swallow. The dog's name is Sport, and the hen's name is Rebecca, and the swallow's name is

Dear Puck and Beavers,—I thought I would like to join your circle. My father has taken "The Farmer's Advocate" for a couple of years, and I like reading the letters in it. For pets, I have two cats, one black and one very much like a tiger, and I have a cow for



"This Little Pig Went to Market."
From "The Australasian."

Peter. Rebecca is three years old, and she was sitting and hatched out some chickens, and she is laying now behind the woodshed door. Sport is black with short hair and long ears. I got the swallow when it wasn't able to fly very far, and I took it up to the house and kept it in for a while, and when I let it fly away and I caught it again before dinner, and I left it on the chair while

a pet too. I go to school every day I can. I go one and a half miles to school. In winter I don't go sometimes when the roads are blocked.

One evening as one of the other school boys and I were walking through the bush the other boy found a robin's nest. He wanted to take the eggs away. I said if he took the eggs away the old one would not go to the nest, and the

The Mending Basket

Another Experience of Farm Life.

I have been very much interested in recent discussions.

When I awoke a few mornings ago, it was to the realization of a most delightful October morning, and the promise of a still more delightful day.

I can always work better on a nice day, so my thoughts naturally ran along something like this: "I will do that pickling and preserving to-day; maybe I will can some tomatoes, and made some more Chili sauce too, then, if I have time, I will finish making that skirt." Oh, yes, I did a lot of work, (in my mind), that morning.

But at breakfast time, the man of the house remarked, "Guess we'll start digging potatoes to-day. Suppose you can help us?"

Now I really don't mind picking up potatoes,—sometimes. But, how was my work in the house to be done? However, I hastily decided that it would have to wait. What use talking pickling and canning to a man, when he has decided to dig potatoes?

Coming in after spending the day in the potato field, and doing the milking, and the rest of the evening work is bad enough; but to discover that those plums just have to be canned, when every bone in your body is crying out a protest against every movement, is like adding "insult to injury." But, that was just what I had to do. Is it any wonder, when the man poked his head in the kitchen, to ask, "Why don't you leave that stuff alone and go to bed?" that the answer was so sharp that he vanished in the direction of his own bedroom?

Having finished the business, I also went to bed, to awake refreshed in mind, if rather sore in body, and spend another half day in the potato field.

Like "Sherard McLeay" when that was finished, I felt that the life of a farmer's wife was certainly not to be desired. Fortunately, I am not a farmer's wife, so that did no harm to any body. And right here let me say, that I am a farmer's daughter, keeping house for my farmer brother, so I know what farm life is.

But let me add, that this work is something unusual for me, but the hired man left, (they sometimes do) so what was a person to do? Pitch in, and help of course.

I think very few farmer's women object to do this, but why can't the men appreciate the fact that we do help willingly, even when by doing so, we know we will have to do two days work in one, to catch up with our own work? Even the best of men seem to have an idea, that a woman's work is a "snap."

I do not hesitate to say, that the average farmer's wife works harder, according to her strength, than does her husband.

True, a woman can make her work hard, so can a man. I feel no sympathy, for the woman who is continually picking up after the men and children, and complaining of their untidiness.

If a man is untidy, some woman has made him so.

I was one of the younger members, of a large family, the oldest being all girls. We little girls were always taught to hang up our own clothes, but our mother imagined that boys should be waited upon. Being unable to do it herself, she expected the older girls to do it. They, however, had a different opinion, and took the law into their own hands. To-day I am reaping the fruits of their labor; the men's shoes and clothes are always put in their proper places.

Not all farmers' wives live such a strenuous life, as the one depicted by "Sherard McLeay," if they did there soon wouldn't be any.

Why should it be left to women to feed the calves, pigs and fowl? To do

the farmers of this vicinity justice I must say they certainly do not think it woman's work to feed pigs and calves. True, the women usually look after the fowl, in the summer time at least, but most of us take a particular pride in doing so, because, doesn't the farmer's wife usually get all she can make from that source? But this is getting down to the financial side of the business, and as I said before, I am not a farmer's wife, and so will not try to solve that problem.

But, if this will lead some man to realize that women's work is just as important as his is, thereby making him more thoughtful of some woman, and more willing to lend a helping hand, I will feel that I did not take up my pen in vain.

Perth Co., Ont. ADELINE.

Marry the Right Man.

I have read with rather disgusted amusement "Regarding a Woman's Work" by Sherard McLeay. Such conditions as he describes may exist in the backwoods among the most ignorant and old-fashioned people, but, thank goodness, the days of such living are not commonly known by the majority of people in Ontario to-day.

In the first place, if there is any trouble regarding over-work, or neglect to a farmer's wife by her husband, you can trace it to mistaken choice of a husband, just the same as in any other walk of life. If a girl is blind enough to marry a young man who can drink a little, smoke some, drive a fast horse, forget his mother, slight his sister, and show no signs of business ability or earning power, she can expect no comforts. Do not marry a man to reform him, or expect him to treat you better than he has treated the members of his own family, when a boy or young man.

If you make a suitable choice in a husband there can be more comforts and pleasure on a farm to-day, than in any other position in life. City conveniences, sunshine, flowers, grass, trees and fresh air, are blessings which can be had by all intelligent farmers to-day. In any well settled part there is no reason why country people cannot be on equal footing with their city cousins. The pig-feeding days for women on Canadian farms to-day are not thought of, or known, in any ordinary or half up-to-date place.

A few conveniences which are very common might be mentioned. The houses are being built, or renovated, to save work and steps to the fullest degree. Many houses have in them a complete lighting system, dumb-waiters, bath-room, and water system equal to those in city residences. Any farmhouse with water in well, or cistern, at a reasonable distance from the house, can have a force pump to send water into a tank upstairs, from which pipes can convey the water to any part of the house, to be had for the turning of a tap. A few feet of hose from the taps to the wash-machine, or boiler on the stove, and from machine to sewer pipe, add much to the comfort of wash-day. Where water is near the house, and there is a natural drop to carry off waste water, the whole system can be put in for less than \$75.00.

With telephones in nearly every country home, regular bi-weekly calls from the baker, and grocery-man, and being able to dispose of all butter and eggs at the door, the house-wife has not so many troubles as the city friend who has to go out for these things, and cannot then depend on quality of her purchases.

With regard to meals, the city woman has the greater difficulty, as the different members of the family follow different lines of work and various hours, so the breakfast and dinner hours are lengthened to a space of time that would strike horror to the farmer's wife, who can depend on gathering the family together at one time and putting things in the dining-room to rights with dispatch. Experience has shown me that the litter of boots, papers, matches, etc., are more likely to be seen in city than country homes. Countrymen smoke out of doors and leave their boots in the outer rooms, and are more careful to fold their papers than men in the city.

All honor to the useful, hopeful life of the cheery farmer's wife.
Durham Co., Ont. S. E. W.

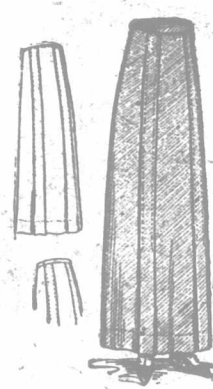
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Order by number, giving age or measurement as required, and allowing at least ten days to receive pattern. Price ten cents PER NUMBER. If two numbers appear for the one suit, one for coat, the other for skirt, twenty cents must be sent. Address Fashion Department, "The Farmer's Advocate and Home Magazine," London, Ont.

All Hallowe'en.

By Lalia Mitchell.

All Hallowe'en, and dark and green
The nodding pine trees sigh,
While pool and spring make bold to fling
Back star for star in mirroring
The over-sea of sky.
A vagrant breeze, through bending trees
Tells mystic tales and trite,
Since all must know, for weal or woe,
The witches fly to-night.

All Hallowe'en, and safe between
Gnarled boughs, a maiden trips,
Love lights her heart, but fears upstart
And dread of weird cabala art
Has hushed her laughing lips.
Shall Fate be kind, or will she find
But added cause for fright,
As mystic lore, she murmurs o'er
When witches fly to-night.

All Hallowe'en, and love were mean
To flout a maiden's prayer,
She bends to look in babbling brook
That dances past their trysting nook,
And lo, his face is there.
And fair shall be, o'er mead and lea
Their homeward path of light,
'Neath stars that know, for weal not woe,
The witches fly to-night.

Ideal Canada.

By A. D. Watson, M. D.

Among these cloud-reefed hills
We'll build a state
Fairer than prophet's dream,
Firmer than fate.

Where man shall be as steel,
In brawn and nerve,
And free, only because
He loves to serve.

And none shall gain by wrong,
Or spoil or fraud,
Where poverty's unknown
And greed outlawed.

Each shall respect the rights
That others hold
When all are true as truth
And pure as gold.

Our Canada shall then
Securely stand,
The home of our desire,
Our Holy Land.

Her mountains tipped with snow,
Her summer days,
Her forests, field and lakes,
Her pleasant bays.

And all her fruitful lands
And waters bright
Shall be a praise and joy—
The world's delight.

May this delightful dream
With hope inspire
Till each shall see at last
His soul's desire.

—Onward.

The Common Things.

The things of every day are all so sweet,
The morning meadows wet with dew;
The dance of daisies in the moon, the blue
Of far-off hills were twilight shadows lie,
The night with all its tender mystery of sound
And silence, and God's starry sky!
O! life—the whole life—is far too fleet,
The things of every day are all so sweet.

The common things of life are all so dear,
The waking in the warm half-gloom
To find again the old familiar room,
The scents and sights and sounds that never tire,
The homely work, the plans, the lilt of baby's laugh,
The crackle of the open fire;
The waiting, then the footsteps coming near,
The opening door, the hand clasp and the kiss—
Is Heaven not, after all, the New and Here,
The common things of life are all so dear.

—Anonymous.

"He Was So Kind."

Half-hidden by sea-pinks and tangled grasses
Stands a small head-stone worn by sun and wind.
Only four little words are carved upon it—
"He was so kind."

He who lies dreaming there—had he high station?
Had fame or wealth their gifts to him assigned?
I know not; yet his deeds pass on like music,
For he was kind!

Those little words—they whisper life's true values
Of that which is worth while to leave behind;
For who could wish to know more lovely tribute—
"He was so kind."
ALICE JEAN CLEATOR,
In "Our Dumb Animals."

If you do not enjoy your life, your living is wrong.

"Winter Suits Like New with Diamond Dyes"

I think I ought to tell you for the benefit of others about my success with Diamond Dyes. Before I learned the magic of Diamond Dyes I used to scrimp and worry every spring and fall about how to get new, fresh clothes for my daughters and myself.



I guess the two snapshots I enclose will show you that I don't worry much now. These are two winter suits I made over from a light tan serge suit and a brown broadcloth dress and coat. I got two of the latest—suit patterns, ripped up the old suit and dress with coat carefully, and they are just like new.

I also dyed some old ostrich plumes and ribbons, and we made three hats with them.

Please send me a copy of the new Diamond Dye Annual.

Mrs. H. G. Burgess.
Made over from a brown broadcloth, dyed black.

Diamond Dyes

There are two classes of Diamond Dyes—one for wool or silk, the other for Cotton, Linen, or Mixed Goods. Diamond Dyes for Wool or Silk now come in Blue envelopes. And, as heretofore, those for Cotton, Linen, or Mixed Goods are in White envelopes.

Here's the Truth About Dyes for Home Use.

Our experience of over 30 years has proven that no one dye will successfully color every fabric. There are two classes of fabrics—animal fibre fabrics and vegetable fibre fabrics: Wool and Silk are animal fibre fabrics. Cotton and Linen are vegetable fibre fabrics. "Union" or "Mixed" goods are 60% to 80% Cotton—so must be treated as vegetable fibre fabrics. Vegetable fibres require one class of dye, and animal fibres another and radically different class of dye. As proof—we call attention to the fact that manufacturers of woollen goods use one class of dye, while manufacturers of cotton goods use an entirely different class of dye.



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Made over from a tan serge, dyed navy blue.

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THE WELLS & RICHARDSON CO., LIMITED
200 MOUNTAIN ST., MONTREAL, QUEBEC

The Ingle Nook.

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

Dear Friends of the Ingle Nook,—A few weeks ago there appeared in this column a quotation from an address given by Dr. W. A. Evans before the Canadian Public Health Association in Toronto, over which you were asked to think a bit. "People used to think," said Dr. Evans, "that deaths invariably resulted from a special intervention of God, and that man was helpless to prevent them. Now," he continued, "they know that someone had sinned, either an individual, or a community, or a nation."

I wonder if you have been thinking about this since, and if it has dawned upon you, if you did not realize it before, that among the "individuals" who have been great sinners in this respect, have been, and are still, mothers, yes—mothers, tens upon tens of thousands of them.

Now, there is not a mother in this country who does not wish to keep her family in good health,—that goes without saying. The trouble is that so many of them are just densely ignorant in regard to the ordinary laws of health. . . . They do not think they are ignorant. Oh, no! They imagine they are doing the very best possible; and that makes the whole question so very much the worse, for there is no one in the world so hard to deal with as the individual who does not realize his, in this case her, limitations, the one who feels that she already knows all that is necessary, and makes no attempt to learn more. When it comes to questions of health, such women are positively dangerous, for, to a great extent, they hold the health of the nation in their hands.

The woman of this stamp never looks for causes. She just dangles along, managing her household affairs as perhaps her mother, who knew no more, did before her. Unhygienic conditions exist, but she does not know it. Then, presently someone falls ill; she flies for the doctor, gives medicine, spends anxious nights in sick-nursing, and rests satisfied that from start to finish she has done all for the best. As a noted physician has said, "The world is filled with women who blame Providence for their own hygienic folly, who rely upon drugs to alleviate the symptoms of disorganized health, when the only common-sense thing to do is to find out the cause of ill-health and deal with that."

Such women have good reason to confess each Sabbath morning and evening. "We have left undone the things which we ought to have done." Still more, they have urgent need to apply to themselves Luther's definition of repentance, "Do so no more," and to start out determined to find out all that is to be learned in regard to the preservation of health, and still better, to practice it.

TO A CERTAIN EXTENT, EVERY MOTHER OF A FAMILY SHOULD BE A TRAINED NURSE. She may not, it is true, be able to take a course in an institution, but books on hygiene and home-nursing are cheap, the magazines overflow with articles upon these subjects, and there are doctors everywhere who may be consulted on any question that may come up. The true mother will apply herself to learn these things; the false one will turn over the page whose head-line runs, "Prevention of Disease," and snuggle herself down in an arm-chair to read the love-story at the back. Reader, do you do this? . . . Read the love-story if you will, but, I beg of you, master the other first. To learn how to set up conditions that will aid greatly in preventing sickness in your house, is no very deep or laborious task; in the words of the physician above quoted, "The knowledge can be simply and easily acquired by anyone who cultivates common sense at the same time."

The first thing the true mother should realize is that, in order to be happy and efficient, her children must have good

health in every respect. They will not develop strong, handsome bodies, they will not get along as fast at school, they will not make as efficient men and women (unless endowed with exceptional will-power) if this is denied them. They must have good health all the way along, just as young pigs and calves must have good health if they are to make strong, vigorous animals.

The second thing that the true mother must realize is that, almost entirely, this question of the health of the children lies in her hands. If she does not understand just how to promote it, she must find out. She can't trust to Providence, for Providence has given her brains, and expects her to use them. If she doesn't use them, she must expect to put up with the consequences.

Now, to be specific, there are a few laws of health that cannot be broken with safety.

In the first place, every human being needs a certain amount of bodily exercise, and a good deal of it. Every part of the body should be exercised if possible, hence children should be encouraged to work and to play, and made to understand that this regular exercise must be kept up all through life whatever the occupation fixed upon. Don't let the boy or girl sit in school all day, then pore over school-books all night. If you do, a narrow chest and a weak body will be the result.

(2) It is necessary to understand that over-work, with undue fatigue, is bad for the health. Don't drive a child at work until he is "dog-tired." If you do, he will hate the work itself, and his body will suffer with his mind. Remember that children tire rather easily. How common it is to hear grown-folk say to a child, "I never was tired at your age." It is not true. The one who says it has forgotten. . . . If, for any reason, the child comes in tired from either work or play, and lies down to rest, cover him with a shawl. Cold is very easily caught when the body is in a state of fatigue, and cold may mean a host of evils.

(3) Remember that, while over-feeding is to be guarded against, under-feeding is to be equally guarded against. If the child eats too much, too fast, too often, or of too rich food, he will likely become a victim of dyspepsia, indigestion, headache, liver trouble, or sleeplessness, or a combination of these. If he eats too little, or lives upon food that does not contain enough nutriment (protein and carbohydrates), he may fall a prey to anemia, or tuberculosis. Make him eat slowly, and at regular intervals; above all, make him chew his food thoroughly, so that every particle that enters the stomach may be saturated with the saliva, a digestive juice. Do not give him very much rich pastry, but see to it that he has a well-balanced ration, consisting chiefly of porridge, milk, bread, vegetables, eggs, a little cheese, fruit, and meat once a day (when old enough). Corn-meal cakes, oat cakes, and Graham-flour cakes, are all good and wholesome, much better than pies and fruit-cake, for either children or grown-ups.

(4) Insist on fresh air, winter and summer. Flood the house with it, and with sunshine. Encourage the children to play outside as much as possible, and clothe them so warmly that they will want to do so. Above all, keep their feet and ankles warm by means of good, warm stockings, leggings, and rubbers to keep out the wet, for cold, wet feet, mean, as a rule, colds, with all their danger. There is really no necessity for any child to be without leggings during the winter, since splendid ones, buttoned up the side, may be made of old coats, old trousers, etc. . . . And don't, don't, don't bottle up the house in the fall, thinking thus to keep it "warm." People simply must have pure air to keep well. It is as necessary as food. When the doors and windows are kept shut, the air becomes, in a very short time, positively dirty, just reeking with carbon dioxide, especially down about the floor where the little ones play, and carbon dioxide—the gas breathed forth from the lungs—is, you must know, an actual poison. So open doors and windows several times a day, and let all this blow out, to be

GOOD HOME-MADE BREAD

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WHITE SWAN YEAST CAKES

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Famous "Pint of Cough Syrup" Recipe.

No Better Remedy at any Price. Fully Guaranteed.

Make a plain syrup by mixing two cups of granulated sugar and one cup of warm water and stir for two minutes. Put 2 1/2 ounces of pure Pinex (fifty cents' worth) in a 16-ounce bottle, and fill it up with the Sugar Syrup. This gives you a family supply of the best cough syrup at a saving of \$2. It never spoils. Take a teaspoonful every one, two or three hours.

The effectiveness of this simple remedy is surprising. It seems to take hold instantly, and will usually stop the most obstinate cough in 24 hours. It tones up the jaded appetite and is just laxative enough to be helpful in a cough, and has a pleasing taste. Also excellent for bronchial trouble, throat tickle, sore lungs and asthma, and an unequalled remedy for whooping cough and croup.

This recipe for making cough remedy with Pinex and Sugar Syrup (or strained honey) is a prime favorite in thousands of homes in the United States and Canada. The plan has been imitated, though never successfully. If you try it, use only genuine Pinex, which is the most valuable concentrated compound of Norway white pine extract, and is rich in gualacol and all the natural healing pine elements. Other preparations will not work in this recipe.

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Nose, Wrinkles, Dandruff, Gray, Falling or Lifeless Hair, Alopecia, Goitre, Moles, Warts, Red Veins, Superfluous Hair, or any other non-contagious skin trouble. For Hair on Face and Red Veins there is no reliable home remedy. Our method is assured satisfactory. Consultation free and confidential, at office or by mail. Our booklet "F" and sample of Toilet Cream mailed free if this paper is named. Hiscott, Dermatological Institute, 61 College St., Toronto, Ont. 1912



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The gasoline engine is being used everywhere. Take our course and learn how to run it. We teach also, Stationary, Traction, Marine, Locomotive and Automobile Engineering. Ask about what interests you.

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Dainty, Disappearing Doughnuts.
Devoured near as fast as you make 'em.

Golden — tooth-teasing — able-bodied nuts of dough.

Made from dough that *Tastes Like Nuts*, you know.

Use **FIVE ROSES** flour. Get that *individual toothsome-ness of Manitoba wheat kernels.*

Doughnuts with a *Palate-Pleasing Personality.* See 'em bob up in the rich deep fat—swelling, soft-textured.

A hole entirely circled with *Light Digestible Food.* Fat without being fat—for **FIVE ROSES** is the sturdy *glutinous flour that resists fat absorption.*

Just enough to *brown deliciously, to crisp quickly.*

No greasiness, heaviness, sogginess.

Filling a vacant place so pleasantly with never an *outraged stomach.*

Like these make **YOURS.**

Use **FIVE ROSES.**

Five Roses Flour

Not Bleached



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replaced by health-giving oxygen-charged air from without. If your house is not fitted with a ventilation system, keep windows open a little, top and bottom, as continuously as possible. See that bedroom windows are open at night, rather widely open in mild weather, less perhaps, when a cold wind is blowing directly in. If you are afraid of draught, put up a screen, or manufacture one for the time,—a skirt thrown over a high chair-back will do. If you are afraid of being cold in bed, put on extra blankets, and slip a hot-water bottle in at the foot; in addition, put warm flannel pyjamas, with "feet" in them, on the little ones, and pin down the bed-clothes with huge safety-pins, so that they can't be kicked off by any chance. Remember that fresh air all night long is the price of health and freedom from colds.

Remember, too, that, when properly covered, the body is really warmer when breathing good fresh air. Oxygen sets up a combustion in the body that causes warmth and energy; "bad" air, however warm, only lowers the vitality and makes one susceptible to chills. Again, —fresh air, night and day, is the price of health. Of this, more later.

(5) Flood the house with sunshine, especially the living-room and sleeping-rooms. Sunshine is the very best disinfectant known. Never mind if it fades the carpets. If it is a question of sunshine or carpets, let the carpets go, and comfort yourself with the thought that they are not very fashionable now, anyway. Choose the rugs according to colors that will not look "bad" if they do happen to fade a little.

(6) Wage war on dust and dampness everywhere. They harbor bacteria that may cause disease. Use plenty of scalding water when cleaning dishes, vessels, etc.

(7) Be sure that scrupulous cleanliness is exercised in regard to milking,

and to all vessels in which milk is kept. Washing-soda and plenty of boiling water are among the necessities. Keep milk and all eatables in pure air. They not only absorb, but form an excellent culture for germs.

(8) Do not use partly-decayed fruit or vegetables, or meat that is even the slightest bit tainted. Food must be of the best in quality.

(9) Look well to the water-supply. See that wells are properly protected against the possible entrance of anything from without, and be sure that there is no possibility of seepage from barnyard or cesspool into them. Impure water is a prolific source of typhoid fever and all other bowel troubles.

(10) Insist on plenty of sleep. No one, child or grown-up, can burn the candle at both ends with safety.

Now, these are the main pillars that support robust bodies, and healthy, active minds.—Not very difficult to understand or to remember, are they?—And every word above applies to grown folk as well as to children.

(Children should be required to live according to these simple laws, and made to understand that they must keep up the practice all through life. The responsibility rests upon the mothers.—Just a few simple rules, and yet how many mothers neglect them, and neglect to impress them! And so the children go forth from the homes and on into middle life, breaking, right along, the simplest rules of health. The result may be, and usually is, death before its time, from preventable disease, and the mothers are responsible.

There is more to say, but the space-limit is filled for this time. More anon. JUNIA.

Parsley Jelly.

Here is a recipe for parsley jelly, also sent from "the West," for the Ingle Nook reader who requested it. As parsley is hardy, there will be enough of it in the gardens to try this sweet which, I should imagine, is to be eaten with meat.

Gather the parsley while at its best, wash it well, cover with cold water, press down, and boil thirty minutes, then put through a jelly-bag without pressing. To each pint of juice, add one pound sugar, and boil for twenty minutes.

This is the recipe as sent. I should imagine that a little gelatine added to the hot liquid just before cooling would help to stiffen it.

QUERIES.

Dear Junia and Nookers,—May I come to your very social corner? I have been a constant reader of your corner, and have received many very helpful hints. I come now to ask a few questions.

I have a light tan coat on which I got some red paint. I removed the paint with turpentine, but now the smell of the turpentine remains. I have had it hanging out in the air, but to no avail. Could you please tell me what would take it out without taking out the color?

Will you also tell me on what day the ninth of August, 1897, fell?

Thanking you in advance, I will sign myself,
IRISH JEAN,
Lambton Co., Ont.

The odor of the turpentine should disappear in a few days. . . The ninth of August, 1897, was a Monday.

CLEANING SWEATER—NUT CREAMS, ETC.

Dear Junia,—Like many others, I am an interested reader of the Ingle Nook. I enjoy the discussions very much, and get many a helpful hint. I enjoyed the letters given on "A Man's Duty Around the Home." They told many a true thing.

I now come to you for information. I have a white sweater coat which has been washed once, and turned a little bit yellow. It is now dirty again, and I am at a loss to know whether to try washing it again or not. I intend to dye it red some time, but thought I would like it white as long as possible.

Can you tell me the latest way for a girl of 16 to do her hair?

I have a pale-blue, fluffy sprig for a hat, and want to color it. Will it color?

If I am not asking too much, might I ask how to hemstitch a handkerchief?

Here is a splendid recipe for "walnut and date creams": One lb. walnuts, 1 lb. dates, 1 lb. confectionery sugar, 1 egg (white). Shell walnuts, stone dates. Into white of 1 egg (do not beat it) stir sugar, adding half a wine-glass of water and two teaspoonfuls vanilla. Fill the dates with the cream, and make small ball of cream, putting walnuts on each side. Press together and sprinkle with granulated sugar.

INQUISITIVE BLUE EYES.

Wellington Co., Ont.

To clean a white woollen sweater so that it will not yellow, use hot water made into suds with pure borax and mild white soap, such as Castile or Ivory. Rinse through two clear waters to which a little borax has been added, having each water hotter than the last. Do not wring, simply press out the water with the hands first, then between dry cloths, and finally put the sweater

in a sheet in a wa- rent of ai- coat to th- and hard.

If there about th- nicely as- out, then and sprin- starch, m- Roll up a- then shak- grimy, it- damp woo- the star- fascinators may be cl-

Young g- hair, as t- three coils but quite- seen wear- hanging d- ribbon bo- pretty, gi- You had- feather, t- it colored. For hem- threads, t- and down- sort of bu- near you- is very di- writing.

COOK

Macaroni water to in 1 tabl- with three parsley to- utes, unti- with 6 ou- beaten egg- or Worces- as much thickness minutes, browned i- serve. M- food, whic- is as a

Kedgere- free from- rice, 2 ha- butter in- stir gentl- eggs cho- Move gent- thoroughly dish with- through a- supper or- Biscuit-

good firm- crisp soda- Place upo- grated che- minutes, a- Graham- flour, 1 t- spoon salt- powder, 1- gather the- powder.

beaten egg- batter, an- rings, or- thirds full- Bacon v- bacon ver- and place- Slice cold- from the- breadcrum- the gravy- bacon laid- Apple S-

1 dozen- water eno- break. B- lump of b- and the ju-

Baked H- meat (seve- leaving o- (preferab- season wi- dried sage- cups, pot- milk to a- earthenwar- the top w- Potatoes- pared and- cold water- put in a s- cover, put- until perfe-

in a sheet to dry. Suspend the sheet in a warm place where there is a current of air, but by no means expose the coat to the sun, or it will become dry and hard.

If there is not too much greasy dirt about the sweater, you can clean it nicely as follows: Shake all the dust out, then spread the coat on a sheet and sprinkle it well with rice or potato starch, mixed with powdered borax. Roll up and put away for a day or two, then shake out. If the sweater is quite grimy, it should be pressed between damp woollen cloths before putting on the starch. White woollen shawls, fascinators, and silk waists and veils, may be cleaned very nicely this way.

Young girls are still wearing their hair, as a rule, parted in front and in three coils low on the back of the head, but quite often girls of 16 or 17 are seen wearing one long braid or curl hanging down the back and tied with a ribbon bow at the top. This is a very pretty, girlish style.

You had better send your blue, fluffy feather, to a professional dyer to have it colored.

For hemstitching, you first draw the threads, then catch those remaining (up and down) into small clusters with a sort of buttonhole stitch. Get someone near you to teach you the stitch, as it is very difficult to give directions in writing.

Cookery for Cool Days.

Macaroni Savory.—Put into just enough water to cover 3/4 lb. macaroni also put in 1 tablespoon butter, 1 small onion, with three cloves in it, herbs and dried parsley to taste. Boil about 40 minutes, until tender, then drain and mix with 6 ounces grated or sliced cheese, 2 beaten egg yolks, a spoonful of chutney or Worcester sauce, some cayenne, and as much gravy as needed to make the thickness of a sauce. Simmer 5 or 10 minutes, scatter a few breadcrumbs browned in butter over the top, and serve. Macaroni is a very nourishing food, which should be used more than it is as a supper dish.

Kedgeriee.—One-half lb. cold flaked fish free from skin and bone, 3 ounces boiled rice, 2 hard-boiled eggs. Melt 2 ounces butter in a saucepan, add the fish and stir gently. Put in the whites of the eggs chopped, and season to taste. Move gently about over the fire until thoroughly hot, and serve on a flat dish with the yolks of the eggs pressed through a sieve over the top. A nice supper or breakfast dish.

Biscuit and Cheese.—Dry a slice of good firm cheese and grate it. Butter crisp soda biscuits or cream wafers, and place upon each a teaspoonful of the grated cheese. Set in the oven for 10 minutes, and send to the table very hot.

Graham Muffins.—One quart Graham flour, 1 tablespoon brown sugar, 1 teaspoon salt, 2 heaping teaspoons baking powder, 1 egg, 1 pint milk. Sift together the flour, sugar, salt, and baking powder. Add the milk in which the beaten egg has been mixed. Beat to a batter, and bake in well-greased muffin-rings, or deep pastry pans, about two-thirds full.

Bacon and Porridge.—Slice breakfast bacon very thin and fry. Lift it up and place where it will keep warm. Slice cold corn-meal porridge left over from the day before, dip in grated breadcrumbs or corn meal, fry brown in the gravy, and serve with a slice of bacon laid on top of each piece.

Apple Sauce.—Pare, core, and quarter 1 dozen nice, juicy apples. Stew in water enough to cover until the pieces break. Beat to a pulp with a good lump of butter, a cup or more of sugar, and the juice of one lemon.

Baked Hash.—Two cups of any cold meat (several kinds will do, if on hand), leaving out the fat. Chop very fine (preferably through a meat-grinder), season with parsley, salt and pepper, dried sage or celery salt if liked; add 2 cups potato mashed and beaten with milk to a cream, put into a greased earthenware or enamelled pan, dot over the top with butter, and bake.

Potatoes a la Maryland.—Six potatoes pared and cut into thin slices; lay in cold water for 15 minutes, drain, and put in a stewpan with milk enough to cover, put on the lid, let simmer slowly until perfectly tender; then add butter,

salt and parsley, minced very fine. Thicken the milk a little if necessary, and serve in a hot dish.

Baltimore Pudding.—Cut stale sponge or layer-cake in slices. Lay some of the slices in the bottom of a baking dish; fill nearly to the top of the dish with any kind of canned fruit, drained a little if too juicy. Put slices of the cake all over the top. Set into the oven to become hot, then spread with a meringue of the whites of 2 eggs beaten with a little sugar. Set back in the oven for a few moments. Serve hot or cold, with cream.

The Two Workers.

Two workers in one field
Toiled on from day to day.
Both had the same hard labor,
Both had the same small pay.
With the same blue sky above,
The same green grass below,
One soul was full of love,
The other full of woe.

One leap'd up with the light,
With the soaring of the lark;
One felt it ever night.
For his soul was ever dark.
One heart was hard as stone,
One heart was ever gay;
One worked with many a groan,
One whistled all the day.

One had a flower-clad cot
Beside a merry mill;
Wife and children near the spot
Made it sweeter, farrer still;
One a wretched hovel had,
Full of discord, dirt, and din—
No wonder he seemed mad,
Wife and children starved within.

Still they worked in the same field
Toiled on from day to day;
Both had the same hard labor,
Both had the same small pay.
But they worked not with one will,
The reason let me tell—
Lo! the one drank at the still,
And the other at the well.
—National Advocate.

The Critic.

A mud-turtle sat on a stone in the sun,
And blinked in a slow, stupid way;
A vain little fly
Came loitering by,
He stopped on that same rock to say
"You're the ugliest creature that ever I
saw;
You are clumsy, and stupid, and slow,
And just how you manage a living at all
Is a thing I would much like to
know."

But the little mud-turtle spoke never a
word
As he sat in the sun on the stone;
He wearily blinked,
He thought as he winked,
That a wise fly would let him alone.
But the fly had grown proud of his
power to torment,
And he buzzed at the mud-turtle's head,
Till the turtle at last gave one short
little snap,
And the critical insect was dead.

It is really too bad that the fly never
knew
That the turtle was wiser than he;
For a creature that thinks
As it winks, and it blinks
May a dangerous enemy be.
And because one can clatter, and buzz,
and annoy.
'Tis no proof he is clever or wise
He may do no more good than to serve
as the food
For the one whom he feigns to despise.
—From the May Bohemian.

Save Fuel.

Do you know that you can save fuel by using a fireless cooker? Start cooking your eatables on the oil-stove or range, then put them into the fireless cooker to finish the work, and turn the oil-stove out, or let the kitchen fire just smoulder. Fuel will be saved, and, when winter is over, you will have the fireless cooker right on hand to begin the hot summer with. Improved fireless cookers will roast and bake as well as boil. For further information, see the advertisement of the Dominion Fireless Cooker Co., Toronto, elsewhere in these pages.



Lumbersoles for Women and Children

This neat lacing style LUMBERSOLE is made specially for women and children although we make them in men's sizes also. They are lined with soft, cosy fleece instead of the felt used in our other styles.

Made in sizes 6 to 2 for children, to fit ages 3 to 10, price \$1.50. Sizes 3 to 12 are for men and women, price \$2.25.

The wood soles wear like iron and keep out cold. The soft, fleecy linings keep feet warm in the coldest weather. Just the thing for children going to school and for the wife when outdoors. Fine for boys too, on account of their wearing qualities. WE GUARANTEE LUMBERSOLES to keep feet warm, in 50 below, and will refund the money if you find it's not so.

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Better than leather, rubber, or steel shoes, both for warmth and wear. Lighter weight than any other winter footwear. Price includes delivery to you. Send for free catalogue of British-made footwear, socks, underwear, etc., etc. DEALERS WANTED.

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Men's Best Quality, 2-Buckle Style, Sizes 6-12	\$2.00
Two Buckle Style, to fit all ages, Sizes 3-12. (Suitable for Ladies)	1.75
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Men's Half Wellingtons, Sizes 5-12	3.00
Children's 2-Buckle Style, Sizes 6-2. Fit ages 3-10	1.35
Children's Fine Lacing Style, Sizes 6-2	1.50

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We still have for sale about two hundred beautiful cockerels; all imported from the best bred-to-lay poultry farms in United States. Write for prices before purchasing elsewhere. Satisfaction guaranteed.

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BRINO WINTERS, 2-year-old stallion, winner first and second at London Fair; sired by Henry Winters, 2.10 1/4, dam Lady Brino, by Cap. Brino, 2.07 1/4, grand-dam by Ringham. Winner first prize and diploma at Toronto and Hamilton, gold medal at London. Brino Winters will make about a 16-hand horse. Square trotter and beautiful animal. Should pay for himself in one season. Will take heavy or express horse in part payment, or will sell half share to reliable farmer. Write for particulars re pedigree, etc. Address:

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TO MUSIC LOVERS



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The demand has been so great that there may be many who were unable to get theirs. So we repeat the coupon. Sign it and hand (with 10c. to cover cost of handling) to any music dealer, and he will supply you with this Columbia Double-Disc Demonstration Record, value 85c.

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So far we have not advertised Columbia Graphophones and Grafonolas, the demand being greater than the supply, but we recommend the Regal at \$52, of which some of our dealers already have a stock. We have other instruments from \$17.50 to \$650.

If you have any difficulty in obtaining the Record, write or phone to The Music Supply Co., 88 Wellington St., West, Toronto.

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Present this coupon with 10c. to cover the cost of handling to any music or piano dealer, and he will hand you a demonstration record.
Name.....
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The Dominion Fireless Cooker



HERE IT IS

A FIRELESS COOKER for a Christmas present.

Men, here is a chance to make your wife a handsome present, an article that will save you hundreds of dollars and will be appreciated by her. She will not lay it up and forget all about it in a month, but it will lessen her work one-half and always be a source of pleasure. Undoubtedly the greatest boon to womankind yet invented.

We will allow a special discount of 10% on all Cookers ordered for Christmas presents up to Dec. 20th. Write for catalogue and special prices.

REPRESENTATIVES WANTED

Dominion Fireless Cooker Co.

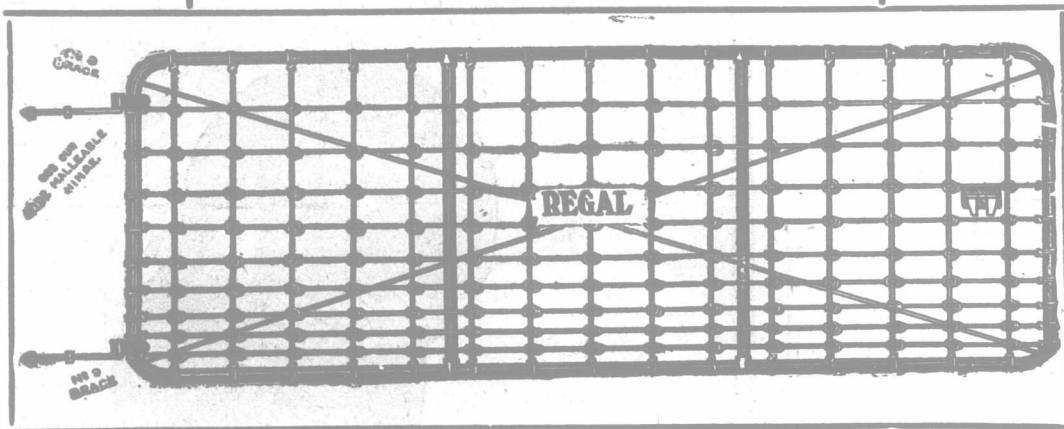
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STEEL FARM GATE**

Wood

12x4-foot Farm Gate\$4.00 14x4-foot Farm Gate.....\$4.50

Freight paid in lots of three gates or over

In Old Ontario, west of Toronto, list price. In New Ontario, add 50c. per gate.
In Old Ontario, east of Toronto, add 25c. per gate. In Quebec, add 55c. per gate.
In Maritime Provinces, add 60c. per gate.

We give here a description of the points of interest to you, that together make possible our claim of the best Farm Gate on the market. Our gates are made from the best steel tubing that money will buy. The filling consists of a heavy No. 9 Galvanized Wire. Each wire, both upright and line wires, is wrapped twice around the frame, making the most secure fastening of filling that is possible. The special and distinct feature of our gates is our method of bracing. Two braces to each gate. Each brace consists of two pieces of heavy angle iron, bolted together over the filling and forged around the frame at both the top and bottom. There is no other gate on the market with a brace that braces both the filling and the frame. It would seem impossible for a factory to sell a gate of this description for the price we ask. It would be impossible for us to do so if we used old-fashioned business methods, but with our enormous capacity and our low cost of selling by our direct-from factory-to-farm method, we are in a position to do so. Our small profit, as you will see, is based on a very large volume of business, and it is necessary for us to sell enormous quantities of these gates to continue to sell them at the prices we quote. We cannot guarantee this offer for any length of time. Send us your order to-day at this SPECIAL PRICE OFFER. Remit by Post Office Order, Money Order or Draft.

THE REGAL FENCE COMPANY, LIMITED, SARNIA, ONTARIO
Manufacturers of FAMOUS REGAL LAWN FENCING

A little boy had eaten too much underdone pie for his Christmas supper, and was soon roaring lustily.

His mother's visitor was much disturbed.

"If he was my child," she said, "he'd get a good, sound spanking."

"He deserves it," the mother admitted; "but I don't believe in spanking him on a full stomach."

"Neither do I," said the visitor, "I'd turn him over."

She—"I consider, John, that sheep are the stupidest creatures living."
He (absent-mindedly)—"Yes, my lamb!"

GREAT SALE 30 IMP. CLYDESDALE FILLIES

By Auction

at ORMSBY GRANGE STOCK FARM, ORMSTOWN,
Province of Quebec, on

Thursday, November 21, at ten o'clock

(on arrival of G.T.R. train from Montreal.)

Illustrated catalogues are being prepared, and will be sent on application. Send your address by post card now. **D. McEACHRAN**

News of the Week.

CANADIAN.

Sir Mackenzie Bowell, former Premier of Canada, who was injured by a fall recently, is in a critical condition.

.....

The plant of the Energetic Explosive Co., two miles from Haileybury, was blown up on October 23rd, and five people were killed. The force of the concussion shattered windows in Cobalt, four miles away.

.....

BRITISH AND FOREIGN.

The rebellion in Mexico, led by General Felix Diaz, has been crushed, and Vera Cruz is once more in possession of the Federal forces.

.....

An important engagement occurred at Kirk-Kilisseh last week, the Bulgarians capturing the position and driving the Turks back with serious loss. Greeks and Macedonians from all parts of the world are hurrying to the Balkans to take part in the war.

.....

The Bulgarian King's beautiful summer residence on the Black Sea has been destroyed by a Turkish fleet, and the Bulgarian town of Kavarna badly damaged by the bombardment.

.....

The first conviction has been obtained in the famous Rosenthal case in New York City. Ex-Police Lieut. Becker has been found guilty of murder in the first degree. He was charged with hiring a number of "gunmen," now under arrest, to shoot Herman Rosenthal for informing in regard to police graft in New York.

Lycidas.

By T. B. Aldrich.

I walked with him one melancholy night
Down by the sea, upon the moon-lit
strands,
While in the silent heaven the Northern
Light
Beckoned with flaming hands!
Beckoned and vanished, like a woeful
ghost
That fain would lure us to some dismal
wood,
And tell us tales of ships that have been
lost,
And in violence and blood.
And where yon daedal rocks o'erhang
the froth,
We sat together, Lycidas and I,
Watching the great star bear that in the
north
Guarded the midnight sky.

And while the moonlight wrought its
miracles,
Drenching the world with silent, silver
rain,
He spoke of life and its tumultuous ills;
He told me of his pain.

He said his life was like a troubled sea
With Autumn brooding over it; and
then
Spoke of his hopes, of what he yearned
to be,
And what he might have been.

"I hope," said Lycidas, "for peace at
last;
I only hope for peace, my god is Ease;
Day after day some rude iconoclast
Breaks all my images.

There is a better life than I have
known—
A surer, purer, sweeter life than this:
There is another, a celestial zone,
There I shall know of bliss."

Close his sad eyes and cross his helpless
hands,
And lay the flowers he loved upon his
breast;
For time and death have stayed the
golden sands
That ran with such unrest.

You weep! I smile, I know that he is
dead!
So is his passion; and 'tis better so;
Take him, O earth, and round his lonely
head
Let countless roses blow.

You weep! I smile, I know that he is
dead!
So is his passion; and 'tis better so;
Take him, O earth, and round his lonely
head
Let countless roses blow.

How Did You Die?

Did you tackle the trouble that came your way With a resolute heart and cheerful? Or hide your face from the light of day With a craven soul and fearful? Oh, a trouble's a ton, or a trouble's an ounce, Or a trouble is what you make it, And it isn't the fact that you're hurt that counts, But only how did you take it?

You are beaten to earth? Well, well, what's that? Come up with a smiling face. It's nothing against you to fall down flat, But to lie there—that's disgrace. The harder you're thrown, why the higher you bounce; Be proud of your blackened eye! It isn't the fact that you're licked that counts; It's how did you fight,—and why? And though you be done to the death, what then? If you battled the best you could, If you played your part in the world of men, Why, the Critic will call it good. Death comes with a crawl, or comes with a pounce, And whether he's slow or spry, It isn't the fact that you're dead that counts, But only how did you die?

—Edmund Vance Cook. (By permission of Dodge Publishing Co., New York.)

Not Work, But Worry.

It is not the work, but the worry, That wrinkles the smooth, fair face, That blends grey hair with the dusky, And robs the form of its grace, That dims the lustre and sparkle Of eyes that were once so bright, But now are heavy and troubled With a weary, despondent light. It is not the work, but the worry, That drives all sleep away, As we toss and turn and wonder About the cares of the day. Do we think of the hand's hard labor, Or the steps of the tires feet? Ah, no! But we plan and ponder How to make both ends meet.

It is not the work, but the worry, That makes us sober and sad, That makes us narrow and sordid When we should be cheery and glad. There's a shadow before the sunlight, And ever a cloud in the blue; The scent of the roses is tainted, The notes of the song are untrue.

It is not the work, but the worry, That makes the world grow old, That numbers the years of its children Ere half the story is told; That weakens their faith in heaven And the wisdom of God's great plan. Ah! 'tis not the work, but the worry, That breaks the heart of man.

Song of Exile.

When the sun strikes the motionless palm-trees, And the sandhills are white with the heat, We long for the breezes of England And the grass that treads soft to the feet. When the camels march slowly, so slowly, And we rock to the sound of the bells, The song in our heart is of England, 'Tis of Home that it tells.

Green memories still haunt and evade us, Cool scenes mocking pass and re-pass; Brief glimpses of parks and green pastures,

Soft lawns and wide fields of long grass; And the tyrannous sun is forgotten, Forgotten the glare of its beams, While fancy-enthralled we revisit The Land of our Dreams.

We who dwell in these sun-smitten plain-lands, And work under tropical skies, Where never the East wind blusters, And never a sea-breeze sighs, And never a white sail quivers

Wind-driven and flecked with the foam— We dream in the silent night watches Of England, our Home.

—Multani, in The Spectator.

A Windy Day.

When the wild west wind is blowing Through the leafless wood; When the turbid stream is flowing In an angry mood, To the steep cliff I would hie, Where the sea-gulls wailing fly— When the wild west wind is blowing Through the leafless wood.

Nature's face is veiled in anger, Skies are darkly grey; Gone the summer's dreamy langour, Riot rules to-day! And the leaves whirl through the air, And their dun-hued death-despair. Nature's face is veiled in anger, Skies are darkly grey.

But the glorious joy of living On a day like this! When to mortals heaven is giving Her sweet thrilling kiss. Drinking in the strong pure breeze Does away with idle ease. Oh, the glorious joy of living On a day like this!

Come from streets where germs are lurking To the wind-swept hill; You will have new life for working, When your lungs are fill. Let the wind lash face and hair; Breathe it in, 'tis health most fair; Come from streets where germs are lurking To the wind-swept hill!

—Rose E. Sharland.

Never Again.

I wish the kettle would sing again, Just as it used to do— I wish it would sing of a lion slain— Of a pirate crew on the Spanish Main— Of a clipper-ship on the sea-way high, With a cabin boy and the Boy was I— Just as it used to do.

I wish the kettle would sing again, Just as it used to do. Of a little girl in a bonnet red, Saved by a prince from a hydra-head That lurked in the corn that towered high, And the girl was She and the Prince was I— Just as it used to do.

I wish it would sing of war's alarms, The booming of cannon and clash of arms— Of a blue-clad boy where the strife ran high, With face to the steel and willing to die— Just as it used to do.

I wish the kettle would sing again, Just as it used to do. The lyrics it crooned and the tales it told— But the earth is chill and the years are old, The fancies it whispered have all taken wing, And never again the kettle will sing Just as it used to do!

—John D. Wells, in Kansas City Post.

GRAND TRUNK RAILWAY SYSTEM

Hunters' Excursions

Single Fare for the Round Trip

GOING DATES

Oct. 7 to Nov. 9, to points in TEMAGAMI, Etc.

Oct. 17 to Nov. 9 to Muskoka Lakes, Lake of Bays, Penetang, Midland, Lakefield, Severn to North Bay inclusive, Argyle to Coboconk inclusive, Lindsay to Haliburton inclusive, Madawaska to Parry Sound inclusive.

All tickets valid for return until Thursday, December 12th, except to points reached by steamer lines, Tuesday, Nov. 12th, 1912. Ask any Grand Trunk Agent for full particulars.

Roupy Poultry Is Useless

either as market stock or layers. You can easily keep your flock free from roup, colds, catarrh. Use

Pratt's Roup Cure

In the drinking water. It surely prevents and cures these diseases. 25c, 50c, \$1. Cull your birds closely and put them in best condition.

Pratt's Poultry Regulator

is the time-tested conditioner. This great preparation stimulates digestion and increases egg production. 25c, 50c, \$1; 25-lb. Pail, \$2.50.

"Your money back if it fails"

Our products are sold by dealers everywhere, or PRATT FOOD CO., OF CANADA Limited, TORONTO.



Pratt's 160-page Poultry Book. 4c by Mail

RAW FURS

Are you a trapper? Are you a dealer? Are you seeking a reliable firm to ship to? Many thousands of shippers say we give best returns, good reasons—we pay as we quote, give a square grade and send your money as quick as the return mail can bring it to you. We post you reliably.

No Commissions. No Express Charges. Write at once for price list, tags, envelopes, invoices, etc.

BENJAMIN DORMAN, Inc.

RAW FURS, GINSENG, GOLDEN SEAL

147 West 24th Street, New York. (Mention this paper.)

References: Greenwich Bank, N. Y. East River National Bank, N. Y.



Your Cows Will Give Milk In Good Quantity & Quality

this winter if you watch their water supply carefully. Don't turn them out on a cold winter's day to drink at a common trough. Long draughts of icy cold water prevent milk secretion.

The Woodward Basin System insures an ample flow of properly tempered water, in automatically regulated quantities. You will save yourself much winter's labor, trouble and expense by installing Woodward Water Basins now.

Get estimates and full particulars free from the office nearest you. With the particulars of the Woodward Basin will come a descriptive pamphlet telling you how to make your cows comfortable by combining Champion Cow Stanchions and Woodward Water Basins. Write the office nearest you.

THE ONTARIO WIND ENGINE & PUMP CO. Winnipeg TORONTO Calgary

POULTRY AND EGGS

Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 30 cents.

EXTRA Choice S.-C. Brown Leghorn cockerels (Becker strain), \$2 each. David A. Ashworth, Maple Grove, Ont.

FOR SALE—Pekin ducks, from prizewinners at Hamilton Poultry Show, 1911. Price \$1.25 each. Apply: H. Sider, Fork's Road, Ont.

FOR SALE—Two thoroughbred White Leghorn S.-C. year-old cocks (prizetakers). Two dollars each. D. McKellar, Tavistock, Ont.

FIRST and second prize Light Brahma and Golden Poland cockerels, two and three dollars each. Harry Wilson, Collingwood.

MONEY in Poultry—Our bred-to-lay strains are putting poultry keeping on a paying basis for hundreds of farmers. Write for illustrated catalogue and Summer Sales List. They are free. L. R. Guild, box 16, Rockwood, Ont.

RAW FURS

Ship your furs to a reliable firm, where you can depend on receiving good assort and highest market prices. Write at once for price list, tags, etc.

J. YAFFE

72 Colborne Street TORONTO, ONT.

WANTS & FOR SALE

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.

ALL kinds of Farms—Fruit Farms a specialty. W. B. Calder, Grimsby.

AGENTS wanted—Good reliable agents wanted in every locality to sell and erect the best lightning rods made. Only responsible parties need apply, as we have an interesting, good paying proposition to the right parties. Apply Box B, Farmer's Advocate, Toronto.

BRITISH Columbia Ranches, Vancouver Island. Ideal climate, no cold weather; no hail, frost or bad storms; abundant crops assured; richest of soil, unsurpassed for growing grain, fruit and vegetables. The poultryman's paradise. Best market in the world. Improved and partly improved ranches, 5 acres and upwards. Easy terms of purchase. Come to the Pacific where life is worth living. Abundant sport, finest of hunting, fishing and boating. For further information and full particulars write Dept. F., Stuart, Campbell, Craddock & Co., 521 Fort Street, Victoria, or 425 Pender Street West, Vancouver, B.C.

CREAM WANTED—We guarantee highest prices, correct weights, accurate tests, prompt returns. Write for free cans and try a few shipments. Toronto Creamery Co., Limited, Toronto.

FARMS FOR SALE—Improved Wellington County farms. Now is the time to inspect. No obligation or expense. Jones & Johnston, Guelph.

FARM FOR SALE—212 acres rich clay loam, 200 acres under good cultivation, balance bush and pasture, no waste land, no stone or stumps, straight fences; barn, 60x90, hip roof, cement foundation and floor; cement pigery and henery; stabling for 50 head cattle, 14 horses; root houses; lightning rods on barn, orchard; plenty hard and soft water; 11-room brick house, furnace; situated alongside the corporation of Bradford; High and Public Schools and churches; one mile from G.T.R. station. Apply: Drawer 276, Bradford, Ontario.

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

WAPELLA, SASK.—An ideal district for grain growing and mixed farming. Soil, rich loam on clay subsoil. Improved and unimproved farm lands selling from \$15.00 to \$30.00 per acre. Write for full description and lists to D. P. Miller, Sect. Wapella Board of Trade, Wapella, Sask.

WANTED AT ONCE—Experienced farm hand. Knowledge of horses and stock necessary. J. Holden, Woodburn, Ont.

WANTED—Married man—all-round farm hand; stock and grain farm; convenient house on farm. Good wages. Address: Box 60, Farmer's Advocate, London, Ont.

YOUNG woman wishes situation as housekeeper—on farm preferred. Accustomed to milking. Good references. Box 75, Farmer's Advocate, London.

COLD IN HEAD CATARRH INSTANTLY RELIEVED BY THE OLD DR. MARSHALL'S CATARRH SNUFF

25c AT ALL DRUG STORES OR SENT PREPAID BY C. H. KEITH, CLEVELAND, OHIO

MENTION "FARMER'S ADVOCATE."



"The Most Exquisite Tone."

MISS HAZEL DAWN, the prima donna who plays the violin so wonderfully in "The Pink Lady," says: "The Vareni Violin has the most exquisite tone. It is one of the most perfect instruments that I have ever used."

Vareni Violins

fully deserve the high praise of this artist. The maker has succeeded in producing a well-balanced instrument with that full, round even tone that is the last test of value in a violin.

The VARENI VIOLINS are made in three models:
 No. 23 is the Concert Model, selling at \$45.00
 No. 62 is for Orchestral Work. The price is \$35.00
 No. 61 is designed for Amateurs and sells for \$25.00
 Write for booklet B 6 of Musical Instruments for description of the above models, and also Mandolins, Guitars, etc.

THE WILLIAMS & SONS CO. LIMITED
 R.S. *AMERICAN INSTRUMENTS OF QUALITY*

143 Yonge St., Toronto; 308 11th Ave., East, Calgary, Alta.; 59 St. Peter St., Montreal; 421 McDermott Ave., Winnipeg.



Take A Handful Of "St. Lawrence" Sugar Out To The Store Door

—out where the light can fall on it—and see the brilliant, diamond-like sparkle the pure white color, of every grain.

That's the way to test any sugar — that's the way we hope you will test

St. Lawrence Sugar

Compare it with any other sugar—compare its pure, white sparkle—its even grain—its matchless sweetness.

Better still, get a 20 pound or 100 pound bag at your grocer's and test "St. Lawrence Sugar" in your home.

ST. LAWRENCE SUGAR REFINERIES LIMITED, - MONTREAL.

THE 9TH ANNUAL

ONTARIO HORTICULTURAL EXHIBITION

OPEN FROM 10 A.M. to 10 P.M.

TORONTO, Nov. 12 to 16th

SINGLE RAILWAY FARES From All Points in Ontario

FLOWERS, FRUIT, VEGETABLES, HONEY

THE ANNUAL SOCIAL EVENT

REBECCA OF SUNNYBROOK FARM.

By Kate Douglas Wiggin.
 [Serial rights secured from Houghton Mifflin Publishing Company, New York.]

CHAPTER III.
 A Difference In Hearts.

"I don't know as I cal'lated to be the makin' of any child," Miranda had said as she folded Aurelia's letter and laid it in the light-stand drawer. "I s'posed, of course, Aurelia would send us the one we asked for, but it's just like her to palm off that wild young one on somebody else."

"You remember we said that Rebecca or even Jenny might come, in case Hannah could n't," interposed Jane.

"I know we did, but we had n't any notion it would turn out that way," grumbled Miranda.

"She was a mite of a thing when we saw her three years ago," ventured Jane; "she's had time to improve."

"And time to grow worse!"

"Won't it be kind of a privilege to put her on the right track?" asked Jane timidly.

"I don't know about the privilege part; it'll be considerable of a chore, I guess. If her mother hain't got her on the right track by now, she won't take to it herself all of a sudden."

This depressed and depressing frame of mind had lasted until the eventful day dawned on which Rebecca was to arrive.

"If she makes as much work after she comes as she has before, we might as well give up hope of ever gettin' any rest," sighed Miranda as she hung the dish towels on the barberry bushes at the side door.

"But we should have had to clean house, Rebecca or no Rebecca," urged Jane; "and I can't see why you've scrubbed and washed and baked as you have for that one child, nor why you've about bought out Watson's stock of dry goods."

"I know Aurelia if you don't," responded Miranda. "I've seen her house, and I've seen that batch o' children, wearin' one another's clothes and never carin' whether they had 'em on right sid' out or not; I know what they've had to live and dress on, and so do you. That child will like as not come here with a passel o' things borrowed from the rest o' the family. She'll have Hannah's shoes and John's undershirts and Mark's socks most likely. I suppose she never had a thimble on her finger in her life, but she'll know the feelin' o' one before she's ben here many days. I've bought a piece of unbleached muslin and a piece of brown gingham for her to make up; that'll keep her busy. Of course she won't pick up anything after herself; she probably never see a duster, and she'll be as hard to train into our ways as if she was a heathen."

"She'll make a difference," acknowledged Jane, "but she may turn out more biddable 'n we think."

"She'll mind when she's spoken to, biddable or not," remarked Miranda with a shake of the last towel.

Miranda Sawyer had a heart, of course, but she had never used it for any other purpose than the pumping and circulating of blood. She was just, conscientious, economical, industrious; a regular attendant at church and Sunday-school, and a member of the State Missionary and Bible societies, but in the presence of all these chilly virtues you longed for one warm little fault, or lacking that, one likeable failing, something to make you sure she was thoroughly alive. She had never had any education other than that of the neighborhood district school, for her desires and ambitions had all pointed to the management of the house, the farm, and the dairy. Jane, on the other hand, had gone to an academy, and also to a boarding-school for young ladies; so had Aurelia; and after all the years that had elapsed there was still a slight difference in language and in manner between the elder and the two younger sisters.

Jane, too, had had the respectable ad-

vantage of a sorrow; not the natural grief at the loss of her aged father and mother, for she had been content to let them go; but something far deeper. She was engaged to marry Tom Carter, who had nothing to marry on, it is true, but who was sure to have, some time or other. Then the war broke out. Tom enlisted at the first call. Up to that time Jane had loved him with a quiet, friendly sort of affection, and had given her country a mild emotion of the same sort. But the strife, the danger, the anxiety of the time, set new currents of feeling in motion. Life became something other than the three meals a day, the round of cooking, washing, sewing, and church-going. Personal gossip vanished from the village conversation. Big things took the place of trifling ones,—sacred sorrows of wives and mothers, pangs of fathers and husbands, self-denials, sympathies, new desire to bear one another's burdens. Men and women grew fast in those days of the nation's trouble and danger, and Jane awoke from the vague dull dream she had hitherto called life to new hopes, new fears, new purposes. Then after a year's anxiety, a year when one never looked in the newspaper without dread and sickness of suspense, came the telegram saying that Tom was wounded; and without so much as asking Miranda's leave, she packed her trunk and started for the South. She was in time to hold Tom's hand through hours of pain; to show him for once the heart of a prim New England girl when it is ablaze with love and grief; to put her arms about him so that he could have a home to die in, and that was all;—all, but it served.

It carried her through weary months of nursing—nursing of other soldiers for Tom's dear sake; it sent her home a better woman; and though she had never left Riverboro in all the years that lay between, and had grown into the counterfeit presentment of her sister and of all other thin, spare, New England spinsters, it was something of a counterfeit, and underneath was still the faint echo of that wild heart-beat of her girlhood. Having learned the trick of beating and loving and suffering, the poor faithful heart persisted, although it lived on memories and carried on its sentimental operations mostly in secret.

"You're soft, Jane," said Miranda once; "you allers was soft, and you allers will be. It's wa'n't for me keepin' you stiffened up, I b'lieve you'd leak out o' the house into the dooryard."

It was already past the appointed hour for Mr. Cobb and his coach to be lumbering down the street.

"The stage ought to be here," said Miranda, glancing nervously at the tall clock for the twentieth time. "I guess everything's done. I've tacked up two thick towels back of her washstand and put a mat under her slop-jar; but children are awful hard on furniture. I expect we sha'n't know this house a year from now."

Jane's frame of mind was naturally depressed and timorous, having been affected by Miranda's gloomy presages of evil to come. The only difference between the sisters in this matter was that while Miranda only wondered how they could endure Rebecca, Jane had flashes of inspiration in which she wondered how Rebecca would endure them. It was in one of these flashes that she ran up the back stairs to put a vase of apple blossoms and a red tomato-pincushion on Rebecca's bureau.

The stage rumbled to the side door of the brick house, and Mr. Cobb handed Rebecca out like a real lady passenger. She alighted with great circumspection, put the bunch of faded flowers in her aunt Miranda's hand, and received her salute; it could hardly be called a kiss without injuring the fair name of that commodity.

"You need n't 'a' bothered to bring flowers," remarked that gracious and tactful lady; "the garden's always full of 'em here when it comes time."

Jane then kissed Rebecca, giving a somewhat better imitation of the real thing than her sister. "Put the trunk in the entry, Jeremiah, and we'll get it carried upstairs this afternoon," she said.

"I'll take it up for ye now, if ye say the word, girls."

"No, no; don't leave the horses; somebody'll be comin' past, and we can call 'em in."

"Well, Mirandy girl there, company k

Miss Sa adjective her belief might be they certa she could used to marked ac

Mr. Cobb wrong tra argument he drove a safer word described

"I'll tak room, Re "Shut the behind yo ain't flyt start right ye and th down for save your braided ru the entry

"It's my "Take i the cloth thought y on the st

"It's my "My ever, to bring.

"Lay yo "Do yo please?

"There and if th make for Remember we don't o' the ca don't ke right and your face hair you we'll unpe settled i your dres

"Rebecca at the running flat little

"Hind that's al children y button' do them up in fro three, bu too."

Miranda door, but alent to

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"Well, good-by, Rebecca; good-day. Mirandy 'n' Jane. You've got a lively girl there. I guess she'll be a first-rate company keeper."

Miss Sawyer shuddered openly at the adjective "lively" as applied to a child; her belief being that though children might be seen, if absolutely necessary, they certainly should never be heard if she could help it. "We're not much used to noise, Jane an' me," she remarked acidly.

Mr. Cobb saw that he had taken the wrong track, but he was too unused to argument to explain himself readily, so he drove away, trying to think by what safer word than "lively" he might have described his interesting little passenger.

"I'll take you up and show you your room, Rebecca," Miss Miranda said. "Shut the mosquito nettin' door tight behind you, so's to keep the flies out; it ain't flytime yet, but I want you to start right; take your passel along with ye and then you won't have to come down for it; always make your head save your heels. Rub your feet on that braided rug; hang your hat and cape in the entry there as you go past."

"It's my best hat," said Rebecca. "Take it upstairs then and put it in the clothespress; but I should n't 'a' thought you 'd 'a' worn your best hat on the stage."

"It's my only hat," explained Rebecca. "My every-day hat was n't good enough to bring. Fanny's going to finish it."

"Lay your parasol in the entry closet." "Do you mind if I keep it in my room, please? It always seems safer."

"There ain't any thieves hereabouts, and if there was, I guess they wouldn't make for your sunshade; but come along. Remember to always go up the back way; we don't use the front stairs on account o' the carpet; take care of the turn and don't ketch your foot; look to your right and go in. When you've washed your face and hands and brushed your hair you can come down, and by and by we'll unpack your trunk and get you settled before supper. Ain't you got your dress on hind sid' foremost?"

Rebecca drew her chin down and looked at the row of smoked pearl buttons running up and down the middle of her flat little chest.

"Hind side foremost? Oh, I see! No, that's all right. If you have seven children you can't keep buttonin' and unbuttonin' 'em all the time—they have to do themselves. We're always buttoned up in front at our house. Mira's only three, but she's buttoned up in front, too."

Miranda said nothing as she closed the door, but her looks were at once equivalent to and more eloquent than words.

Rebecca stood perfectly still in the centre of the floor and looked about her. There was a square of oilcloth in front of each article of furniture and a drawn-in rug beside the single four poster, which was covered with a fringed white dimity counterpane.

Everything was as neat as wax, but the ceilings were much higher than Rebecca was accustomed to. It was a north room, and the window, which was long and narrow, looked out on the back buildings and the barn.

It was not the room, which was far more comfortable than Rebecca's own at the farm, nor the lack of view, nor yet the long journey, for she was not conscious of weariness; it was not the fear of a strange place, for she loved new places and courted new sensations; it was because of some curious blending of uncomprehended emotions that Rebecca stood her sunshade in the corner, tore off her best hat, flung it on the bureau with the porcupine quills on the under side, and stripping down the dimity spread, precipitated herself into the middle of the bed and pulled the counterpane over her head.

In a moment the door opened quickly. Knocking was a refinement quite unknown in Riverboro, and if it had been heard of would never have been wasted on a child.

Miss Miranda entered, and as her eye wandered about the vacant room, it fell upon a white tempestuous ocean of counterpane, an ocean breaking into strange movements of wave and crest and billow.

"Rebecca!"

The tone in which the word was voiced gave it all the effect of having been shouted from the housetops.

A dark ruffled head and two frightened eyes appeared above the dimity spread.

"What are you layin' on your good bed in the daytime for, messin' up the feathers, and dirtyin' the pillers with your dusty boots?"

Rebecca rose guiltily. There seemed no excuse to make. Her offense was beyond explanation or apology.

"I'm sorry, aunt Mirandy—something came over me; I don't know what."

"Well, if it comes over you very soon again we'll have to find out what it is. Spread your bed up smooth this minute, for 'Bijah Flagg's bringin' your trunk upstairs, and I wouldn't let him see such a cluttered-up room for anything; he'd tell it all over town."

When Mr. Cobb had put up his horses that night he carried a kitchen chair to the side of his wife, who was sitting on the back porch.

"I brought a little Randall girl down on the stage from Maplewood to-day, mother. She's kin to the Sawyer girls an' is goin' to live with 'em," he said, as he sat down and began to whittle. "She's that Aurelia's child, the one that ran away with Susan Randal's son just before we came here to live."

"How old a child?"

"Bout ten, or somewhere along there, an' small for her age; but land! she might be a hundred to hear her talk! She hep' me jumpin' tryin' to answer her! Of all the queer children I ever come across she's the queerest. She ain't no beauty—her face is all eyes; but if she ayer grows up to them eyes an' fills out a little she'll make folks stare. Land, mother! I wish't you could 'a' heard her talk."

"I don't see what she had to talk about, a child like that, to a stranger," replied Mrs. Cobb.

"Stranger or no stranger, 't wouldn't make no difference to her. She'd talk to a pump or a grindstun; she'd talk to herself ruther 'n keep still."

"What did she talk about?"

"Blamed if I can repeat any of it. She kep' me so surprised I didn't have my wits about me. She had a little pink sunshade—it kind o' looked like a doll's amberill, 'n' she clung to it like a doll's to a woolen stockin'. I advised her to open it up—the sun was so hot; but she said no, 't would fade, an' she tucked it under her dress. 'It's the dearest thing in life to me,' says she, 'but it's a dreadful care. Them's the very words, and it's all the words I remember. 'It's the dearest thing in life to me, but it's an awful care!'—here Mr. Cobb laughed aloud as he tipped his chair back against the side of the house. "There was another thing, but I can't get it right exactly. She was talkin' 'bout the circus parade an' the snake charmer in a gold chariot, an' says she, 'She was so beautiful beyond compare, Mr. Cobb, that it made you have lumps in your throat to look at her.' She'll be comin' over to see you, mother, an' you can size her up for yourself. I don't know how she'll git on with Mirandy Sawyer—poor little soul!"

This doubt was more or less openly expressed in Riverboro, which, however, had two opinions on the subject; one that it was a most generous thing in the Sawyer girls to take one of Aurelia's children to educate, the other that the education would be bought at a price wholly out of proportion to its intrinsic value.

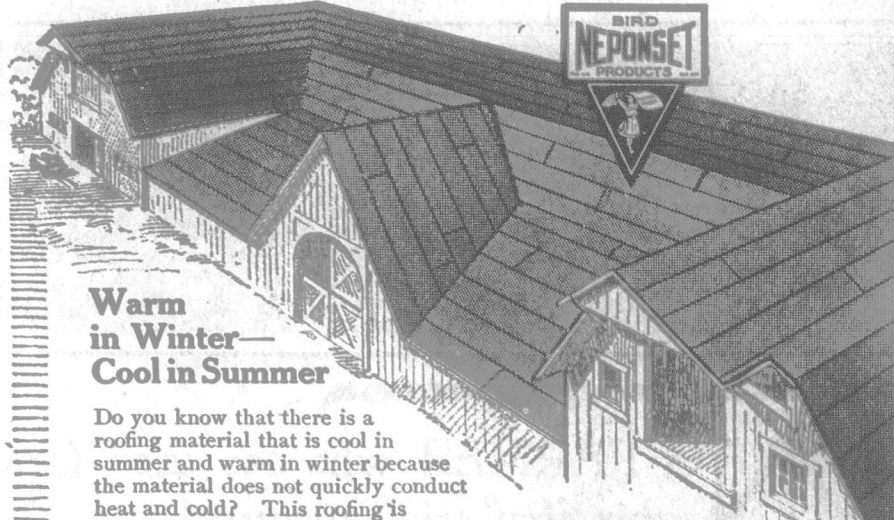
Rebecca's first letters to her mother would seem to indicate that she cordially coincided with the latter view of the situation.

(To be continued.)

Farmer Smith was a large exhibitor, and successful at the live-stock show, and a rousing cheer greeted him as he left the show-field for his hotel. "By Garge," thought the delighted farmer, "the people of this here town are a hearty lot! They knows how to appreciate a man wot does his dooty by the nation's live stock." He took off his hat to acknowledge the cheers, and found that some humorous friend had pinned to it a card inscribed: "Prize Ox."

Vicar—"The most wonderful organ I ever saw was the property of a private gentleman. It had nearly 100 stops."

Sexton—"Um! The most remarkable organ I ever 'eard is my old woman's tongue. It ain't got no stops at all."



Warm in Winter—Cool in Summer

Do you know that there is a roofing material that is cool in summer and warm in winter because the material does not quickly conduct heat and cold? This roofing is

NEPONSET PAROID ROOFING

No Metal to Attract Lightning or to Rust Out

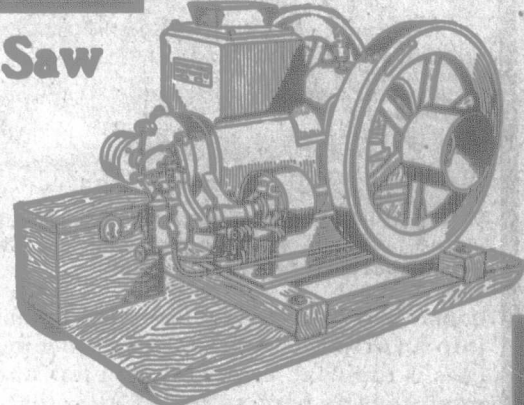
It costs less than metal roofing and wears longer than wooden shingles. Does not rattle and roar. Gives adequate fire protection. It is sold all over the world, to Governments, Railway Systems, farmers—wherever good roofs are needed. NEPONSET Paroid is a good investment, the same as good stock or good machinery. Write today for all the facts, the dealer's name and how

Blue Print Barn Plans—FREE

Designed especially for Canadian farmers, the greatest barn builders in the world. NEPONSET Roofings are made in Canada.

F. W. BIRD & SON, 449 Heintzman Building, Hamilton, Ont. Established 1795 Winnipeg St. John, N.B. Vancouver, B.C.

Pump Water, Saw Wood, Grind Grain, Churn



and do many other labor-saving tasks with the Barrie Engine. Will pay for itself quickly by saving valuable time for you. Strong, rugged construction. So simple a lad can run it. Sure in action. Economical in operation. Every farmer needs one.

Write for booklet.

AGENTS WANTED

THE CANADA PRODUCER & GAS ENGINE CO., LTD. BARRIE, ONTARIO, CANADA

Distributors: James Rae, Medicine Hat; Canada Machinery Agency, Montreal; McCusker Imp. Co., Regina; The Tudhope-Anderson Co., Ltd., Winnipeg, Calgary, Edmonton, Lethbridge, Saskatoon, Regina.

Barrie Engines

Stationary or Portable; 3 to 100 h.p., for gasoline, distillate, natural gas and producer gas. Make and break or jump spark ignition.

DAIRYMEN !!!

No doubt you know of the great Feeding value of

Sugar Beet Meal

which is rapidly growing in favor year by year.

When this meal is fed, results are easily seen in the milk-pail and it has been shown by actual test that returns are much better than from the same expenditure in any other ration.

This meal is ready for shipment now. As our supply is always exhausted early in the year, ask for prices and particulars at once and send in your order early.

DOMINION SUGAR CO., LTD., Wallaceburg, Ont.

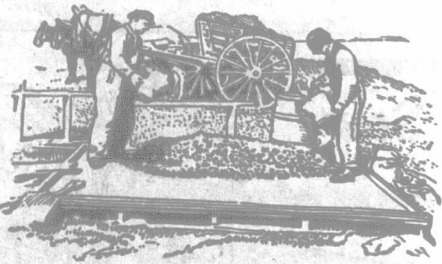
Why should I use W.C. Canada Cement?

NO FARMER who has used Canada Cement asks that question, because his first trial answered it to his complete satisfaction. Yet it is only natural that a farmer who has never used concrete—perhaps yourself—should require convincing reasons before deciding to use it himself.

If we knew where you lived, and knew your name and the names of your neighbors, we could tell you of many men in your own locality who would be glad to tell why they are using Canada Cement. Since that is impossible, this advertisement will try to give you an answer to your question.

“What is Concrete?”

CONCRETE is an artificial stone. It is a mixture of cement, sand and stone, or of cement and gravel, with water. The proportions of the various materials vary according to the purpose for which the



THE mixing and placing of concrete is simple, and is easily learned. No elaborate tools are needed.

concrete is to be used. This mixture hardens into an artificial stone. This hardening process is rapid at first, and in a few days the mixture is as hard as rock. After that, time and weather, instead of making it crumble, actually make it stronger.

Since stone, sand and gravel may be found on nearly every farm, the only cash outlay is that required for cement. Cement forms only a small part of finished concrete, and this expense is relatively small.

Concrete may be mixed and placed at any season of the year (in extremely cold weather certain precautions must be observed) by yourself and your regular help.



CONCRETE is the ideal material for barns and silos. Being fire, wind and weather proof, it protects the contents perfectly.

contained in the book which we will send you free.

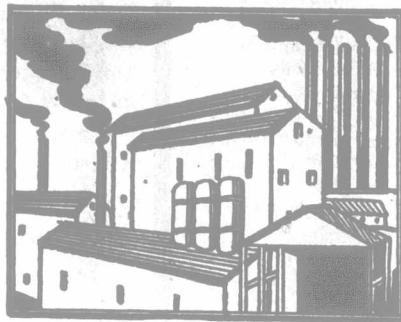
“What Can I Use Concrete For?”

CONCRETE can be used for all kinds of improvements. By having a small supply of cement on hand you will be able to turn many an otherwise idle afternoon to good account by putting a new step on the porch, or making a few fence posts,

or repairing an old foundation wall. It is a mistake to suppose that you have to be ready for a new barn or silo to be interested in concrete. Besides, it is just as well to become familiar with the use of concrete on small jobs, for then you will be better able to handle big jobs later on.

First cost is last cost when you build or concrete. Concrete improvements never need to be repaired. They are there to stay, and every dollar put into them adds several dollars to the cash value of your farm, and in many cases improvements of this everlasting material are actually cheaper in first cost than if they were built of wood. The cost of lumber is constantly increasing, and it will not be many years before its cost will be prohibitive.

YOU should use concrete, because by so doing you can make your farm more attractive, more convenient, more profitable and more valuable.



OUR mills are located all over Canada, so that no matter where you live you can get Canada Cement without paying high prices caused by long freight hauls.

“Why Should I Use Canada Cement?”

WE were the first cement company to investigate the farmer's needs, and to point out to the farmers of Canada how they could save money by using concrete. We conducted an exhaustive investigation into the subject, learned the difficulties they were likely to encounter, and how to overcome them, and published a book, “What the Farmer Can Do With Concrete,” containing all the information that the farmer could need.

We have made a special effort to give the farmers of Canada not only the best cement that can be

made, but also every possible assistance in the use of concrete. Our free Farmers' Information Bureau is at the service of every farmer in Canada. All questions concerning the use of concrete are answered at once, and the Bureau is always glad to receive suggestions from farmers who have discovered new uses for cement.

Last year we conducted a \$3,600 Cash Prize Contest, in which farmers in every Province participated. A second contest, in which three times as many prizes are offered, has been announced for this year.

You can easily see why a company that is devoting this much attention to the farmers' needs is in better position to give you—a farmer—satisfactory service. Canada Cement will always give you satisfactory results. Every bag and barrel must undergo the most rigid inspection before leaving the factory.

YOU should use “CANADA” Cement because its makers offer you not only the best cement made, but also careful, conscientious, personal assistance in making use of it.



THIS sign hangs in front of nearly all our dealers' stores. Let it guide you to the place where the best cement is sold.



THIS book of 160 pages, handsomely bound and illustrated with photographs, was the first, and is the best work describing the farmers' uses for concrete ever published. See free offer on this page.

IF you haven't received a copy of “What the Farmer Can Do With Concrete,” write for it at once. It will be sent absolutely free, without obligating you in any way. Use a post card or clip out the coupon. We will also send particulars of the 1912 Cash Prize Contest. Address:

Canada Cement Company LIMITED
Farmers' Information Bureau
550 Herald Bldg. MONTREAL, QUE.

CANADA CEMENT COMPANY, LTD.
550 Herald Building, Montreal

Please send me, free, your book: “What the Farmer Can Do With Concrete,” and full particulars of the 1912 Cash Prize Contest.

My name is.....

Address.....

Shire horse elongated windpipe. only small. Ans.—The result of distemper of two drops of potassium permanganate solution, as recommended. Mare rich and thrifty. dry hair, pimples. Ans.—The horse with the ginger, and of ginger, three times examined, a molar crown on food of regular ex-

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Ans.—Ge amount, t easy. On hens kept breeds do the gener Then ther in the nu be consid ter feedin full of ro access to all the feed the trough, a they go their mor eat, in t covering Feed gre clover, et grain diff gauge th feeding, scatter w ing and oats, mal each, or substitute plenty of hen cons grain per ounces entire y than thi and litt free run LYMPI

1. I h of lym any. 2. He scratches I drive l 3. He there an it be do 4. Wh horse in Ans.—1 drams B ginger, potash, Bathe th hot wat with car lar exer Give on caused 2. The swollen. is chron

QUESTIONS AND ANSWERS. Veterinary.

ENLARGED GLANDS.

Shire horse has a lump the size of an elongated egg just behind the jaw, above windpipe. Another horse has the same, only smaller. A. M. S.

Ans.—These are enlarged glands, probably resulting as a sequel to influenza or distemper. Get an ointment made of two drams each of iodine and iodide of potassium, mixed with two ounces vaseline, and rub a little well into the swollen glands once daily. Have patience, as reduction will be slow. V.

UNTHRIFTY MARE.

Mare rising four years old is unthrifty. She is in poor condition, with dry hair, and will eat her own droppings. L. V. B.

Ans.—This is chronic indigestion. Purge her with 8 drams aloes and 2 drams ginger, and follow up with 1 dram each of ginger, gentian, and nux vomica, three times daily. Have her mouth examined, and if there be any unshed molar crowns, have them removed. Feed on food of first-class quality, and give regular exercise. V.

Miscellaneous.

FEEDING HENS.

Having just started in poultry-raising, I should very much like to know what amount of feed 100 hens should have per day in summer, and also in winter. I know that to produce winter eggs, the feed should be somewhat heavier, but should like to know the correct amount. J. P.

Ans.—Getting right down to a correct amount, that is, an exact weight, is not easy. One must know the breed of hens kept, as the lighter, non-sitting breeds do not require as much feed as the general-purpose or heavier breeds. Then there is something in the pen, and in the number of eggs laid which must be considered. A good method in winter feeding is to keep a feed hopper full of rolled oats where the hens have access to it at all times. Give them all the sour milk they will drink, and feed them mixed grain whole, from a trough, all they will eat, just before they go to roost at night, scattering their morning feed, just what they will eat, in the litter the night before, and covering it up to give the hens exercise. Feed green feed—roots, cabbages, boiled clover, etc., at noon. The amounts of grain differ. You will soon be able to gauge the feed correctly. For summer feeding, give sour milk to drink, and scatter whole grain in the litter morning and evening. Wheat, barley, and oats, make a suitable mixture, one-third each, or buckwheat may be added or substituted for one of them. Give plenty of grit in winter. The average hen consumes about 60 to 70 lbs. of grain per year, which means about three ounces daily if equally divided for the entire year. Doubtless a little more than this would be required in winter, and little less in summer if the hens had free run during the warm weather.

LYMPHANGITIS, SCRATCHES, ETC.

1. I have a horse with a slight touch of lymphangitis. Give me a cure, if any.

2. He also has a severe case of scratches. Give me a remedy. When I drive him the swelling goes down.

3. He carries his tail to one side. Is there any way of preventing it? Can it be done by docking tail?

4. What is good to put a run-down horse in condition? P. E. R.

Ans.—1. Give a brisk purgative of 8 drams Barbadoes aloes and 2 drams ginger, followed by 2 drams nitrate of potash, three times daily for a week. Bathe the leg several times daily with hot water, and after bathing rub well with camphorated liniment. Give regular exercise, and feed lightly on grain. Give only good hay. The disease is caused by over-feeding during idleness.

2. The leg is described as being badly swollen. It is quite likely the trouble is chronic, often called grease. Horses

with beefy legs are predisposed to this disease, but it may occur in any horse. Purging, as recommended in question 1, will help. If the leg is raw, dress the raw surface once daily with butter of antimony, applied with a feather, for three applications. Then poultice for two days and nights with linseed meal and a little powdered charcoal, applied warm, and changed every four or five hours. Then dress twice or three times daily with a solution of corrosive sublimate 15 grains to a pint of water.

3. This is not a bad fault. Many horses do it when working. Docking might improve matters, but would not dock on this account alone.

4. See that his teeth are in good condition. Take 6 ounces each sulphate of iron, gentian, ginger, nux vomica, and bicarbonate of soda. Mix and make into 48 powders. Give him a purgative of 8 drams aloes and 2 drams ginger. Feed bran only until purgation commences. After the bowels regain their normal condition, give him a powder every night and morning.

Loss by Forest Fires.

"Forest fires in the United States have caused an average annual loss of about 70 human lives, the destruction of trees worth at the very least \$25,000,000, and the loss of stock, crops, buildings, and other improvements to the amount of many millions more. To these must be added enormous losses from the destruction of young tree growth, deterioration of the soil, damage to water courses and adjacent property by low water and flood, interruption of business, and depreciation of property. By inquiry into the causes and extent of such fires, we are able to realize in some degree the magnitude of their losses, even though their annual amount in dollars may not be apparent."—Bulletin 117 of the U. S. Forest Service.

GOSSIP.

IMPORTANT SALE OF SHORTHORNS.

J. M. Gardhouse, of Weston, Ont., has recently purchased the entire Shorthorn herd of A. Edward Meyer, Guelph. This is a very choice herd, both in breeding and individuality. It comprises such families as Village Blossoms, Clippers, Mysies, Bessies, Minas, Lovelys, Roan Ladys, Missies, Augustas, Mayflowers, and others. The stock bull, Scottish Hero (imp.) =55042= (90063), goes with the herd. He has undoubtedly proved himself one of the best getters in Canada. Mr. Gardhouse has displayed his usual enterprise and pluck in transferring this herd from Guelph to Weston.

J. B. Hogate, West Toronto, Ont., the well- and widely-known importer of high-class Percherons and Clydesdales, whose barns are at Weston, having sold nearly all his large importation of this summer, intimates in his new advertisement in this issue, that he has arranged to leave for France the last week in this month, and to arrive home with a large shipment about December 1st, and to exhibit at the Winter Fair at Guelph, a class of horses which will be up to the standard of his former importations, or better.

A certain bishop, an ardent advocate of teetotalism, found one of his flock, to whom he had preached for years, leaning in helpless drunkenness against a wall.

"Wilkins!" cried the bishop, inexpressibly shocked. "Oh, Wilkins! You in this state! I am sorry—I am sorry—I am sorry!"

As the bishop was passing by on the other side, Wilkins pulled himself together, and hiccupped after him: "Bishop—Bishop!"

The bishop hastened back in the hope of hearing a resolution of repentance. "Bishop, if you are really sorry, I forgive you!"

House-owner—"You didn't pay the rent last month?"

Tenant—"No. Well, I suppose you'll hold me to your agreement?"

Owner—"Agreement—what agreement?"

Tenant—"Why, when I rented, you said I must pay in advance or not at all."

He Bought Her a 1900 Washer ONE OF OUR READERS TELLS HOW HER HUSBAND LEARNED What Washday Means to a Woman

DEAR EDITOR:—Most men have no realization of what "wash-day" means to a woman. My husband is one of the best men that ever lived, but he laughed when I asked him one day to get me a 1900 Gravity Washer. I told him it would wash a tubful of clothes in six minutes. "Why, wife," said he, "a washing machine is a luxury. And besides, there's no better exercise than rubbing clothes on a washboard. It's good for the back. I think we had better wait 'til we get the farm paid for before fooling away money on such new-fangled things as washing machines."



John's "Busy Day"

I am not very strong, and the washing, with all my other work, finally got the better of me. I had quite a sick spell, and after things had gone at sixes and sevens for nearly two weeks, I suggested to John that he had better do the washing. We couldn't hire a girl for love or money, and the situation was desperate.

So one morning he started it. My, what a commotion there was in the kitchen! From my bedroom I occasionally caught glimpses of poor John struggling with that mountain of dirty clothes.

If ever a man had all the "exercise" he wanted, my husband was that man! Couldn't help feeling sorry for him, and yet it made me laugh, for I remembered how he made fun of me when I hinted so strongly for a 1900 Gravity Washer. When he finally got the clothes done and on the line, he was just about "all in."

That evening John came to my room, and said kind of sheepishly—"What's the name of the firm that makes those washers you were telling me

about?" I looked up their advertisement and found the following address:

I. J. MORRIS, Manager The 1900 Washer Company, 357 Yonge Street, TORONTO, CANADA

That's all he said, but he lost no time in sending for their Free Washer Book. The book came in due time and with it an offer to send the 1900 Gravity Washer on thirty days' free trial. My husband jumped at the chance to try the Washer without having to spend a cent. "We'll have four weeks' use of the Washer anyway, even if we don't decide to keep it," he said! So he told the Company to send on the Washer.

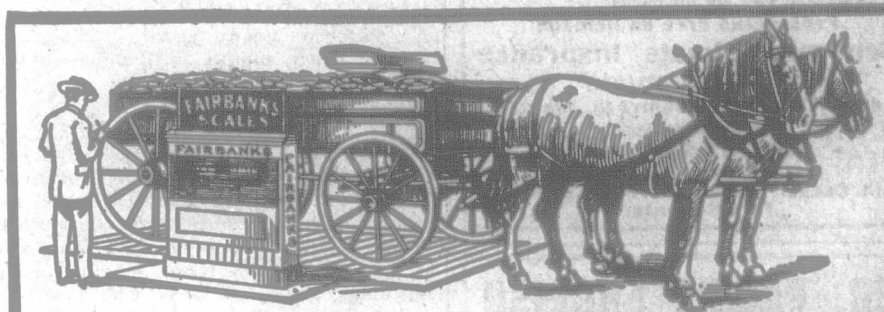
It was sent promptly, all charges paid, and the 1900 Washer Company offered to let us pay for it in little easy payments. The next week I felt well enough to use it. It is the nicest Washer I ever saw, and it almost runs itself. Takes only six minutes to wash a tubful, and the garments come out spotlessly clean.

We were all delighted with the Washer, and wrote to the Company that we would keep it and accept their easy payment terms of 50 cents a week. We paid for it without ever missing the money and wouldn't part with the Washer for five times its cost if we couldn't get another just like it.

If women knew what a wonderful help the 1900 Gravity Washer is, not one would be without it. It saves work and worry and doctor's bills. Takes away all the dread of wash-day. I feel like a different woman since I have quit the use of the washboard. And if any woman's husband objects to buying one of these labor-saving machines, take a hint from my experience. Let the man do just one big washing by hand-rubbing on the old-fashioned washboard, and he will be only too glad to get you a 1900 Gravity Washer.

Anybody can get one on free trial, by first writing for the Washer Book.

Excuse me for writing such a long letter, but I hope, Mr. Editor, you will print it for the benefit of the women readers of your valuable paper. Sincerely yours, MRS. J. H. SMITH.



Fairbanks Scales for Accurate Weighing

WHEN you weigh on a Fairbanks Scale you have that sense of security which comes from knowing that the weight is absolutely correct. Perfect material and simple construction make them last a lifetime. We can cite many instances where Fairbanks Scales installed sixty years ago are still weighing with accuracy. Our Catalog No. ZX 2824 fully describing these scales is yours for the asking.

The Canadian Fairbanks-Morse Co., Limited. 444 ST. JAMES STREET MONTREAL

CLYDESDALES OF CANADA'S STANDARD My second importation for 1912 has arrived, my third will be here in six weeks. In stallions or fillies I have the farmers' best at farmers' prices. Come and see me. GEO. A. BRODIE, Newmarket P. O. Newmarket or Stouffville Stns., G. T. R.; Gormley, C. N. R. L.-D. Phone from either

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

Stallions — CLYDESDALES — Fillies I have a big importation of Clyde stallions and fillies just landed; a lot that cannot be duplicated to-day in Scotland, and never was in Canada. Let me know your wants. ROBT. BETH, Bowmanville, Ont.

Shire Stallions and Mares, Shorthorn Cattle (both sexes); also Hampshire Swine. Prices reasonable. PORTER BROS., APPLEBY, ONT., Burlington Station. Phone.

Clydesdales and Percherons Stallions and fillies of either breed. Over forty head to select from. Draft horses in reality as well as in name. Highest types of the breeds. Come and see them. Terms and prices to suit. T. D. ELLIOTT & SON, BOLTON, ONTARIO

When Writing Advertisers, Please Mention "The Farmer's Advocate"

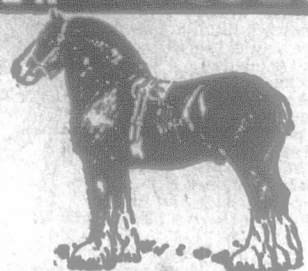
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 A Safe, Speedy and Positive Cure for
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 Bunches from Horses or Cattle.

As a Human Remedy for Rheumatism,
 Sprain, Sore Throat, etc., it is invaluable.
 Every bottle of Gaustic Balsam sold is
 warranted to give satisfaction. Price \$1.50
 per bottle. Sold by druggists, or sent by ex-
 press, charges paid, with full directions for
 its use. Send for descriptive circulars,
 testimonials, etc. Address
 The Lawrence-Williams Co., Toronto, Ont.

INSURE YOUR HORSES



Your Stallion is Worth Insuring Against Death

For an equal premium we grant a more liberal Policy than any other Company.
 We issue Policies covering all risks on animals. Horse shipments insured for 5, 10, 15, 20 or 30 days at very low premiums.
 Prospectus Free on Demand
General Animals Insurance Co. of Canada
 Head Office, 71A St. James St., Montreal
 OTTAWA BRANCH:
 106 York St., Ottawa
 TORONTO AGENCY:
 J.J.A. Caesar, Room No. 2, James Building, Toronto, Ontario


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

J. A. JOHNSTON & CO., Druggists,
 171 King St., E. TORONTO, ONT.

ABSORBINE



Removes Bursal Enlargements, Thickened, Swollen Tendons, Curbs, Filled Tendons, Soreness from any Bruise or Strain; Cures Spavin Lameness, Allays Pain. Does not blister, remove the hair or lay up the horse. \$2.00 a bottle, delivered. Book 1 E free.
ABSORBINE is a liniment for mankind. For Synovitis, Strains, Gouty or Rheumatic Deposits, Swollen, Painful Varicose Veins, Allays Pain. Will tell you more if you write. \$1 and \$3 per bottle at dealers or delivered. Manufactured only by **W. F. YOUNG, P.D.F., 258 Lyman Bldg., Montreal, Ca.**

"Another big advance in prices!"
 "Good gracious!" It's shoes this time!
 "I am you startled me. I was afraid it was..."

QUESTIONS AND ANSWERS.
 Veterinary.

COLT WITH COUGH.
 Colt is now 4½ months old. When a week old it commenced to cough and discharge from the nostrils. I expected it would get better during the summer, but it has not improved, and it is not thriving well.
 B. T.

Ans.—Keep in comfortable stable, except on fine days. Get a liniment made of equal parts of oil of turpentine, raw linseed oil, and liquor of ammonia. Rub the throat twice daily with this until it commences to blister, then apply vaseline daily. Give it 10 grains chlorate of potassium, and 5 grains quinine, twice daily, either in a little water as a drench, or mixed with chopped oats.
 V.

ABORTION.
 Mare was bred on May 20th. She was fed on musty hay for a few days, but with this exception her feed was of good quality. She aborted October 12th. Would it be wise to breed her again this fall, or wait until spring? Will she be liable to abort again?
 J. J. McL.

Ans.—The musty hay may have caused the trouble, or it may have been due to some unknown accident. It will be wise to breed her again in a couple of months, or even less. Any mare is liable to abort, and especially one that has already aborted. At the same time, it is probable she will carry to full term unless she meets with an accident.
 V.

LUMPS ON LEGS.
 1. Horse has a hard lump on the inside and towards the back of the knee. He goes lame when he trots.
 2. He has another swelling on hind fetlock joint which does not cause lameness.
 W. H. E.

Ans.—1 and 2. Get a blister made of 2 drams each of biniodide of mercury and cantharides, mixed with 2 ounces vaseline. Clip the hair off the parts. Tie so that he cannot bite them. Rub well with the blister once daily for two days, on the third day apply sweet oil and let his head down. Oil every day until the hair has grown again. Repeat the blister every month until lameness disappears. It may be that the lumps cannot be reduced.
 V.


ECZEMA.
 Three-year-old colt has broken out nearly all over his body. He is very itchy, especially when warmed up. He tosses his head, runs sideways, etc., when in harness. When loose, he rubs against buildings, etc. He is so bad I am not able to work him.
 W. B.

Ans.—Clip him, and give the whole body a thorough washing with a warm solution of corrosive sublimate, 1 dram of the drug to a gallon of warm water. After washing, rub well until dry. Then wash every second day until itchiness ceases with a 4-per-cent. solution of creolin, that is 1 part of the drug to 24 parts of warm water. In the meantime give him 1 ounce Fowler's Solution of Arsenic twice daily for 10 days.
 V.

INDIGESTION.
 Horse shows the following symptoms weekly. He suddenly becomes uneasy, lies down, rolls, gets up, paws, lies down again, etc. The attacks last about an hour. His hind legs are swollen. He is 11 years old.
 A. M.

Ans.—These frequent attacks of indigestion are due to a weakness of the digestive glands, or poorly-masticated food, or both. Have his teeth dressed. Purge him with 8 drams aloes and 2 drams ginger. Mix equal parts of sulphate of iron, gentian, ginger, and nuxvomica, and give him a tablespoonful three times daily. Feed on food of first-class quality. Feed a little at a time and often, and as digestion improves increase the quantity and lengthen periods between meals until he is being fed only three times daily. When suffering from an attack, give him ½ ounce fluid extract of belladonna, 2 ounces sweet spirit of nitre, and 1 ounce laudanum, in a pint of cold water as a drench. Repeat the drench every two hours as long as necessary.
 V.

1,000 PERCHERONS
 (Stallions and Mares)
WANTED IN ONTARIO



I HAVE sold nearly all I brought over this summer, and am leaving for France the 22nd of this month for another shipment of Percherons, stallions and mares. They will arrive at my barn, **Weston, Ontario**, about Dec. 1st. Will have an exhibit at Guelph Fat Stock Show. Price will be in reach of everyone that wants a good stallion or a big brood mare, and terms to suit. Write for particulars, or better come. No trouble to show what I have. Visitors always welcome. Address:

J. B. HOGATE
 West Toronto, Ontario
 Barns at Weston, Ont.

IMP. CLYDESDALES AND PERCHERONS.

I have 65 head of Clydesdales and Percherons in my barns to choose from, a great many of them are prizewinners in Canada, Scotland and France, and other extra show horses that have not yet been shown. I have never had so many good horses at one time before. Intending purchasers would do well to see through my barns before buying. My horses are all for sale and at right prices.

MARKHAM P. O., G. T. R., and LOCUST HILL, C. P. R., three miles.
 Long-distance Phone. **T. H. HASSARD**

Union Stock Yards of Toronto, Ltd.

HORSE DEPARTMENT
 Auction Sale Every Wednesday Private Sales Every Day
 Railroad Loading Facilities at Barn Doors

W. W. SUTHERLAND, In Office. J. H. ASHCRAFT, JR., Manager.

Just Arrived—Clydesdale Stallions and Fillies

Bigger and better than ever before is our 1912 importation just arrived. Stallions with size, character, quality and breeding. Fillies of high-class breeding and quality for show or breeding purposes. Come and see them. Terms and prices right. **JOHN A. SOGAS & SON, Queensville P.O. and Sta., on Toronto to Sutton Electric Line L.-D. Phone.**

PERCHERON STALLIONS—Our 1912 importation of Percheron stallions supply the trade for ideal draft character, fishy quality of underpinning, stylish tops and faultless moving. Let us know your wants. Any terms arranged.
EAD & PORTER, Simcoe, Ontario

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., Gatineau Pt. Que., near Ottawa.

ORMSBY GRANGE STOCK FARM, ORMSTOWN, P. QUE.
 My fall importation (20 head) arrived, ex. S.S. Grampian, on Oct. 6, all in the very pink of condition. They were personally selected and well bought, and are offered along with five good ones on hand, home-bred and imported, and at very reasonable prices. Don't forget that they are becoming scarce good breeding mares, don't miss this lot.
D. MCEACHRAN.

MT. VICTORIA STOCK FARM, Hudson Heights, P. Q.
 We have some very choice young stock for sale, both sexes. Clydesdales and Hackneys from champion sires and well bred dams, at reasonable prices.
T. B. MACAULAY, Prop. E. WATSON, Mgr

QUALITY AND SIZE IN CLYDESDALES
 For the best breed produces in the combination of size, character, quality, breeding and action, see my 1912 importation of Clyde Stallions and Fillies. Prices and terms unequalled.
JAMES TORRANCE, MARKHAM, Locust Hill, C. P. R. F. O. and Sta., G. T. R. L. D. Phone

Orchard-Grove Herefords
 I have lately made a big importation of Bulls, Heifers and Mature Cows from the leading herds of Illinois. In my herd you now have 25 Bulls to select from; a big range of Heifers and Cows. High-class show and breeding stock a specialty.
L. O. CLIFFORD, Oshawa, Ontario, G.T.R. and C.N.R.

Shorthorns
 of breeding and quality—Our offering this year in young bulls and heifers, out of Scotch cow, and sired by our great Mildred Royal, are put up on show lines, and strictly first-class.
GEO. GIER & SON, Grand Valley, Ont., P.O. and Sta.

Scotch Shorthorns
 FOR SALE. One promising 12 months imported Bull Calf, a Mare, Flora, recently imported; 12 bull calves from 6 to 11 months old, all by imported Sire, some good ones among these; also 30 choice cows and heifers in calf, at reasonable prices.
 Farm ½-mile from Burlington, on J.C. Station. **MITCHELL BROS., Burlington, Ont.**

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 If you our "Pat tor" a tr Europe f the great two me men an for fellin

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NOTICE

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Will meet i Belgium, an gians, French shipping, bar perence; be

Messrs
COURT L

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 Draft horse buyers should place before they have y references fr

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1854 Map

Have some old from co in call to

Grand youn Sandy Knor

A. W. SM
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OAKLA
 Herd head in his prime, straight line the choice 1 bulls, one ye JOHN ELD

SPRING
 Herd head Ringleader. The female Young stock prices. Tel KYLE BE

"The M
 Present bulls, heifers; etc. Ins Phone J. T. GIB

Fletche
 Shorthorns headed by t Royal Bruc Choice you GEO. D. F

Shortl
 large cows and heavy r STEWAE

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What claimed t from sho taken out

"Sure, came ove like to u sint it o job getti ma'am."

Bell— straight

Nell—

Bell— at my ne

Nell—

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STUMP EXTRACTOR

If you are troubled with stumps, give our "Patent Samson Stump Extractor" a trial. It has now been in use in Europe for the past three years with the greatest success.

WRITE US FOR DETAILS.

The Canadian Boving Co., Ltd. 164 Bay Street, TORONTO

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 pedigrees. Many years experience; best references. Correspondence solicited.

Messrs. Hickman & Scruby COURT LODGE, EGERTON, KENT, ENG. EXPORTERS OF

Live Stock of all Descriptions Draft horses of all breeds a specialty. Intending buyers should write us for particulars, as we can place before them the most attractive proposition they have yet experienced.

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

Walter Hall, Washington, Ont

1854 Maple Lodge Stock Farm 1912

Have some SHORTHORN HEIFERS two years old from cows giving 50 pounds milk per day, and in calf to my stock bull, Senator Lavender.

Grand young LEICESTERS from imp. Wooler of Sandy Knowe, champion at Toronto, and imp. Royal Connaught.

A. W. SMITH, MAPLE LODGE, ONTARIO Lucan Crossing, G. T. Ry., one mile.

OAKLAND 50 SHORTHORNS

Herd header for sale, Scotch Grey = 72692—, still in his prime, a beautiful roan and a grand handler, straight lined, quiet, active and alright, and one of the choice bulls in Ontario; also five other good bulls, one year and over.

JOHN ELDER & SON, HENSALL, ONTARIO

SPRING VALLEY SHORTHORNS

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

KYLE BROS. - - Ayr, Ontario

"The Manor" Scotch Shorthorns

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

J. T. GIBSON, DENFIELD, ONTARIO

Fletcher's Shorthorns Our herd of Pure Scotch Shorthorns (Imp.) or direct from imported stock, is headed by the grandly-bred Bruce Mayflower bull, Royal Bruce (Imp.) = 55038 = (89909) 273853. Choice young stock for sale.

GEO. D. FLETCHER, R.R. No. 2, Erin, Ont.

Shorthorns for Sale—Three strong-boned bulls of servicable age, two large cows with calves by side; choicest breeding and heavy milking strain.

STEWART M. GRAHAM, Port Perry, Ont.

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

ISRAEL GROFF, Elmira, Ont.

"What does this mean, Bridget?" exclaimed the lady of the house, returning from shopping. "The telephone's been taken out."

"Sure, ma'am, the girl cross the way came over and said her missus would like to use it for a little while, and I sint it over to her; but I had a terrible job gettin' it unscrewed from the wall, ma'am."

Bell—"That man over there is staring straight at my nose."

Nell—"Probably he's a reporter."

Bell—"And why should a reporter stare at my nose?"

Nell—"They are supposed to keep their eyes on everything that turns up, aren't they?"

GOSSIP.

Fairview herd of Berkshires, advertised in this issue, the property of J. S. Cowan, Donegal, Perth County, Ont., is still to the front, headed by the unbeaten boar, Cherry Lane Dick, winner of the championship over all ages at the Canadian National in 1911 and 1912, described as of big size, and lengthy, weighing over 800 lbs., and of ideal bacon type, as also are the breeding sows. For sale, at present, are boars seven months old, also a few young sows, and pigs from eight weeks up. Mr. Cowan reports the present year the best in business he has had, and gives "The Farmer's Advocate" credit for being the best advertising medium.

The United States Department of Agriculture will soon issue an interesting publication entitled, "Some Types of Children's Garden Work" in the Public Schools of the larger cities, from Pittsburg to the Pacific Coast. The bulletin is number 252, Office of Experiment Station. The introduction says:

"School-garden work has become so general within the past five years, and literature relative to the same so abundant, that facts of the nature furnished in earlier reports would be superfluous, viz., what to plant, the distance apart of the rows, and of the seeds in the rows, and like detailed information. Teachers need now to view the garden from a higher plane—its relation to daily living, its effect upon character development, its place in the curriculum, and its relation to other subjects in the course of study. Therefore, in making this report, such facts have taken a more prominent place than the ones that may be obtained from text-books.

The individual-plot system, and the young gardener owner of all he raises, is the system in vogue east of the Rockies. West of the Rockies, almost invariably the commercial side holds a place of importance equal with the cultivation, but the products are sold for the benefit of the school. Children are taught business methods through the sale.

The system of teaching agriculture used, is always based on the best local practice, and is one that children can follow intelligently, but the products are always the property of the school.

"Nowhere is there systematized garden instruction in the city graded schools. In a majority of places it is still a matter of choice with the principals. Until the necessity of a specialized instructor is felt, the work will not be systematized. The educational value of garden instruction is too great to allow it to be a matter of choice with the teachers. There seems to be a fear among educators in official positions of burdening teachers and the course of study with new subjects.

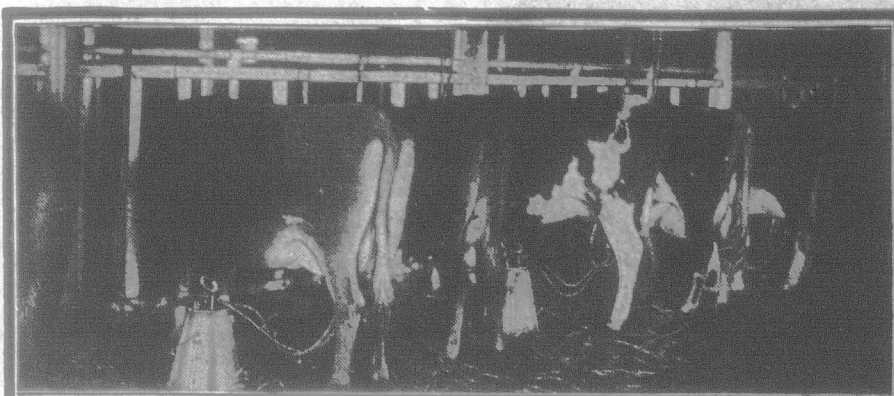
"As our modes of living improve, the demand comes to the schools for practical methods dealing with the question of right living. It is safe to predict that popular demand will cause the replacement of some of our antiquated methods and subjects by systematized science lessons that will teach people how to lead more wholesome lives."

TRADE TOPIC.

A Greener gun is a gilt-edged investment. Not only do you derive life-long pleasure from the use of the world's best gun, but you have the satisfaction of knowing that future generations may cherish it, in all probability without spending a cent for repairs. Cheap guns are, in the long run, dear guns, as you may easily double their cost in repairs, apart from which you much prefer to own the best. The Greener gun has an experience of over 100 years. Each gun is constructed separately, in a most perfectly-equipped factory. It is said no other gun can equal it for hard hitting and far shooting. The advertisement of this well-known firm appeared in our issue of October 24th, and will appear again November 28th. Look it up. Write W. W. Greener, Gun, Rifle, and Cartridge-maker, St. Mary's Square, Birmingham, England.

Mary had a little lamb, She bought the critter cheap, In five years she owned a farm, Just through raising sheep.

—Shepherd's Journal.



One Man and a Boy Do the Work of Four Good Men

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

Just think of what that means. Think of the relief from the long hours of awful drudgery twice a day. Think of the freedom from worry and unreliable "hired help". Think of the extra profit—at least \$15 more per cow each year—you can make with a Sharples Milker. Think of the opportunity you have of doubling your herd, thus more than doubling your dairy profits without increasing the labor expense a cent.

These are but a few of the many advantages of

The Sharples Mechanical Milker

The one recognized successful milker on the market today. Used in the world's finest and largest dairies. Over five hundred of these machines in regular use.

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

One secret of the success of The Sharples Milker is

"The Patented Teat Cup With the Upward Squeeze"

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

A Postal Brings Catalog M

THE SHARPLES SEPARATOR CO. WEST CHESTER, PA. BRANCHES: Toronto, Can.; Winnipeg, Man.



TRADE MARK

The National Stock Food Company

GENTLEMEN:—I am so pleased to write you, with reference to a very bad colic case I had. Although the horse was almost dead and hopeless I drenched him with two bottles of your "ANTI-COLIC"; he made a fine and quick recovery. I obtained as good results as this one with any of your other preparations I used. Yours truly, O. Yelle.

The National Stock Food Co., whose products are famed all over the Dominion, always carry a stock of pure Veterinaries' medicines. Our expert Veterinarians are at your disposal for free consultation. Just write and give all details possible on the disease your animal is affected with, when you will receive the answer strictly free of charge. Write at once.

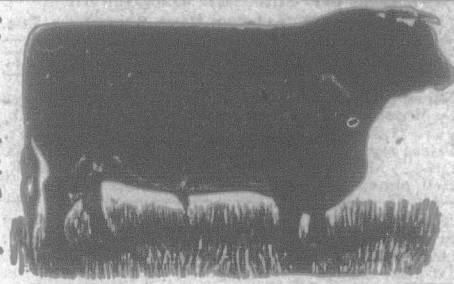
The National Stock Food Company, Ottawa, Ont. NOTE.—For shanty horses, special medicines. Write before you go.

Present Special Offering

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

At moderate prices, including Marr Minnie, Emma, Cruickbank Nonpareil, Duchess of Glosters, Village Girl, Bridesmaid, Butterfly, Kinellar Claret, Miss Ramsdens, Crimson Flowers; also a number of the grand old milking tribe, which have been famous in the showing.

ARTHUR J. HOWDEN & CO. Columbus, Ontario



SHORTHORNS

Have now a choice lot of young bulls to offer; also with something nice in heifers. Catalogue of herd and list of young animals on application.

H. CARGILL & SON, Proprietors, Cargill, Ont., Bruce Co. JOHN CLANCY, Manager



I Have SHORTHORN Bulls and Heifers, SHROPSHIRE and COTSWOLD Rams and Ewes, CLYDESDALE Fillies and Colts

that are as good as I have ever had, and that I will sell for prices within the reach of all. We have been in the business 75 years, always in the front rank, and propose to keep that position. You cannot afford to buy without writing us for prices. ROBERT MILLER, STOUFFVILLE, ONTARIO

Scotch Shorthorns

—Present offering: Three young bulls of servicable age, from imp. sires and dams. A few very good bull calves. Cows and heifers bred or with calves at foot.

Burlington Jct. Sta., G. T. R. W. G. PETTIT & SONS, Freeman, Ont.

1861 Irvine-Side Shorthorns 1912

Offering for sale young bulls and heifers that are the result of over 50 years successful breeding. Pure Scotch, and carrying the best blood of the breed. Few good Oxford Down rams. John Watt & Son, Salem P. O., Ont. Elora Station, G. T. and C. P. R.

SALEM SHORTHORNS

Headed by Gainford Marquis, undefeated bull of three countries. See our show herd at the leading fair, starting at Winnipeg. J. A. WATT, SALEM. ELORA STA., G. T. and C. P. R.

After all there is just one best range on the market—it is called

McClary's Pandora Range



"Clay Gates"

Selected by Men Who Know
CLAY Steel Farm Gates are in use at the Ontario Agricultural College, Guelph; Macdonald College, Quebec; Experimental Farm, Ottawa, and on the farms of nearly all the leading stock and dairy farmers of Ontario and Eastern Canada, because they are

THE BEST FARM GATES made. They raise (as shown in the illustration), by easy adjustment, to lift over snow in winter, or to let small stock through. They won't bend, sag, burn, blow down, or rot. Clay Gates last a lifetime, and are thoroughly guaranteed. Sent for 60 days' Free Trial. Try them before buying them. 20,000 gates sold last year on these terms. Send for illustrated price list.

CANADIAN GATE CO., LTD.
 34 Morris St., Guelph, Ont.

CHERRYBANK AYRSHIRES

We are offering 5 young bulls fit for service, from dams of 40 lbs. to 50 lbs. daily of 4% milk. Anything else in the herd priced reasonable. This herd won over \$1,200 prize money in 1911.
 P. D. McArthur, North Georgetown, Que.

AYRSHIRES FOR SALE

Seven bulls and a few heifers of different ages, sired by Woodroffe Comrade, whose first heifer in milk, gave 11,322 lbs. milk, 480 lbs. butterfat in one year. Prices right. H. C. HAMILL, BOX GROVE P. O. ONT., Markham, G. T. R.; Locust Hill, C. P. R. Bell phone connection from Markham.

STOCKWOOD AYRSHIRES—This herd is now headed by White Hill Free Trader (Imp.) No. 33273, championship bull at Sherbrooke; also headed the 1st-prize aged herd. All ages for sale. Satisfaction guaranteed. D. M. Watt, St. Louis Station, Que. Telephone in house.

"Would you mind making a noise like a frog, uncle?"
 "And why," said the uncle, with an amused smile, "why, Tommy, do you desire me to make a noise like a frog?"
 "Because," replied the urchin, "whenever I ask daddy to buy me anything, he always says: 'Wait till your uncle croaks.'"

You Pay for This Lamp
 many times in ruined eyesight, annoyances of odor and cleaning of greasy lamps. May as well buy it and own it. Simple, safe and cheap—generates its own gas giving 200 candle power of pure white brilliant light for less than 1/2 cent per hour. Color post card free. Write to day for circular A—and free post card.

RICE-KNIGHT Ltd.
 Toronto or Regina

GOSSIP.

A short call by "The Farmer's Advocate" representative, at Sprucedale Farm, a little west of St. Thomas, Ont., owned by A. Watson & Sons, found their herd of thirty-five Holsteins in nice condition, and paying profitable dividends. As an indication of the quality of the Holsteins that are the backbone of this herd, it is only necessary to say that last year, the only time exhibited, out of twelve entries, they were awarded ten firsts and two seconds, and the stock bull, King Peter Teake, has been exhibited three times, and won three firsts. Parties looking for bargains in Holstein females should visit this herd. With thirty-five head to select from, and over a dozen yearling heifers among them, they present an alluring proposition, especially when the price asked is taken into consideration. Mr. Watson is also offering a number of young Yorkshire sows, along about five months of age, that look like attractive buying. Write him your wants.

HOLSTEINS, TAMWORTHS, AND COTSWOLDS.

R. O. Morrow & Son, of Hilton, Ont., four miles north of Brighton Station, G. T. R. and C. N. O., whose advertisement has been running regularly in these columns for many years, and whose reliability has been proven by as many years' dealing with Canadian breeders all over the country, as well as across the lines, and as far away as South Africa, are still doing business at the old stand, and just now are in a particularly favorable position to supply the trade in their lines of pure-bred stock-breeding, with as nice a lot of young things as ever graced the stables and pastured off this noted farm. The Holstein herd is now fifty strong, and contains many very choice animals whose ability to produce the gold-making material is of large calibre. Although no official testing has been done, in private tests there are three-year-olds that have produced 10,000 lbs. in eight months, and many of the mature cows are good for over 70 lbs. a day, and heifers 50 lbs. a day, on pasture alone, and twice-a-day milking. As a show herd, in local competition, which is always strong in that section, they have always been at the top. Last year at Colborne, they won the T. Eaton Co.'s special for best dairy herd of any breed, and this year at the same show, the Robert Simpson Co.'s special for same class. In service at the head of the herd is the well-bred and successful-breeding bull, Riverside Johanna Wayne, a son of Sir Pietertje Posch De Boer, whose dam and sire's dam have records that average over 25 1/2 lbs., and his dam and grandam have records that average 19 lbs. Sired by him, and out of big-producing and show-ring cows, for sale, are about fifteen heifers that are a most alluring proposition for anyone wanting Holstein heifers. The herd is too large, and must be reduced. Nothing need be said as to the quality of the Tamworths, their many years' successful competition at the leading shows, including Toronto and Ottawa, place them among the best in the country. Several of the dozen or more sows in breeding are daughters and granddaughters of such boars as Imp. Knowle King David, and out of Imp. Cholderton May and her daughters, which is an infusion of new blood, badly needed in Canadian Tamworths. For sale, are young things of both sexes and any desired age. In the last year Mr. Morrow has shipped Tamworths all over the country, and as far away as South Africa. In Cotswolds, for sale, are about twenty lambs of both sexes, that are well grown and well covered. Write Mr. Morrow your wants.

"I tell you I won't have this room," protested the old lady to the bellboy who was conducting her. "I ain't a-goin' to pay my good money for a pigsty with a measly little foldin'-bed in it. If you think that jest because I'm from the country—"
 Profoundly disgusted, the boy cut her short.
 "Get in, mum. Get in," he ordered.
 "This ain't yer room, this is the elevator."

HAPPY THOUGHT

Give Your Stove the "Frying Test"

PROBABLY you think frying such a simple form of cooking that all stoves should be equal in this respect. That is just where you are mistaken. The "frying test" proves conclusively a stove's real worth to you.

Frying with the "Happy Thought" shows you this. A small fire does more and better work than a big fire does in other stoves—gives you more heat, right at the lid opening. Besides, the moment you lift the lid and put the frying pan in place, you get the very maximum of heat that the fire can produce—just where you want it. When you replace the lid, the heat goes straight to the oven and concentrates there with all its intensity.

No other stove is designed to do this so effectually. That is one reason why the "Happy Thought" has a superior value for you.

HAPPY THOUGHT RANGES.
 Are sold in your locality. Ask your hardwareman
THE WILLIAM BUCK STOVE CO., LIMITED, BRANTFORD, ONT.

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GLENHURST AYRSHIRES
 Established over 50 years ago, and ever since kept up to a high standard. We can supply females of all ages and young bulls, the result of a lifetime's intelligent breeding: 45 head to select from. Let me know your wants.
JAMES BENNING, Williamstown P.O. Summerstown Sta., Glengarry

Ayrshires and Yorkshires—We now offer at bargain bull calves dropped in July, 1912. All bred from (imp.) sire and from either imported or home-bred. Some choice February pigs; also young pigs.
Alex. Hume & Co., Menie, Ont.

City View Ayrshires—Bonnie's Messenger 32762 at head of herd, both dam and gr. dam R. O. P. cows. One yearling bull and calves of either sex. Will sell a few cows.
JAMES BEGG, R. R. No. 1 St. Thomas
 One and a half miles from all stations.

Hillcrest Ayrshires—At head of herd is Ivanhoe of Tanglewild, a son of the champion Ayrshire cow, Primrose of Tanglewild, R. O. P. test 16,195 lbs. milk and 625.00 lbs. fat; 60 head to select from. Inspection invited.
F. H. HARRIS, Mt. Elgin, Ont.

STONEHOUSE AYRSHIRES
 Are coming to the front wherever shown. Look out for this at the leading exhibitions. Some choice young bulls for sale, as well as cows and heifers.
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THIS OFFER IS NO CATCH. It is a solid proposition to send, on trial, fully guaranteed, a new, well made, easy running separator for \$15.95. Skims hot or cold milk; making heavy or light cream. Designed especially for small dairies, hotels and private families. Different from this picture, which illustrates our large capacity machines. The bowl is a sanitary marvel, easily cleaned. Shipments made promptly from WINNIPEG, MAN., TORONTO, ONT., and ST. JOHN, N. B. Whether your dairy is large or small, write us and obtain our handsome free catalog. Address: AMERICAN SEPARATOR CO. Box 1200 N.Y. BAINBRIDGE, N.Y.

HOLSTEINS



We are now offering some young bulls from 4 to 10 months old, got by the great sire, Ida's Paul Veeman, which has daughters with 20 lbs. of butter in 7 days as 2-year-olds; also some cows and heifers freshening in Oct., served by Veeman. Write or come and visit the herd for particulars.

H. G. HOLTSBY, Belmont, Ont.

PURE-BRED REGISTERED Holstein Cattle

The most profitable dairy breed, greatest in size, milk, butter-fat and in vitality. Send for FREE illustrated descriptive booklets. HOLSTEIN - FRIESIAN ASSOCIATION, F. L. Houghton, Sec., Box 127, Battleboro, Vt.

The Maples Holstein Herd

offers a splendid lot of bull calves, all sired by Prince Aaggie Mechthilde and all from record of merit dams. For pedigrees and prices write

WALBURN RIVERS,
Felden, Ontario

Maple Grove Holsteins Herd headed by King Lyons Hengerveld, whose 17 near female ancestors have butter records from 30.50 to 34.75 lbs. in 7 days, including world's records for 7 and 30 days.

H. BOLLERT, R. R. No. 3, Tavistock, Ont.

BALAPHORENE A. J. C. C. JERSEYS

Present offering: Cows from three to seven years old; calves from two to ten months old; either sex.

JOSEPH S. ABROOK, HAVELOCK, ONT.

FOR SALE—Two thoroughbred Jersey bulls; grandson eight months and son four months old, off Clara Minto 1886. The cow that was shown with her record in The Advocate a few weeks ago. L. Rice, Cassel, Ont.

A youth of about eighteen was walking along the promenade leading to the pier, when all of a sudden he slipped and fell into the water, and, finding he couldn't swim, he shouted at the top of his voice: "Help, help! I can't swim!" An old gentleman standing close by remarked: "Now's your time to learn, young fellow."

SUFFERED WITH LAME BACK WAS NOT ABLE TO STRAIGHTEN UP

Mr. C. Grace, Hamilton, Ont., writes: "I was suffering with lame back, and for two weeks was not able to straighten up to walk, and hardly able to sit down for the pains in my back, hips and legs. I had used different kinds of pills, plasters, liniments and medicines, without any relief. One day there was a B.B.B. book left at our door, and I read about Doan's Kidney Pills, and I decided to try them. Before I had half a box used I felt a great deal better, and by the time I had used two boxes I was cured. I have no hesitation in recommending Doan's Kidney Pills to all suffering as I did, or from any illness arising from diseased kidneys.

Price 50 cents per box, or 3 boxes for \$1.25, at all dealers, or will be mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

When ordering direct, specify "Doan's."

QUESTIONS AND ANSWERS. Miscellaneous.

TREES FROM SPROUTS — ANTS ON TREES—SPRAYING POTATOES—SEEDING ALFALFA AND ALSIKE.

1. Have some young fruit trees which were badly injured last summer with sun-scald, and this season they sprouted nicely just below the injury. Would you advise letting the young sprouts grow, or replant with new trees? When would you advise cutting off the old trunk, and how close to the green wood?

2. Young trees are badly infested with ants and spiders. The leaves curl up, making a covering for them, and the spiders make nests in them. What can I do to rid the trees of them?

3. I sprayed my potatoes three times, at intervals of from two to three weeks, beginning about the middle of July, with the Bordeaux mixture, and find, on digging them, quite a number are black on sides and ends, as if infected with blight. What was wrong that the spraying did not prevent the blight? Did I not spray soon enough, or often enough? I also put in one-half pound Paris green for potato beetle, but didn't kill a bug. Sprayer holds twenty gallons. How much poison would it take in the twenty gallons to kill the bugs?

4. Have a young meadow seeded with timothy, red clover, and about one-third alfalfa, and I would like to have it all seeded to alfalfa when the red clover dies. Would you advise sowing more seed this fall late, or early next spring, or would it be better to wait until next fall? Would the red clover have a tendency to kill out the new alfalfa next summer?

5. How much alsike clover would you advise sowing with timothy? D. F.

Ans.—1. Sometimes sprouts growing from the root of a tree which has succumbed from sun-scald or other causes, grow rapidly and make very satisfactory trees. Much depends upon their location and their growth as to whether it is better to leave them or replant. It is usually safer to replant the tree, as the sprouts may originate below the place where the tree was budded or grafted, and if so the trees are likely to be useless. Examine them closely, and if assured that the sprout to be left is above the graft, and it is very healthy and growing well, it might be left. Cut the dead tree away close to where the sprout appears, and paint over the cut surface to keep out water. Leave one sprout only. Good, thrifty, young trees are much more satisfactory than poor, sickly sprouts.

2. It is not likely that the ants are directly responsible for the curling of the leaves. This is likely due to aphids, or plant lice, with which ants have a peculiar relationship. Many believe the ants do harm on the trees, but such is not the case. The ants follow the aphids because they are very fond of the sweet honey-dew which is emitted by the plant-lice, and some kinds of ants actually colonize plant-lice. When ants are seen running on the trees, a search should be made for their nest, which is likely to be found in the ground close to the tree. When the nest is found, pour one or two tablespoonfuls of carbon bisulphide into it and close the opening. The fumes of liquid will quickly penetrate all parts of the nest, killing the larvae as well as the ants. Care must be taken that no light is brought near the material, as it is very inflammable. Large ant nests at the roots of a young tree may so injure the tree as to cause its death by causing the land to dry out. The spiders do no particular harm.

3. This has been a very wet summer, and one in which blight has been very prevalent. Spraying should commence when the plants are about five inches high, and in a summer like the past, more than three sprayings are necessary to keep the plants fairly well covered with the Bordeaux. Three weeks was too long to leave them without spraying, and there is a possibility that you did not commence soon enough. The more frequent the rains the oftener spraying is necessary. The best guide is to watch the plants, and as soon as

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Brampton Jerseys

Bulls fit for service are getting scarce. Just a few left. Yearling heifers in calf are in great demand; 6 now being bred. Brampton Stockwell the sire. A few good cows and some calves for sale. Production and quality.

B. H. BULL & SON, Brampton, Ont.

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AND DORSET HORNED SHEEP.

To make room for daughters of Prince Hengerveld Pietje, we are offering a few females bred to the greatest bred bulls in Canada, and at rock-bottom prices. Also a few extra good yearling rams. Address: H. LORNE LOGAN, MANAGER. A. C. Hardy, Brockville, Ont.

King Segis Walker

The highest pedigreed sire in Canada. Average record of dam, grandams, and g. gr. dams: Butter, 28.36 lbs.; milk, 644.42 lbs.; fat, 4.24 lbs. Fee for service, \$25. This sire's get are 80 per cent. females. For sale: A grandson of King Segis and Pontiac Pet. record 37.67 lbs. butter and the world's champion; also a bull calf whose dam is a daughter of Pontiac Korndyke, and just completed a record of 725 lbs. in seven days.

A. A. FAREWELL, OSHAWA, ONTARIO

Lakeview Holsteins

Offer bull born February, 1912, sired by our son, Colantha Johanna Led, and out of a heifer that made over 13 lbs. butter at two years old. She is a daughter of Count Hengerveld Jayne De Kol, and out of a 23.51-lb. cow with a 23-lb. dam. The seven nearest dams of this young bull average 23.32 lbs. of butter in seven days. Write at once for extended pedigree and price. E. F. Oslar, Bronte, Ont.

FAIRVIEW FARM'S HERD OFFERS sons of Pontiac Korndyke 25983, the greatest sire that ever lived, and the only bull that ever sired 12

daughters that have made 7-day records above 30 pounds each. Do you want your next bull to be a brother to such cows as Pontiac Lady Korndyke (38.02), Pontiac Pet (37.67), Pontiac Clothilde De Kol 2nd (37.21), Sadie Vale Korndyke (36.20), and eight others above 30 pounds? If you do, write me for price on a son of Pontiac Korndyke. I also have sons of Rag Apple Korndyke and Sir Johanna Colantha Gladi. E. H. DOLLAR, HEUVELTON, NEW YORK. Near Prescott.

Silver Creek Holsteins

We are now offering about a dozen yearling heifers and three young bulls. They are all of superior type, and officially backed on both sides. King Fayne Segis Clothilde, whose seven nearest dams have seven-day records that average 27 pounds, is at head of herd. A. H. TEEPLE, CURRIES P. O., ONT., Woodstock Station. Phone connection.

SUMMER HILL HOLSTEIN CATTLE and YORKSHIRE HOGS

Our senior herd bull, Sir Admiral Ormsby, is the sire of the world's record 2-year-old for yearly butter production. Also sire of the highest record 4-year-olds in Canada. The dam of our junior herd bull made 34.6 lbs. butter in 7 days, and gave 111 lbs. milk per day. Come and make your selection from over 70 head. In Improved English Yorkshires we have won 95 per cent of first prizes at Toronto Exhibition for ten years. We are still breeding them bigger and better than ever. Buy Summer Hill Yorkshires, the quick-maturing kind, and double your profits.

D. C. FLATT & SON, R. F. D. No. 2, Hamilton, Ontario. Bell phone: 2471, Hamilton.

HOLSTEINS AND YORKSHIRES

Last year our Holsteins, out of 12 entries, won 10 firsts and 2 seconds. Our stock bull, King Peter Teake, shown three times and won three firsts. We have 35 head, any of them are for sale. Some choice young sows.

A. Watson & Sons, R. R. No. 1, St. Thomas, Ont. L.-D. Phone.

SPRING BROOK HOLSTEINS and TAMWORTH SWINE

Two rich-bred bulls for sale, 15 months old; popular strains; "Record of Merit" ancestry, good individuals; bargain to quick buyers. Thirty Tamworth pigs ready to wean; bred from imported stock. Price, \$8 apiece. Express paid to Ontario points. Order early if you want any. Choice stock.

A. C. HALLMAN, Breslau, Ont., Waterloo Co.

Holsteins of Quality

Write us to-day for our proposition, telling you how any good dairyman may own a registered Holstein bull from a Record-of-Performance cow without investing a cent for him.

MONRO & LAWLESS, "Elmdale Farm" Thorold, Ontario

Holsteins and Yorkshires

Richly-bred young bulls, officially backed on both sides. Yorkshires of highest type and quality at rock-bottom prices.

R. HONEY & SONS, BRICKLEY, ONT. "MINSTER FARM."

Farnham Oxfords and Hampshires

FLOCK ESTABLISHED IN 1881.
Present offering: A lot of first-class ram lambs of both breeds, by imported champion rams. Also a number of yearling and older ewes and ewe lambs of both breeds. Prices reasonable.

Henry Arkell & Son, Arkell, Ontario.
Long-distance phone in house.

Southdown Sheep

The market to-day demands quality. It pays to breed what the market wants. Can you do this more cheaply or quickly than by heading your flock with a right good ram of this most perfect of mutton breeds?
Orders taken for a few sturdy young rams for all delivery.

ROBT. McEWEN, Alloway Lodge Stock Farm
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Cattle and Sheep Labels

Size	Price doz.	Fifty tags
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Light Cattle ..	60c.	1.50
Sheep or Hog.	40c.	1.00

No postage or duty to pay. Cattle sizes with name and address and numbers; sheep or hog size, name and numbers. Get your neighbors to order with you and get better rate. Circular and sample. Mailed free. F. G. JAMES, Bowmanville, Ont.

Oxford Downs—Choice reg. ram and ewe lambs, \$10 and \$12 each; also a few yearling rams and ewes at close prices.
W. A. BRYANT, Cairngorm, Ont.

SHROPSHIRE

Aged ewes, yearling ewes and rams; also ewe lambs. Feed scarce, so will sell at reasonable prices.
L. G. CLARK, ALTON, ONTARIO.

Maplewood Oxfords and ram lambs from Hamptonian 96 (imp.). All good typical Oxforda, and prices reasonable. A. STEVENSON, ATWOOD, ONT.

SPRING ANK OXFORD DOWNS
Present offering: 20 two-shear ewes, 20 ewe lambs and 20 ram lambs from imported sires. WM. BARNETT & SONS, LIVING SPRINGS P. O., ONT. Fergus, C. P. R. and G. I. R.

SHROPSHIRE For Sale—Registered ram lambs, shearing rams and ewe lambs from imported and home-bred ewes. Also ewes from one to six years old. Prices very moderate. Write for particulars. JOHN HAYWARD, EASTWOOD, ONT.

LEICESTERS FOR SALE—Ram and ewe lambs of choice breeding. Good covering and best of quality. Also Embden geese and B. Rock fowl. Satisfaction or no sale. Trout: Creek Farm, Lucknow, Ont. G. A. Greer.

Large White Yorkshires

Have a choice lot of sows in pig. Boars ready for service and young pigs of both sexes supplied not akin, at reasonable prices. All breeding stock imported, or from imported stock, from the best British herds. Write or call on:

H. J. Davis, Woodstock, Ont
C. P. R. and G. T. R. Long-distance phone

"Johnny has begun to develop all the characteristics of an optimist."

Papa—"Why do you think so?"
Mamma—"When I made him wash his neck to-day, he said he was glad he wasn't a giraffe."

Policeman—"Knocked down by a motor-car, were you? Did you take the number of the car?"

Victim—"No. It was going too fast."

Policeman—"Could you swear to the driver?"

Victim—"I did."

She Had Such Beautiful Hands

that it was perfectly evident that she used SNAP, the original hand cleaner, to remove the grime of housework.

Hand cleaners by any other name do not smell as sweet. Avoid rank imitations, and remember the name



SNAP

Order from your dealer to-day. Save coupons.

the Bordeaux is beginning to disappear from the leaves give them another application. Then, too, the work must be done thoroughly. One-half pound of pure Paris green is certainly sufficient to twenty gallons water, but it must be thoroughly mixed. Poorly-mixed sprays are ineffective. One-quarter of a pound would be enough with all conditions right. Then a fine nozzle is necessary. A coarse spray may cause the liquid to run on the leaves and drip, and when such is the case the poison is washed away. The work must be thoroughly done or it is ineffective.

4. Take the crop of red clover, timothy, and alfalfa, off next summer, and plow the field and work it well, and seed to alfalfa the following spring, either with a nurse crop or alone. It would be a waste of seed to sow alfalfa now, or with the present mixture. Alfalfa soil must be clean and free from grass. Clean the field, first, then sow the seed.

5. About two pounds per acre is sufficient where timothy and red clover form the greater portion of the seeding.

QUESTIONS AND ANSWERS.

Miscellaneous.

EVENING PRIMROSE.

I am sending a weed, the name of which I do not know? H. T.

Ans.—The weed is common evening primrose (*Oenothera biennis*), a biennial, occurring in clover fields and meadows. Where only a few plants are present, they should be spudded out or pulled. Where the field is badly infested, the plants should be destroyed by plowing, followed by thorough fall and spring cultivation.

FEEDING POTATOES AND PUMPKINS TO PIGS.

I have a few pigs about 100 lbs., and have buttermilk for them, and have pumpkins, also potatoes which have the rot, but are very solid, not having reached the stage of soft rot. I have a boiler, and can boil them up for the hogs.

1. Would potatoes of that nature be good to boil for the hogs?

2. Would pumpkins and potatoes mixed with shorts, and boiled, be good for them, and mix a little buttermilk with them?

3. My pigs have developed a cough. I have been feeding them a little buttermilk and shorts. What would be good to give them? They have been running out on grass all summer.

A SUBSCRIBER.

Ans.—1. Cooking does not increase the digestibility of many of the stock foods produced on the farm, but potatoes for hogs is an exception. Four hundred pounds of boiled potatoes have been found equal to 100 pounds of mixed grains for pigs. We would try these potatoes boiled for the pigs, provided they have not a bitter rot, which might prove very unpalatable to the pigs. Try them on a small quantity at first, and if no bad results follow, continue the feed. It depends altogether upon the condition of the potatoes whether or not they are fit for feed.

2. Pumpkins may be fed to pigs raw or cooked. There is little to gain by cooking, unless the pigs are young, and it is desired to mix some other feed with them. This might be all cooked together, or the potatoes might be cooked alone, having the shorts and milk added afterwards, and the pumpkins fed whole or cooked with the potatoes. The best method might be to boil the potatoes and pumpkins together, and add the shorts and milk afterwards.

3. It is probable the pigs have bronchitis, which may have been caused by exposure to the heavy rains and during cool nights. Give the pigs the run of a dry yard during fine days, and keep them in a clean, dry, well-ventilated pen at night. Give them plenty of fresh air and good feed, keep them dry, and keep their bowels open by feeding a little Epsom salts and sulphur daily for a few days.

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Every farmer and stock-raiser knows that Pure Cane Molasses is an excellent food for animals, but the difficulty of feeding it has stood in the way of its general use.



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contains at least 84% of Pure Cane Molasses, and is the only safe and convenient form in which Molasses may be fed to stock. It costs nothing to use it, because it takes the place of an equal quantity of cereal, and adds greatly to the nutritive value of the entire feed.

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Please send me booklet and full particulars as to cost, etc., of Molasses Meal.

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Shropshires and Cotswolds!

In SHROPSHIRE I have for sale 35 imp. shearing rams and ewes from some of England's best flocks, a lot of fine home-bred rams and ewes bred from Minton and Buttar ewes. In COTSWOLDS a lot of rams and ewes, and an extra good lot of lambs. A few of each breed fitted for showing. Order early and get a good choice. Prices very reasonable.

Claremont Station, C. P. R., three miles. Pickering Station, G. T. R., seven miles. **John Miller, Brougham, Ont.**

Belmont Shropshires and Southdowns

I have a grand lot of rams and ewes for sale, both breeds. Anyone wanting a good ram, or a few good breeding ewes, should write me at once and get the first choice.

C. Hodgson, Brantford, Ont.

COTSWOLDS AND SHROPSHIRE At Toronto I won 1st on ram and ewe in Cotswolds. I have for sale a big lot of shearing rams and ewes, ram and ewe lambs of both breeds; strictly high-class. **J. MILLER, JR., "BLAIRGOWRIE FARM," ASHBURN P. O., ONTARIO**

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Present offering: Seven boars from 6 to 10 months old; boars and sow pigs 6 weeks to 4 months; sows bred and others ready to breed, from such noted stock as Colwill's Choice, Canada's champion boar, 1901, '02, '03 and '05, and Imp. Cholderton Golden Secret. Also a few choice Shorthorn heifers in calf; beef and milk combined. Show stock a specialty. Prices right. L.-D. Phone. **A. A. Colwill Newcastle Ont.**

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—Present offering: Four dandy bull calves that will make show winners, from six to ten months old. Choice Tamworths, both sexes. **CHAS. CURRIE, Morrison, Ontario**

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

Duroc Jersey Swine AND JERSEY CATTLE.
Grand stock, either sex, constantly for sale. Price reasonable. **MAC CAMPBELL & SONS, Northwood, Ontario.**

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Both sexes and all ages, from imported stock. Prices reasonable. **C. A. POWELL, Arva, Ontario**
Four miles north of London.

Hampshire Pigs PRESENT OFFERING—7 Sows in pig from imported stock. Also a number of young pigs 3 months old. Write for prices. Long-distance phone. **J. H. RUTHERFORD, Box 62, Caledon East, Ont**

Registered Tamworths.
We are offering boars ready for service, sows bred and ready to breed. Young pigs all ages, from six weeks up. **W. W. GEORGE, Crumpton, Ont.**

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Send To-Day

This machine quickly pays for itself in the labor it saves. It is a waste of money to be without it.

Fill in and mail the coupon to-day. Use the machine 10 days. If it doesn't satisfy you, return it at our expense. If you keep it, the "factory-to-you" price is..... **\$16.00**

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WE HEREBY GUARANTEE this Vacuum Cleaner, bearing our name, and manufactured by us, to be perfectly constructed, of good material, and perfect in workmanship. We fully warrant it, under fair usage, against any defects of workmanship or material for the term of FIVE YEARS from date.

We furthermore guarantee that it will do satisfactorily the work for which it has been sold, and in the event of failure to do as represented, said machine is returnable at our expense.

The GEO. H. KING CO. LTD.
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Gentlemen.—Please send me a King Edward Vacuum Cleaner on ten days' free trial, without obligation to me.
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Large Top Cooking Surface with wide, short centres between pot holes.

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Removable Improved Duplex Grate, the best form of grate ever devised. Ask for illustrated booklet explaining these, and many other excellent features.

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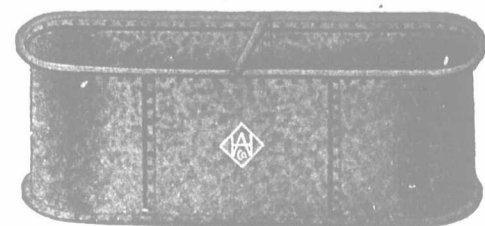
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Let us give you a demonstration of the Monarch machine in your home. A post card will place literature and full information in your hands immediately. Easy payments. Write now for full particulars.

MONARCH DEPARTMENT
Remington Typewriter Co., Ltd. 144 Bay St., TORONTO, ONT.

H.-A. STEEL TANKS



Are the most durable and handy stock-watering tanks on the market.

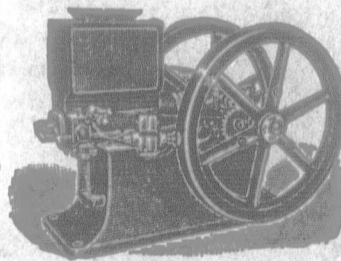
We use nothing but the very best annealed steel, heavily galvanized, in the construction of them. All seams are securely locked together and soldered in small tanks, and in larger ones the seams are rivetted.

We also make a complete line of water-well supplies. "BAKER" Windmills, Pumps, Cylinders. Ask for Tank Catalogue No. 24, or Windmill Catalogue No. 28.

THE HELLER-ALLER CO., Windsor, Ontario

Here is the Best Friend a Farmer Ever Had

MONARCH FARM ENGINES are made from highest quality material, with every device for perfect service. They do the hard chores, saw wood, save mill tolls, and make farm life much easier. Our two-color folder tells about them. Sizes from 1½ to 35 horse-power, especially adapted to farm use.



Write for folder, and also prices.

CANADIAN ENGINES, LIMITED
DUNNVILLE, ONT.

Frost & Wood Co., Limited, Smith's Falls, Ont.
Sole Canadian Selling Agents east of Peterboro.

"Go North Young Man!"

WHY?

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

For information as to terms, homestead regulations, special railway rates, etc., write to

H. A. Macdonnell
Director of Colonization
TORONTO, ONTARIO

HON. JAS. S. DUFF,
Minister of Agriculture

Little Willie—"What, is the difference between a close friend and a dear friend?"

Pa—"A close friend, my son, is one who will not lend you any money, while a dear friend is one who borrows all you will stand for."

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.

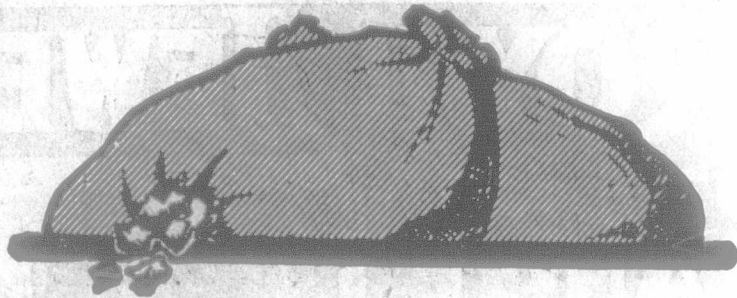
FREE Our "Up to the minute" Fur quotations and the last Edition of HALLAM'S TRAPPERS GUIDE, a book of 96 pages, mailed FREE.

Write to-day to John Hallam, Mail Dept 31 TORONTO, 111 Front St. E.

"My wife is going to make me get out of politics this fall."

"Won't you feel lost?"

"She's going to try to make it easy for me. Going to cart me off to Europe and let me take a full course of mud baths."



The coal you save

Do you think a cheap range an economy? It may appear so when buying it.

But when you see it eating up the coal—When the oven is slow in heating—When first one part then another requires renewing—Then your cheap range is not an economy, but the very opposite. Then you will see that it wastes enough coal to pay for a good range.

The Monarch Range is a well-designed, strongly constructed range—designed for economy of fuel—constructed for durability and wear. Ask your neighbor what she thinks of her Monarch. Get her opinion of it as a coal-saver and a baker.

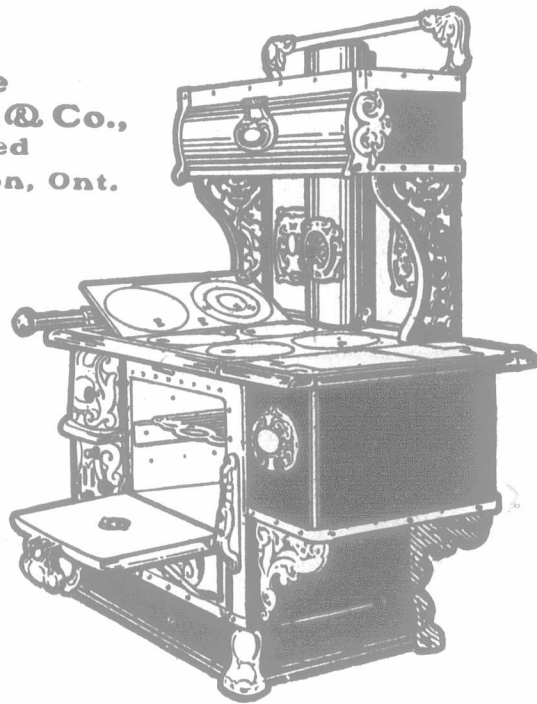
You will find that your cheap stove has actually cost more than your neighbor's well-designed, economical, and convenient Monarch.

Will it pay for a

MONARCH RANGE

Peninsular Range
"Ask your neighbor"

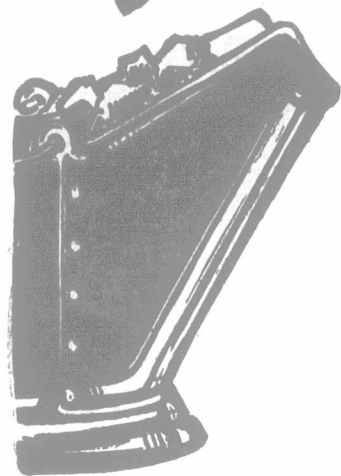
Clare Bros. & Co., Limited
Preston, Ont.



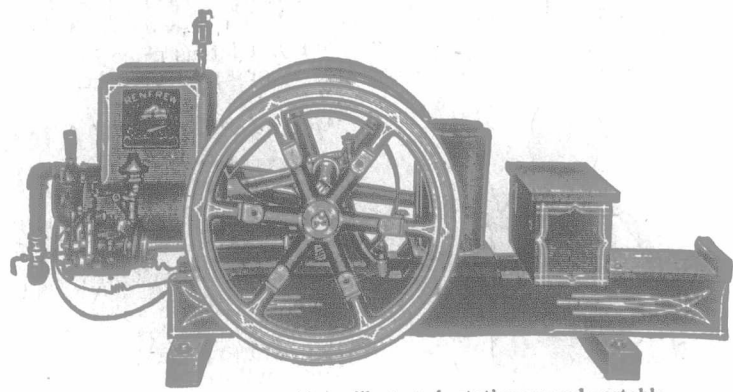
INVEST A CENT.

Before investing in a new range it will pay you well to see our book "The Cost of a Range." A post-card will bring it to you.

209



When Writing Advertisers, Please Mention "The Farmer's Advocate"



2½ to 60 h.-p. Semi-portable, as illustrated; stationary and portable.

Always on the Job

Sturdy, compact, substantial, built to withstand the hardest wear and tear, and to perform its task under all Canadian weather conditions, the

Renfrew Standard

has no peer among gasoline engines. Indeed, users tell us it has no equal—and we believe it. It is the latest type for sale in Canada. Starts easily without cranking in the coldest weather. Runs with clock-like smoothness. Needs

little water for cooling, and has no cooling pumps, fans or complicated contrivances to get out of order. Simple in construction, easy to operate. A great power-producer on a small amount of gasoline. Write for descriptive bulletin.

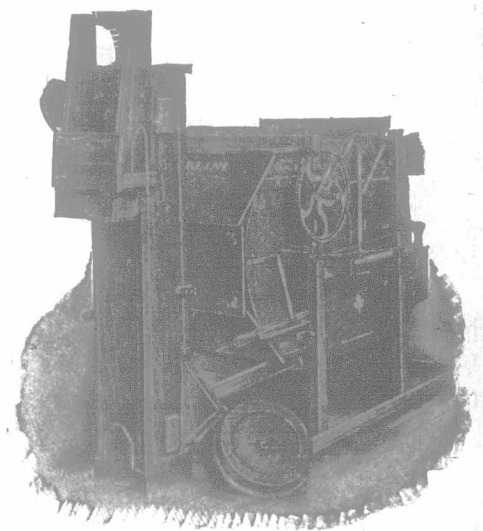
The Renfrew Machinery Company, Limited

Head Office and Works: RENFREW, ONTARIO

Sales Branches at Winnipeg, Man., and Sussex, N. B.

A Great Record

"Kline" Fanning Mills have earned a great reputation among Canadian farmers. Lately we have run across "Kline" Mills that have been in use from 20 to 35 years and are still giving efficient service. It's really surprising what lasting satisfaction these machines will give and how much money they will save for farmers even in a year.



"Kline" Fanning Mills

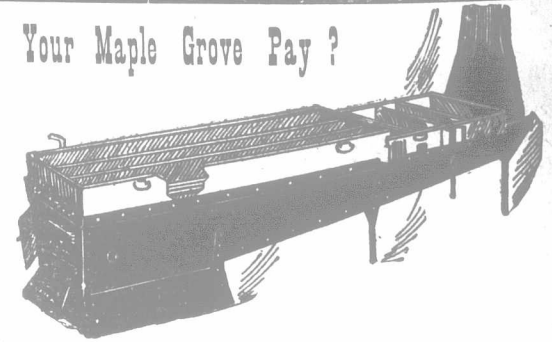
are built on correct principles and have several features not found on other fanning mills. They are suited for either hand or power. The prices and terms are such that you will be eager to own a "Kline."

Further particulars will be supplied as soon as we learn your name and address. Agents wanted in unrepresented territory.

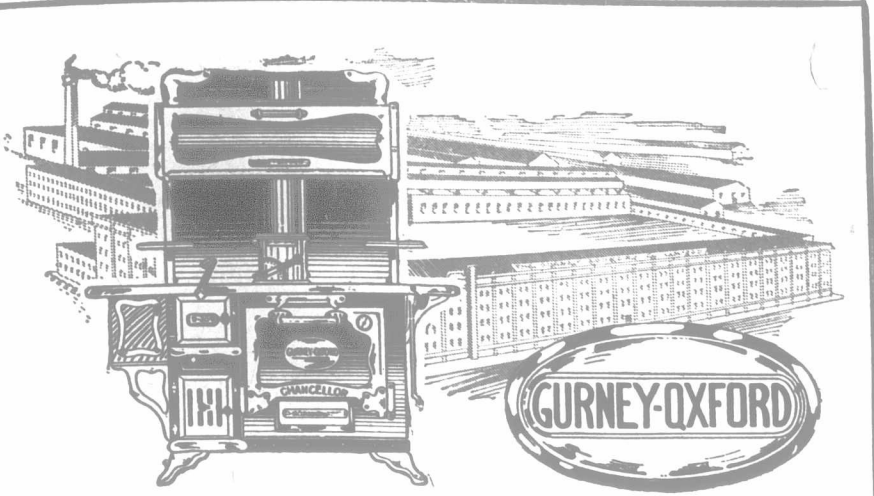
Kline Manufacturing Co., Ltd.
BEETON, ONTARIO.

Maple Syrup-Makers--Does Your Maple Grove Pay?

You must go at it in the right way to make money out of your maple grove. You are not giving your maple grove a show to bring you good returns by using pots and old pans, which consume a lot of fuel and time and make a very poor grade of syrup. Every farmer who possesses a maple grove should operate it with an up-to-date evaporator. The "Champion" Evaporator will get more syrup out of a given amount of sap, with less trouble than any other evaporator on the market. Any boy 14 years of age with a little common sense can operate a "Champion" Evaporator and make the highest grade of syrup that will command the highest market price. Write us to-day for our new illustrated catalogue, free.



The GRIMM MFG. CO., Limited, 58 Wellington St., Montreal, Que.



**The Range---The Factory
The Methods**

You will be interested in knowing of the foundry where the Gurney-Oxford Range is made, also of the methods and organization which have brought it to its present high state of efficiency.

The Foundry Building is large and commodious, and laid out in a way that contributes to economy in manufacturing. Every single part of the range is made here under the closest scrutiny. We have never been content to accept traditions in range building. We experiment constantly to find something better, something which will effect an improvement or add to the value of the range when it reaches your kitchen to do your work.

The Gurney-Economizer, the greatest and most radical improvement in range making, was the subject of extensive tests in the factory.

We knew what a great improvement it would be to have an oven always properly and evenly heated, so we experimented until, by an arrangement of flues, this was accomplished.

We have never hesitated to make a change in design or principle when we found that change meant greater efficiency.

When you select a Gurney-Oxford Range you know that it has behind it one of the most competent factories in Canada and an accumulation of experience extending over 70 years.

The Gurney Foundry Co. Limited
TORONTO - CANADA
MONTREAL HAMILTON WINNIPEG CALGARY VANCOUVER



**HOW TO GET BETTER LIGHT
From COAL OIL (Kerosene)**

Tests by Prof. McKergow, McGill University, Montreal, on leading oil-burning lamps show the Aladdin Mantle Lamp is the most economical and gives over twice as much light as the Rayo and other lamps tested. It is odorless, safe, clean, noiseless. Guaranteed. Better light than gas or electric. To introduce the Aladdin we'll send a sample lamp on 10 Days Trial. Experience unnecessary. Every home needs this lamp. One agent sold over 1000 on home needs this lamp. Another sold \$300 worth in 15 days. Evenings made profitable. Ask for agents prices and trial offer. Ask for Particulars. **AGENTS WANTED** MANTLE LAMP COMPANY 223 Aladdin Bldg. Montreal and Winnipeg, Can.

MENTION THE FARMER'S ADVOCATE WHEN WRITING ADVERTISERS.

GOSSIP.

HILLCREST TAMWORTHS

The Hillcrest herd of Tamworth swine has the honor of being one of the first herds of that popular bacon breed established in Canada, the early representatives having registration numbers as low as 12 in the first volume. That was many years ago, and the herd is still in existence, and through all the years has kept pace with the times in the matter of type-improvement and show-ring quality. For a number of years, at the big exhibitions they were exhibited by the herd's former owner, N. Blain, and for a number of recent years exhibited by their present owner, Herbert Germain, of St. George, Ont. In the strongest competition the breed could put up in Canada they won their honors, and since the herd's foundation, the breeding has been going on from prizewinning sires and dams. To-day, the young things offered for sale, particularly the young sows getting along to breeding age, are an exceedingly choice lot, sired by such great hogs as the Toronto second-prize boar, Springbank Oscar, and Morrision Harry 3rd, a grandson of Imp. Knowle King David, on his dam's side, and Imp. Rolleston Raymond, on his sire's side. These youngsters, on their dam's side, are out of daughters and granddaughters of Imp. Cholderton Golden Star, and the invincible, Colwill's Choice. There is no better breeding in the country. Parties wanting young Tamworths of show-ring quality should write Mr. Germain.

MINSTER HOLSTEINS AND YORKSHIRES.

The annual visit of the migratory representative of "The Farmer's Advocate" to the old and widely-known stock farm, Minster, the property of genial Dick Honey, of Brickley, Ont., was, as is usual with visitors to that noted farm, the occasion of one of Friend Dick's spontaneous outbursts of entertaining hospitality. He is right proud of his big herds of Holstein cattle and Yorkshire swine, and well he should be, for they have for many years kept things pretty well cleaned up at a wide circle of local and county shows in Hastings, Peterborough, and Northumberland, and are just now, after another very successful season, looking in prime condition. Of late years Mr. Honey has had a number of his Holsteins measuring up for the standard of entrance to the official R. O. P. Records, and they have made a most creditable showing. Many of them have already qualified, and several others are gradually gaining the goal. A particularly pleasing aspect of the herd's complexion is the splendid quality and uniformity of the young things sired by the present stock bull, Lakeview Burke Fayne, a son of the grandly-bred Count Hengerveld Fayne De Kol, whose sire, Pieterje Hengerveld Count De Kol, has over 100 daughters and 30 sons in the A. R. O., and whose dam was Grace Fayne 2nd, the dam of the ex-world's champion, Grace Fayne 2nd's Homestead, with a record of 35.55 lbs. The dam of Lakeview Burke Fayne was Derkje Pet Burke, whose record and dam's record average over 22 lbs. In use on the daughters of this splendidly-bred bull is Triumph Velstra, a son of Velstra Triumph, with 12 A. R. O. daughters, and whose dam and sire's dam have records that average over 100 lbs. of milk a day, a record that no other bull in Canada can claim. The dam of this young bull is Velstra Mollie, with a two-year-old record of 13.13 lbs. For sale just now are a few young bulls sired by the senior stock bull. In Yorkshires, there are on hand some particularly nice young things of breeding age, sired by the 800-lb. Miss Hollingsworth-bred boar, Monkland Roaster, a son of Imp. Broomhouse Hawthorne 1st, and got by the great sire Monkland Joe. On their dam's side, they are of the ever-popular Victoria tribe. Parties wanting a young Holstein bull, or breeding stock in Yorkshires, would do well to correspond with Mr. Honey, as his prices are remarkably liberal.

Customer—"What have you in the way of summer fiction?"
Newdealer—"We have the platforms of all the parties, and the candidates' speeches."



**Better Butter And
Better Prices**

These are the two big reasons why you should use Windsor Dairy Salt.

If you make your living out of the butter you sell, then anything that will make the butter better will make more money for you.

**WINDSOR
DAIRY SALT**

has proved its quality and superiority in thousands of dairies and in hundreds of contests.

Successful creamery men have used and are still using Windsor Dairy Salt—because it gives them the best results always.

Are YOU using it? 71D

VICE VERSA.

A farmer went into a hardware store, and, while purchasing some tools, was asked by the proprietor if he did not want to buy a bicycle.

"A bicycle won't eat its head off," said the man, "and you can ride around your farm on it. They're cheap now, and I can let you have one for \$35."

"I'd rather put the \$35 in a cow," replied the farmer.

"Oh, well," said the hardware man, sarcastically, "you'd look almighty foolish riding round your farm on a cow, now, wouldn't you?"

"No more foolish, perhaps," said the farmer, "than I would milking a 'bicycle.'"

Customer—"Is that a real ostrich feather?"
Draper—"What, for tenpence? Oh, no, ostrich is merely its nom-de-plume."

**IF YOU WISH TO BE WELL
YOU MUST KEEP THE
BOWELS OPEN**

Any irregularity of the bowels is always dangerous, and should be attended to at once. If the bowels cease to work properly, all the other organs become deranged.

Milburn's Laxa-Liver Pills work on the bowels gently and naturally, and will cure the worst cases of constipation.

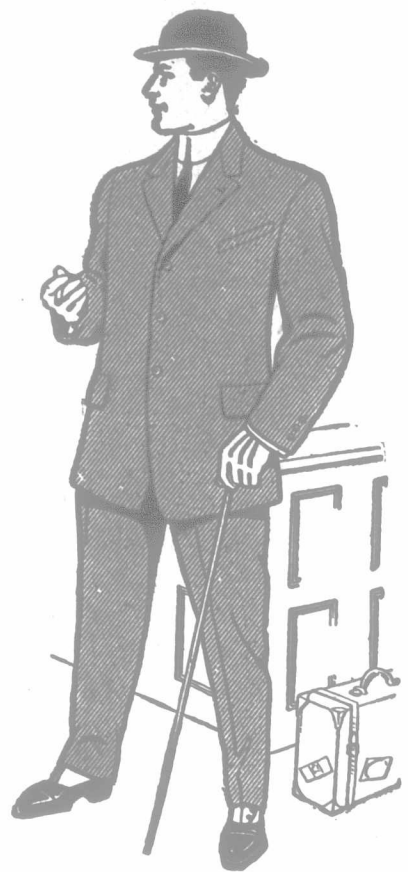
Mrs. J. Hubbard, Port Colborne, Ont., writes—"I have tried many remedies for constipation and never found anything so good as your Milburn's Laxa-Liver Pills. We always keep a vial in the house, for we would not be without them. I always recommend them to my friends."

Milburn's Laxa-Liver Pills are 25 cents per vial, or 5 vials for \$1.00, at all dealers, or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.



Your Local Tailor Couldn't Make a Profit if He Sold You a Suit Like This for \$25.00, but We'll Sell It to You for \$12.50, and Make a Profit, Too.

Learn one of the reasons why.
 Your local tailor buys his goods in single suit lengths. Four profits come out of the cloth before it reaches his hands. You pay these four profits when you buy from him.
 You save these profits when you buy from us, because we buy all our suitings direct from the mill, and give you the benefit of our tremendous buying power.
Here's a Fair Offer: Send us your name and address, and we will mail you, absolutely free, 72 pattern pieces of the finest English suitings and overcoatings you ever saw.
 With the patterns will come a booklet telling all about the successful Catesby "made to measure" tailoring system.
 Read it, and you'll understand why hundreds of shrewd, well dressed Canadians buy their clothes direct from London, and save half of what they would otherwise have to pay their local tailor.
 Don't put this matter off—you'll soon be needing a suit. Send now, while the thought is in your mind.
Remember, your suit comes right to your door, full carriage and duty charges paid by us. Every suit is guaranteed to give absolute satisfaction.



\$12.50 buys this elegant MALVERN Suit. Made to your measure from materials you select. Samples and measurement chart promptly sent free from our Canadian address. Perfect fit and satisfaction guaranteed.

Orders are shipped five days after we receive them in London. Address our nearest Canadian office.

CATESBYS Ltd. 119 West Wellington St., Toronto.
 Dept. "A" Coronation Bldg., Montreal.
 160 Princess St., Winnipeg.

The "Burlington" English Model. This shows the most Popular style of suit worn by well-dressed men in England. Prices are as follows:
\$16.50, \$18.50, \$21.50.
 Duty free and carriage paid right to your door.

HERE'S A GREAT TEST—When you get patterns take one to your local tailor. Ask him what he will charge you to make a suit of such an imported cloth. Then compare his price with that asked by CATESBYS.

No man who has ever bought a suit or an overcoat from Catesbys has had reason to REGRET it. Every garment is guaranteed to give absolute satisfaction. But you know that all of the whole facts can't be told in an advertisement. The thing to do is to prove the thing for yourself by sending for the free package containing the 72 samples. Write for these samples now. Remember your order will be shipped five days after we receive it in London.



YOU NEED A WARM OVERCOAT

And you can get one for half of what it would cost you from your local tailor. Catesbys overcoats are made in England, especially for the Canadian climate. The material is heavy close-woven woollen cloth. It is almost wear-proof.

Your Local Tailor could not possibly make you a coat like the Ulster illustrated for less than \$35, yet we will deliver it to you—duty and carriage charges paid—right to your door for \$16.75.

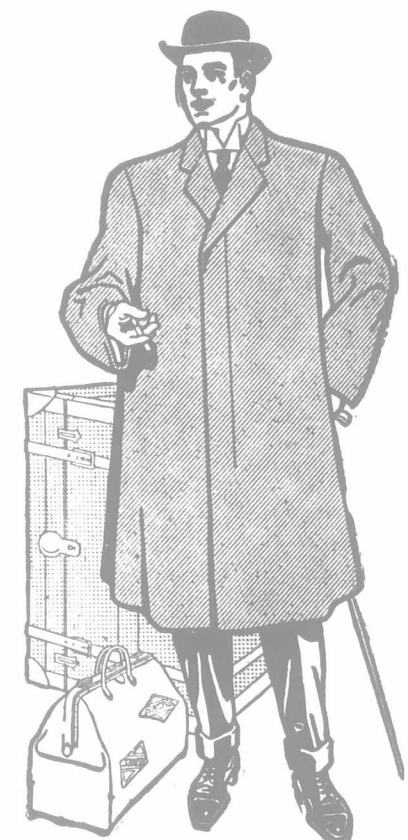
This is the reason why: We buy our materials wholesale, direct from the mills. Your local tailor buys in single overcoat or suit lengths. When you buy from us you save the four middlemen's profits that come out of the cloth before it gets to your local tailor.

You Can Prove the Value of Catesbys Overcoatings for Yourself by Making This Test:

Send to our nearest Canadian office for a package containing 72 samples of overcoatings and suitings. When you get them, pick out the cloth you like best, take it to your local tailor, and ask him what he will charge to make you an overcoat or suit of that quality of material. When he quotes his price, compare it with the price in the Catesby catalogue. We are satisfied to abide by the result. That's fair isn't it? So send for the patterns to-day.

Splendid Ulsters in heavy Yorkshire woollens from \$16.75 and upwards. Duty and carriage all paid right to your door.

Remember, we ship your overcoat or suit five days after your order gets to us in London, and the price includes payment of all duty and carriage charges by us. Write for the samples to-day, while the thought is in your mind. Address our nearest Canadian office.



A fine Chesterfield—made of warm rough Tweed from \$10.80 up, duty and carriage paid right to your door.

CATESBYS, Ltd., Dept. "A" 119 West Wellington Street, Toronto
 Coronation Building, Montreal
 160 Princess Street, Winnipeg

Or write direct to CATESBYS, Ltd., Tottenham Court Road, London, England.