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FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

NOVEMBER 2

1911.



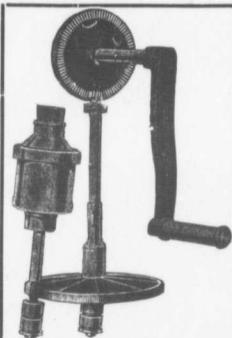
THE HARVEST OF AN IMPORTANT MONEY CROP OF FARMS IN EASTERN CANADA

The income from the apple orchard is an important addition to the revenue of many Ontario and Eastern Canada farms. In recent years there has been a remarkable growth of cooperative enterprise in the marketing of this crop. The old-time apple buyer is not the important man he was some years ago, and apple orchards sold in bulk—so much for the crop—are not to be had to-day as they were years ago. Greater returns per barrel are being realized to the growers, and much encouragement is thereby being given to orcharding. The illustration shown is from a photo taken in Mr. Chas. Patchett's orchard, Peel Co., Ont.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

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SOME farmers have an idea that all Cream Separators are alike. Because the machine they are using is not a success they conclude that there is not a better machine and that they will "just make it do for a while."



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This is because it is the only machine having the LINK-BLADE Separating device and the SELF-CENTERING BOWL. These two features alone make the machine superior in construction to any other machine. But there are other points of excellence about the machine that are just as important, with the result that the SIMPLEX is a machine of life time-lasting value. Our new Booklet is brimful of Separator facts and is free for the asking.

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Adv. Dept., FARM & DAIRY, Peterboro, Ont.

Cattle at Toronto and Guelph Stock Shows

Although the Winter Fair at Guelph this year will be held December 11 to 15, and the Toronto Fat Stock Show at Union Stock Yards, Toronto, December 11 to 12, arrangements have been made between the management of the two shows so that cattle exhibited at the Toronto Fat Stock Show, which have been regularly entered at Guelph, will be eligible to compete in their classes if received at Guelph not later than 6 p.m. Tuesday, December 12.

The management of the Toronto Fat Stock Show will make special transportation arrangements so that cattle may be loaded at the Union Stock Yards at 3 p.m. December 12, and reach Guelph in ample time.

A One-Cow Enthusiast on Testing

"I see by your last issue that Mr. Whitley says that scales do not make a cow give more milk," said Mr. R. W. Ward, Dairy Instructor of Peterboro Co., Ont., on a recent call at Farm and Dairy office. "Now I do not agree with Mr. Whitley at all. I believe that scales do make a cow give more milk and I can prove it."

We looked up our issue of October 12th and found a small lot that read as follows: "Scales do not make the cow give more milk, but they let the farmer know which cow is fit to keep and which he should sell." We explained to Mr. Ward that this was merely an extract from an address given by Mr. Whitley, and that he qualified that statement considerably.

"Well, I am glad to hear it," said Mr. Ward. "for although I only have one cow, I know that weighing the milk each day makes her give more milk. We have weighed the milk from our cow for four years. I am satisfied that she has given \$10 worth of milk more each year than she did previously."

THIS IS ALWAYS A CAUSE

"Every time our cow goes down in her milk we know it and we look around for a cause. And we always find it. It may be mismanagement or bad feeding or something along that line. Under the oil system the cow might have dropped five or even 10 lbs. in her milk flow, and we would not have noticed it. Of course a drop of 15 lbs. in the day would be noticed, but that is too much to lose."

"Last year my one cow gave 8,864 lbs. of milk. The year previously, in 365 days, she gave 8,171 lbs., and in 1908, in 265 days, 6,468 lbs. This year she freshened the first of June and is still giving 30 pounds of milk a day."

"I am telling you this," continued Mr. Ward, "because there are lots of cows just as good or better in this country that have lived and died and that people never knew were better than ordinary cows. There are lots of cows giving 3,000 pounds of milk a year that naturally are just as good as my cow if they received the attention. And the best eye-opener their owners can get would be to start weighing their milk daily."

"My neighbors know that my cow is doing well and they frequently ask how much she has given so far. After I tell them the comment always is, 'Oh, well, you feed her.' And my comment just as invariably is, 'When you see a breed of cows that will milk without feed let me know.' My neighbors can afford to feed their cows just as well as I can, but they do not weigh the milk and experiment with feeding and do not know."

"We only have one and three-quarter acres in the King's highway, cow pasture on the King's highway. As soon as the grass begins to get

short we start to feed grain. At present we are feeding three quarts of Molasses and one quart of cracked oats night and morning. Had this cow been fed as few many of the cows in the country are, she would now be giving 10 lbs. of milk instead of 30, and I consider that 20 lbs. of milk is pretty good pay for two gallons of grain."

"This cow-testing idea is all right," concluded Mr. Ward, "and you cannot say too much about it."

About the Horse's Collar

If the horse is in good working order have the new collar suit a trifle tighter, and let him work in it. He will soon pull that collar into the shape required to fit him and will work in comfort.

About six months after purchasing have the collar lined and stuffed, and it should be all that is necessary for the horse.

If possible have a separate collar for each horse, and do not allow "Bonnie" to work in "Trooper's" collar.

On no account put too much oil on the collar; it is not required, and the oil penetrates to the straw, and when they are lined and stuffed they will not give satisfaction.

When not in use place collars in shade, especially when wet. Do not let the sun play on them, for it will draw on the straw and alter the shape.

Have all collars lined with check for farm work, as it is cheaper and cooler than leather lining. Leather gets very hot and is likely to scald when the horse sweats.

If leather lining is preferred, wipe it with a damp rag occasionally, but do not put any oil on it or it will penetrate to the hair and take all the spring away.

Sore shoulders are in most cases due to the fault of the driver. These bad sores do not occur in one day; it takes some rubbing to rub the skin off, which should be noticed when removing or placing the collar on the horse. Why not then attend to it? Ease the place on the collar where it hurts the horse. See if the draught of the harness is on the right place to suit the animal; also see if the chains are exactly the same length.

Look for any other little part that may be mislaid; see to it at once and we will get better results from our horses and a lot more pleasure in driving them.

Items of Interest

The regular session of the Nova Scotia Agriculture College opened on November 2. It is expected that the class this year will be the largest in the history of the College.

The regulations issued by the United States Department of Agriculture, under act of November 3, 1910, regarding the recognition of specific breeds of horses, cattle, sheep and hogs registered in the Canadian National Records, is modified so as to provide that hereafter the Canadian National Records for standard-bred horses are recognized, subject to the same provisions prescribed for books of record across the seas. No horse or horse registered in the Canadian National Records for standard-bred horses shall be certified by the Secretary of Agriculture as purebred except those which trace in all crosses to registered horses in the country where the breed originated.

The eighth annual Ontario horticultural exhibition will be held in Toronto, November 14 to 18, 1911. This show is conducted by the Fruit Growers' Association of Ontario. Its object is the encouragement of better fruit and better packing throughout the province. The bulk of the prize money is offered for fruit packed in boxes.

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FARM AND DAIRY

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RURAL HOME

THE KIND OF MANAGEMENT THAT BRINGS SUCCESS IN DAIRY FARMING

The Farming Methods of Mr. S. A. Northcott, Ontario Co., Ont. described by an Editor of Farm and Dairy. Mr. Northcott is a Young Farmer who is making a Success of his business with Pure Bred Stock, A Short Rotation and Attention to the Details of Management.

EXCELLENT management is a characteristic most in evidence in connection with all of the farming operations of Mr. S. A. North-



S. A. Northcott

cott, whose farm secured second place in district No. 3 of the Interprovincial Dairy Prize Farms Competition conducted this year by Farm and Dairy. Evidences of good management were to be found in the layout of his farm for crop rotation, in the rapid improvement that Mr. Northcott is making in his stock by selection, breeding and

buying, and in smaller details, such as caring for the farm implements.

Mr. Northcott's farm consists of 140 acres, five miles from the town of Ottawa. Most of the soil is a heavy clay loam; one field inclines to sandy loam. One hundred and twenty acres are on one side of the road and 20 on the other. The buildings are situated very conveniently for drawing in crops with the shortest haul. Ten acres of the farm are in bush. An open ditch running through this bush and the centre of the farm causes some waste of land, but otherwise the fields are level, free from obstructions, and well laid out for convenience in working.

PERMANENT IMPROVEMENTS

Mr. Northcott has been on this farm only six years, but he has made great improvements in that time. Last year he laid 9,000 feet of tile drains. Altogether he has taken out 240 rods of cross fences, his ideal being to have large fields, easily worked.

Dairying is here the main source of revenue. Cream is taken to Oshawa every other day to supply a regular customer in a restaurant. Horse breeding, hogs, poultry, and a good orchard also contribute to Mr. Northcott's income.

In July, at the time the farm was judged by Mr. Hy. Glendinning and an editor of Farm and Dairy, who took notes of some of the leading features of Mr. Northcott's farm for the Benefit of Farm and Dairy readers, Mr. Northcott's dairy herd consisted of 14 cows, four being registered Holsteins. This young farmer has made a good start along pure bred lines. Two of his cows and a heifer had been purchased from the Holstein herd of G. A. Brethen, Norwood. His herd was bred by Mr. A. D. Foster, in whose herd are animals that have held world's records.

Mr. Northcott has had some interesting experiences in cow testing. Dairy records of the milk and fat production of his individual cows he has kept for a little over a year. As a result of the droveries he made through cow testing, he sold 13 cows last spring, and of his original herd of over 20 cows he now has only two or three.

The results of his first year's cow testing came

as a surprise to Mr. Northcott. The information he then gained was promptly acted on, and any cows producing less than 7,000 pounds of milk had to go. There are only two cows now in the herd that will make less than 8,000 pounds of milk a year. In starting out for a new herd, Mr. Northcott secured two excellent cows from a neighbor, who, as he says, "had no better sense than to sell them." A Babcock testing machine is kept and used for determining the fat in the



Country Home Equipped with Modern Conveniences

The home of Mr. S. A. Northcott, here illustrated, is fitted with a complete bathroom and hot and cold, hard and soft water on tap. Such conveniences increase the comfort of the country home and relieve the women folks of much drudgery.

milk of each cow and for keeping check on the fat in the cream sold.

FEED IS GROWN AT HOME

Mr. Northcott buys very little feed. He depends on corn ensilage, alfalfa, and clover hay, and the mixed grains that he grows on his farm. Short pastures are supplemented with alfalfa, or corn ensilage if it is on hand.

Two registered Clydesdale mares of good breed-



Beautiful Trees are Appreciated on This Farm

A row of trees such as may be seen in the illustration extends all round the farm of Mr. S. A. Northcott, Ontario Co., Ont., and on both sides of the permanent lanes through the farm. These trees add to the value as well as the beauty of the farm. Read of the farming methods of this successful young farmer in the adjoining article.

—Photos by an editor of Farm and Dairy.

ing and conformation are a source of profit and of satisfaction to Mr. Northcott, who finds that a heavy draft horse for sale occasionally is a profitable proposition; particularly when the colts are eligible for registration. Altogether there were six horses and two colts on the farm.

Mr. Northcott believes that there is profit in

sheep; he keeps an excellent flock of 30 pure bred Shropshires.

In his piggery were 15 pure bred Yorkshires. Two breeds of hens are kept, Plymouth Rocks and White Leghorns.

PURE BRED STOCK MORE PROFITABLE

Farm and Dairy readers will notice that in all lines of live stock, Mr. Northcott either already has all pure bred stock or is getting into it as fast as he can. He finds that pure bred stock can be kept as easily and as cheaply as common stock, and it is more profitable. When there is stock for sale the initial cost of a pure bred foundation is more than made up in the extra price that can be obtained for the surplus stock.

The main farm barn is 102 by 42 feet, with a stable under the whole. An "L," 60 by 36 feet, is used as a straw barn; under it are the sheep pens and an open shed for cattle. In the stables are all modern conveniences for doing the work easily. The manure is removed in a litter carrier and is dumped directly on to the spreader. It is then taken to the fields and spread daily. Feed carriers reduce to a minimum the work of feeding the stock.

WATER BEFORE THE COWS

Water on this farm is supplied to the cows in individual basins in the stables. A 14-foot windmill pumps the water into an overhead tank. The rain water from the roof is saved in a cistern in the basement. The one objectionable feature of his well-water system is the supply, which is drawn from a well in the larnyard. The yard is kept fairly clean, but even then the well would be much better situated some distance from the buildings.

No adequate provision has been made by Mr. Northcott for ventilation in his stables. Two shafts extend to the roof at each end of the stable, but only the doors and windows supply an inlet for fresh air.

An inside silo, 14 by 10 by 30 feet, erected by Mr. Northcott, has been in use for a few years. A second one, a circular cement silo outside the barn, was just about to be erected when the farms were judged. With his two silos, Mr. Northcott will now have ensilage to feed the year round.

USES FOR THE WINDMILL

His power windmill not only pumps the water for the stock but turns the grindstone, cuts feed, and when there is a good wind it develops power enough to run the feed chopper, which grinds all the grain fed on the farm.

Mr. Northcott is of a mechanical turn, and delights in working with his implements, keeping them in first class repair, and in improving them. All of the implements on the farm are kept under cover in a dry shed. In the several years that the Linder has been in use it has never once been out over night. Exposed parts of machinery, such as the mold boards of the plows and the cutter bars of mower and binder, are greased when put in storage. "We can grease steel a lot easier than we can scour it," was Mr. Northcott's comment on this feature.

A three-year rotation is followed; the first year

corn or roots, the second mixed grains seeded down to clover and alfalfa, with sometimes a little alkali. Hay is cut one year. Enough hoe crop is not grown to take in one-third of the rotation. About 25 acres will be in corn and roots and the rest in pasture. There is no permanent pasture on the farm.

The winter of 1910-11 killed out much of Mr. Northcott's clover and alfalfa, thereby interfering with his regular rotation. He had altogether this year 60 acres in mixed grain, 15 acres in corn, 21-2 acres in potatoes (one of his ready money crops), and 10 acres in alfalfa. Ten acres of alfalfa he seeded down last spring with a nurse crop of one bushel of emmer per acre. This alfalfa had made a good start when we inspected it.

HARD TO FIND A WEED

These crops were all remarkably free from weeds. It was hard to find a weed at all in the hoe crops, and in the grain crops a few wild oats and a little sow thistle were the only really noxious weeds in evidence. In spite of the present dry year the crops were all making good growth.

Four acres of the farm are devoted to garden and orchard. The orchard is well pruned and sprayed, but is not cultivated. In the garden were strawberries, raspberries, currants, gooseberries, and a good variety of vegetables—such a garden as would be a source of pride to any farmer.

The farm home, a cosy frame house, is situated rather too near the road. To one side, however, is a good-sized lawn, surrounded by a cedar hedge and shaded by maple trees. The lawn was nicely bordered with flower beds and ornamental shrubs.

CITY CONVENIENCES

A fully-equipped bathroom and an excellent water system installed in the house bear further testimony to Mr. Northcott's mechanical genius, he having done all the plumbing himself. Hard water is pumped into an elevated tank from a well at the side of the house, this being done by a small windmill on the rear of the house. There is also an elevated tank for the soft water, which is pumped from the cistern, also by windmill. Hot and cold hard and soft water are on tap in the kitchen.

The cellar of the house is deserving of note. The floor is of cement, the walls and ceiling are whitewashed frequently, and the musty odor so common in house cellars was not to be found in this one. In one corner of the cellar was a cement tank, in which the cream is cooled and held for shipment. This tank is drained by tiles that run into the garden. An outside entrance to the cellar makes it convenient for storing the vegetables.

An account of all receipts and expenditures is kept by Mr. Northcott in one book; separate accounts are not kept with the various departments of the farm. The leading farm journals are subscribed for as well as a daily paper. A rural 'phone keeps him and his family in touch with their neighbors and the town of Oshawa.

TREES ALL ABOUT

A feature in connection with this place deserving of more than passing notice is the effort—much of which was made years ago—to make the whole farm attractive. A row of well-developed maple trees extends around the whole farm and on each side of the principal lanes as well.

Although Mr. Northcott is but a year or so over thirty, he already has made a success financially of his farming business. As years go by and he has developed his stock and farm to greater perfection along the lines that he has laid down for himself, not only will his income be greatly increased, but he will have accomplished a work of which he may well be proud, and which will be a shining example for the emulation of other young men who are planning to follow agriculture as their life's work.

In his work he is blessed with a most competent help-mate. He has a family of three children, two girls and a boy.—F. E. E.

Our New Minister of Agriculture

On Martin Burrell, Member of Parliament for Yale-Cariboo, British Columbia, has been conferred the honor and responsibility of guiding the course of agricultural affairs in the Dominion of Canada.

Canada's new Dominion Minister of Agriculture is a practical fruit-grower. Born in 1858 at Farington, Berks, England, he came to Canada in 1883. A horticulturist in vocation, he tried



Hon. Martin Burrell

farming in the Niagara Peninsula, and did considerable work as a farmers' institute lecturer, but later the productive areas of southern British Columbia attracted him. In 1899 he became associated with the fruit industry around Grand Forks, B.C., where he conducted a large fruit ranch that has been looked upon as being a model. He also established a nursery, and is a member of the British Columbia Board of Horticulture, and has frequently acted as a judge at fruit fairs, including Vancouver's big apple show.

In 1904 Mr. Burrell contested the constituency of Yale-Cariboo in the Conservative interests, but was defeated. In 1908 he was elected by a good majority. His parliamentary experience, therefore, is limited to one term. In debate he has shown himself a careful, painstaking speaker, always adhering closely to his subject. His wide knowledge in horticultural lines implies a general knowledge of conditions in the numerous other branches of agricultural work.

The legislative enactments originating in the Department of Agriculture affect the well-being of two-thirds of the people of Canada. Mr. Burrell's position, therefore, is a responsible one. In the past his department has not received the consideration that it should from the parties in power. A man of energy, full of enthusiasm, and aggressive in urging the needs and rights of his department on his fellow-countrymen, are the qualities that our new Minister must have if he is to put the department on the basis that the importance of the industry of agriculture warrants, and successfully guide the agricultural affairs of the nation.

Mr. Burrell has a great work before him. We farmers should cooperate in giving Mr. Burrell our hearty support and goodwill in every measure that he advocates for the betterment of agriculture.

A Teamster's Ideas on Teaming

E. C. MacDonald, Cumberland Co., N.S.

How long will it take teamsters to find out that the strength and working ability of a team of horses depends almost as much on the creases and consideration of the teamster as on the natural strength of the horses? Only last winter, when we were working in the lumber woods, the wide differences in teamsters was always a marvel to me. I remember one Colchester county man who had an excellent team of Clydes, but he was always getting stuck in the hard places. On one occasion he was pulled out by a young fellow with a team not half as good as his own.

The difference was in the men. The first teamster was continually nagging and exciting his team. The horse is a nervous animal, and when this team got into a hard place they were so "strung up" that they did not half pull. The other teamster was always cool, and when he spoke to his team they went at it for all that was in them.

I have found that the reins and not the voice should be used in controlling a team of horses. The teamster should always keep his team well in hand by a firm yet gentle pressure of the bit. They then know that he is there, and it gives them a confidence they can never have with a loose rein teamster.

A teamster should never try to put his team to a pull that is beyond their strength for the purpose of "showing off." The horses will then lose confidence in him and become a very secondary team.

I believe that my horses, did I tell them, would walk over a 10-foot embankment any time, but the reason they would be so willing to do this is because I never ask them to do such foolish things. Consideration for the team is the basic principle of good teaming.

Pointers From a Successful Shepherd

Alex. Stuart, Wellington Co., Ont.

Proper care and sufficient feed suitable to making strong and vigorous ewes for the rearing of a first-class lot of lambs is the secret of success in the management of a flock of sheep. Uniformity in type, in fleeces, and in the character of the breed are fundamental features that must be closely observed. I breed Oxford down sheep, but these rules apply to all breeds.

I dip my sheep twice annually. This is important as a preventative against scab and a guarantee against the collection of ticks, which are responsible for great loss to us sheep owners. The flock should be closely examined, as sheep infested with these blood suckers cannot thrive, and poor results will be obtained for the food and labor given.

I consider that 20 ewes are enough to keep in one flock for best results.

After the lambs are weaned breeding ewes should be put in good condition. Our ewes have the run of a clover field, and to finish up, a few acres of rape, which I find is one of the very best soiling crops for putting the ewes in good condition to stand the test of the winter months.

A Clever Wrinkle.—A clever way to remove a stubborn screw from a piece of wood—a screw that sticks—is to try this recipe: Heat a poker red-hot and hold it against the screw-head for a little while; wait a few minutes for the screw to cool down, when it will be found that the screw can be removed quite easily with the same screw-driver that just previously would not perform the work. The explanation is quite simple. The red-hot poker heats the screw; the screw expands and makes the hole it is in just a bit bigger. The screw then cools down and resumes its original size, leaving the hole in the wood a size too large—and there you are.

About T

All indications show this coming to a failure, and that than a fair yield of potatoes have become the news to us for their visibility, therefore marketing of them.

Those of us who are to justify their own position, to lighten the burden of a common plow, and pick them up to the potato fork work. The potatoes are three hours at best time to making. All of the and picked by the field is not large to pick them for.

The practice of time provinces, topped the Toronto store all of pass the first potato cellars or houses and regaining in the winter work is not possible that has even there and all smaller and fed to the in marketing, to formity of car lot the provinces do plains the extra are willing to potatoes. Good quality good price.

If we take pricing, storing and totes this year, we are likely to years will help short crop. The \$1.00 a bag. At the ruling price

How We Four

Wm. Kaw

The first year of each cow in of sent to the butcher cheese months on records for the matured cows gave milk, and two years average.

This year we have milked per lbs. of milk. She the flush, but a given her credit

We have raised cows quite a lot boys now take a each would like more than the other.

The greatest advantage which cows to raise or four heifer calves from which

If we have a cow worth of the worth purchaser then had a disappointment

Cow testing do through the sun daylight. In winter

About The Short Potato Crop

All indications point to a good price for potatoes this coming winter. The early varieties were a failure, and the late crop will not return more than a fair yield. In many sections from which potatoes have been shipped in previous years comes the news that farmers will be buying potatoes for their own use this winter. The advisability, therefore, of careful harvesting and marketing of what potatoes we have is evident.

Those of us who do not raise a sufficient acreage to justify the investment in a potato digger can lighten the hard labor in digging by running a common plow under the ridge of potatoes, turning them up to the surface. A little work with the potato fork will then bring them all into sight. The potatoes should be allowed to dry two or three hours at least before being picked. The best time to make the first grading is when picking. All of the culls should be left on the ground and picked by themselves or, better still, if the field is not large, allow the hogs and cattle in to pick them for you.

The practice of the potato growers of the Maritime provinces, whose potatoes for years have topped the Toronto markets, is to store all of the potatoes that pass the first grading in the field in potato cellars or the cellars of their houses and regrade them for shipping in the winter season when farm work is not pressing. Everything that has even the appearance of rot, and all smaller potatoes, are discarded and fed to the stock. This care in marketing, together with the uniformity of car load lots secured from the provinces down by the sea, explains the extra prices that dealers are willing to pay for Maritime potatoes. Good quality always brings a good price.

If we take proper care in harvesting, storing and marketing our potatoes this year, the extra prices that we are likely to secure over previous years will help to make up for the short crop. The price now is over \$1.00 a bag. At this time last year the ruling price in Ontario was 55 to 60 cents.

How We Found an 11,000 Pound Cow

Wm. Kaufmann, Oxford Co., Ont.

The first year we weighed and tested the milk of each cow in our herd, three of the cows were sent to the butcher. We took records for the six cheese months only that year. Last year we kept records for the full year, with the result that matured cows gave us from 8,000 to 9,000 lbs. of milk, and two year olds, 6,000 lbs. of milk on an average.

This year we have one cow that has finished her milking period, and has given over 11,000 lbs. of milk. She is not a very heavy milker in the flush, but a good stayer. I would not have given her credit if it had not been for the scales.

We have raised the average production of our cows quite a lot since we started testing, as my boys now take a greater interest in the cows, and each would like to have his cows give a littler more than the other fellow's.

The greatest advantage is that we know from which cows to raise our calves. We raise three or four heifer calves each year, and you can easily guess from which cows I raise them.

If we have a cow to sell and are asked about the worth of the cow, we just show the intending purchaser the testing sheet. We have not had a disappointed buyer yet.

Cow testing does not involve much time through the summer, when milking is done in daylight. In winter it is a little more bother,

as we have our cows in two stables, but I find that it pays well.

Cow testing, however, will not do it all; we must also feed and breed and care for our cows. Cow testing will never pay better than it does now, when feed is high in price.

Prevent Dampness and Weevils in Grain

W. M. Hays, Dept. of Agr., Washington.

As American farmers accumulate wealth, they build great barns, if not sufficient for all their hay and unthreshed grain, at least to store the neat grain until such time as good prices or needs of the bank account warrant its being taken to the market. In these store houses two enemies of the grain must be guarded against.—dampness and insects.

Only where the newly threshed grain is damp, is there usually need of extra precautions in storing grain. Then some means of drying must be employed. Large barn floors on which the grain is spread and turned with shovels twice or oftener daily, to avoid heating, and to induce drying, is usually the most convenient method.

Dry Farming in Ontario

R. C. Coleman, Halton Co., Ont.

We are hearing much nowadays about "dry farming." It seems that in some sections of Western Canada they are growing good crops where they have less than one-quarter the rainfall that we have here in Ontario. Some of us thought that we had dry farming in Ontario this summer. But, according to the views of those western men, we had plenty of rain.

Shall we practice dry farming methods where there is plenty of rain? I believe that, did we practice dry farming methods, the droughts that we have in Ontario would not affect us to an appreciable extent.

Now is the time to conserve moisture for next year's crop. Rain will fall in abundance for the next month or two. The snows of winter will add a lot of moisture to that which falls as rain. And we will have lots of wet weather next spring. Why not hold over some of this surplus moisture for the dry season next year?

NOT ONE-THIRD ENOUGH RAIN

Even in the best of seasons the rainfall from seed time to harvest does not supply one-third



New Ontario is Admirably Adapted by Soil and Climate to Supply Old Ontario With Potatoes

A large percentage of the potatoes used in the cities of Ontario comes from the Maritime provinces. New Ontario will soon be competing for a share of this trade now enjoyed by the Atlantic provinces. In all parts of New Ontario potatoes grow to perfection. The success of Mr. Eli David, of the New Lisheard Dist., who may be seen in the illustration, has been duplicated by scores of other settlers.

—Photo courtesy Cobalt Nugget.

In rare cases grain weevils need to be fought. Then the bisulphide of carbon treatment can be effectively used.

The bisulphide may be applied directly to the infested grain or seed by spraying or pouring without injury to its edible or germinative qualities. The most effective manner of its application in moderately tight bins, or other receptacles, consists in evaporating the liquid in shallow dishes or pans or on bits of cloth or cotton waste distributed about on the surface of the infested grain.

INSECTS KILLED BY EVAPORATION OF LIQUID
The liquid rapidly volatilizes and being heavier than air, descends and permeates the mass of grain, killing all insects and other vermin present.

The bisulphide is usually evaporated in vessels containing one-fourth or one-half pound each, and is applied at the rate of a pound and a half to the ton of grain. In more open bins a larger quantity is used. For smaller masses of grain or other material an ounce is evaporated to every 100 pounds of infested matter.

The grain is generally subjected to the bisulphide treatment for 24 hours, but may be exposed much longer without harmful results. Since this chemical is inflammable, all lights and matches should be kept away from it.

Surface drainage is cheaper than tile drainage, but the latter is generally to be preferred.—J. H. Gridale, Ottawa.

of the moisture required by a growing crop. A conservation of this winter moisture is dry farming as I would like to see it practiced in Ontario.

We do not depend altogether on Providence for our crops. We can do a whole lot ourselves. We can start right now to conserve moisture. Fall plowing is the way. Plowed land absorbs moisture that would otherwise run off. Plowed land, particularly when the plowing is deep, is loosened up and has greater water holding capacity than the same land in sod.

HOLDS 17 PER CENT. MORE WATER

It may seem to be contrary to reason to state that land that is tile drained will hold more water than land that is not so drained, but this is one of the chief points of importance about tile drains, not that they carry water off, but that they hold it in the soil. The drained soil is more porous and will hold at least 17 per cent more water than the same soil before the tiles are put in.

The last point, and one of the most important, in the conservation of moisture is through cultivation of the soil next spring and on through the summer. The biggest loss of soil moisture is not through the growing crop but by evaporation through the surface soil. The dust mulch made and kept by constant cultivation of hoe crops prevents evaporation, and is the biggest factor we have in conserving soil moisture.

Good fall wheat land is also good for alfalfa.—Henry Glendinning, Victoria Co., Ont.

Galt Steel Siding



"Galt" Embossed Steel Siding, put over a weather-beaten house or barn, will transform an old dilapidated structure into a modern building—thus increasing the real estate value 50%.

"Galt" Siding makes the whole building handsome and substantial, fire-proof and weather-tight. The cost is reasonable. It is easily applied and lasts for all time.

THE GALT ART METAL CO. LIMITED, GALT, ONT.
Watch for the advertisement with The Kite from Galt.



SYNOPSIS OF CANADIAN NORTH-WEST LAND REGULATIONS

Any person who is the sole head of a family, or any male over 16 years old may homestead a quarter section of available Dominion land in Manitoba, Saskatchewan or Alberta. This applicant must appear in person at the Dominion Lands Agency, or sub-Agency, for the District Entry by proxy may be made at any Agency, on certain conditions, by father, mother, son, daughter, brother or sister of intending homesteader.

Duties—Six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 10 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts, a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price \$1 per acre. Duties—Must reside upon the homestead or pre-empt six months in each of six years from date of homestead entry (including the time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-empt may enter for a purchased homestead in certain districts. Price \$10 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$500.

W. W. OORT,

Deputy of the Minister of the Interior
15—Unauthorized publication of this advertisement will not be paid for.

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During 1910 we sold over 133,400 acres; during the past four years we have sold over 400,000.

The Feeders' Corner

The Feeders' Corner is for the use of our subscribers. Any interested are invited to ask questions and receive prompt attention. All questions will receive prompt attention.

Rations for 1,000-Pound Cows

The following rations for dairy cows of 1,000-lbs. weight have been proposed by C. C. Hayden of the Illinois Agricultural College. These rations are properly balanced and contain sufficient dry matter for the proper nutrition of a cow of that weight. The amount of grain fed varies according to the production of the individual cow:

Alfalfa hay 10 lbs., corn stover at will, ensilage 30 to 40 lbs., ground corn 5 lbs., wheat bran 5 lbs., linseed meal 1 1/2 lbs., 1 lb. grain to 3 to 4 lbs. of milk daily.

Alfalfa hay 10 lbs., clover hay at will, corn silage 30 to 40 lbs., corn and meal 5 lbs., wheat bran 3 lbs., cotton seed meal 1/2 lb., 1 lb. grain to 4 lbs. milk.

Clover hay at will, corn silage 30 to 40 lbs., ground corn 5 lbs., ground oats 5 lbs., cotton seed meal 4 1/2 lbs., 1 lb. of grain to 4 to 5 lbs. milk.

Clover hay 10 lbs., corn stover at will, corn silage 30 to 40 lbs., ground corn 5 lbs., wheat bran 4 lbs., gluten feed 3 lbs., cotton seed meal 1 lb., 1 lb. grain to 4 to 5 lbs. milk.

Cowpea hay at will, corn silage 30 to 40 lbs., ground corn 5 lbs., ground oats 5 lbs., for very heavy milkers a little bran or oil meal; for very light milkers reduce amount of hay or oats 1 lb. to 4 1/2 lbs. milk.

Cowpea hay 10 lbs., clover hay 10 lbs., corn silage 30 to 40 lbs., ground corn 5 lbs., ground oats 4 lbs., linseed meal 1 lb., 1 lb. grain to 4 lbs. milk.

Succulent Feeds for Dairy Cows

C. C. Hayden, Illinois.

Because of its ease of production, handling and preserving, silage is the most important feed of the succulent class. It may be made from corn, sorghum, clover, alfalfa, cowpeas, etc., but corn is by far the best for this purpose. There have been many complaints and objections to its use in the past, but these are rapidly disappearing. The condensing companies which have been opposed to it are now permitting and even encouraging its use.

Most of the other complaints come from places where it is used for the

first time. This is usually due to cutting the corn too green or to improper filling of the silo. Too green corn makes a sour silage, which if fed in too large quantities causes indigestion and scours.

Beginners are dissatisfied because they have expected too much from its use. It must be remembered that it is not a balanced ration and cannot be used alone, nor should it be used with grain only, but with a liberal allowance of some dry roughage. Ordinarily not more than 30 to 40 lbs. should be fed regularly to each cow daily unless she is a very large cow.

The mangel is used in certain localities to supply succulence and is a very good feed. It can be grown with less labor than other root crops and the yields are good, but is not so rich in nutrients as some other roots. Where root crops are used for winter feeding it is almost necessary to have a root cellar in which to store the place of silage in the ration. The greatest objection to mangels and all root crops is the great cost of labor in their production.

Sugar beets are an excellent dairy feed and are highly prized by some breeders for feeding when making official records. There is a belief on the part of some persons that it is impossible to increase the percent of fat in the milk. Where the soil is adapted to the growth of sugar beets they yield well.

Pointers on Buying Feed

What feed's should be purchased to feed those grown on the farm? Speaking generally, only those feeds should be purchased which will supply the protein lacking in the feeds grown on the farm.

There is a long list of feeds on the market and it is quite a problem for the farmer to decide which he should select. There is nothing better than the straight grains when properly combined with home-grown roughage in the ration. So many of the new mixed feeds on the market have not been tried out in feeding tests and it is so easy for the manufacturer or mixer to vary the contents that it is difficult to state their value in terms of digestible nutrients, which is the true measure of value. Given percentages of nutrients are guaranteed for these mixtures, but these are not and not digestible nutrients. Their digestibility and value depend much upon the materials from which they come. Many of these mixed feeds contain mill screenings with weed seed, oat hulls, chaff, etc., which are of little if any value.

They are usually claimed to be balanced rations in themselves. The dairymen who has his own farm should not purchase a balanced ration, but those who have no other feed added to his home-grown feeds, will give a balanced ration, and this will almost invariably be a feed which contains a high percentage of protein.

Wet Brewers' Grains for Cows

We can get wet brewers' grains at a very low price. Please give directions for feeding them to dairy cows. J. S. Wellington Co., Ont.

Owing to the excessive quantity of water in wet brewers' grains they would have to be fed near to the brewery as the cost of transportation would be too high to haul them far at a profit. Unless fed with care they lead to very foul conditions in the stable, the moisture dripping down through the mangers and fouling in every corner. Also, unless fed in a short time they will become putrid.

There is nothing in wet brewers' grains, however, that is poisonous or when fresh or in water tight boxes. Supplied in reasonable quantities and fed with hay or other coarse fodder there is no better feed for dairy cows.

Thoughts on Calf Rearing

Whole milk is the most perfectly balanced food for the young calves, and do not let any one make you believe that there is anything else equally good. You cannot afford to take many chances of deranging their constitutions while they are yet very young, especially if they are purchased.

Be careful not to feed too much milk. If the little calf fails to come up to the pail with vim and relish, and acts as if it does not know whether it gets any milk or not, this is a sign that it has been given too much. Take the milk right away and do not try the next feeding time it will likely be hungry enough to wait some. Then if you feed it lightly for a few times you will avoid the threatened case of scours.

A good way to feed calves is to have them put their heads in little stanchions when you give them milk. Fasten them in until they get their heads out, by the time they have eaten this they will have overcome their natural inclination to suck one another's ears and will eat readily.

Never mix any grain feed with the milk, and if you gulp the milk down fast, and any grain that is left is very quickly forced with the liquid into the small intestines before it has been properly digested. The chances are that you will have to witness a case of scours on your hands inside 24 hours.

Scours is a form of indigestion, nearly always caused by improper feeding. Be very careful to feed out clean pails and to keep the milk sweet and at the right temperature. Provide clean, dry quarters, for no calf can thrive in a wet, dirty pen.

Calves are dropped in the fall and can go to pasture the next summer.

A Point on Mixing Feeds

In selecting feeds, the effect which the feeds may have on the animal should be kept in mind. It is well known by dairymen that certain feeds have a laxative effect and that others have a binding effect on the bowels. It is natural for the droppings from a cow to be soft and not hard like those of the horse. Such feeds as oil meal, silage, alfalfa hay, cowpea hay, brewer's grains, bran, and roots are called good conditioners and are complementary to those which are not good conditioners as corn, cottonseed meal, clover (late cut), millet, corn stover, straw, etc. In compounding rations, care should be taken to get the best combinations, that is, some good conditioners along with the others.

Cottonseed meal, clover hay and corn meal do not go together as well as cottonseed meal, corn meal, silage and clover hay. When either clover hay or hay are used, the linseed meal will answer better. Corn meal alone is said to be too heavy and not readily mixed with the digestive juices. This is probably true to a certain extent but this can be overcome by feeding the grain with silage or mixed with other cut roughage. Too much corn is not best for the cow just before calving. It is very important on keeping the system of the cow in good working order.

Silage for Work Horses

We have lots of silage but little hay. Cow silage is fed to our work horses this winter—A. C. Halton Co., Ont.

Owing to the large quantity of water in silage and relatively low nutritive value, silage is not adapted as a feed for young horses. In the case of the horse has a small stomach and feeds given it should be nutritious and not too bulky. For hard working horses silage should not be fed in any quantity for horses do not help to make up for a shortage in coarse feed.

FARM MAN

What Fertilizer

Please give information for potash, nitrogenous and phosphatic of the Westminster Dist.

The only method with accuracy the constitution of the soil analysis. Such a large knowledge of chemistry and a fully apparatus which in a fully equipped with such a complete secured by a of the soil for crop no be definitely in the present accurate method amount of plant is available. The terminating the necessary carrying on the small plots. The best returns the ones needed in themselves to dictations as to give the best result in a soil is color and a lack of growth of both nitrogen is not necessarily indica

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Fleshy fruits and of color also produces good early and phosphorus ally be found of which heretofore and lacking in lime, that are hard to be improved by lime. The best thing whether or as with other fert

ment with a small

Save Labor

The laborious rips by hand and a knife, which practice, has been done, and the with a hoe and with a sharp-sha mould-board re adopted. By stri rows together, they been and if row of tops, are picking up to be on.

With three men straddling one side and one behind fully performed; two hands are a time may be as slow as well as taproots will c through the soil before throwing it

A slatted chute on which to shoot the dirt out into the cellars of the cow, and the turnips from into, and remove may have accumu erwise they will a and rot for lack and windows of

FARM MANAGEMENT

What Fertilizer to Apply

Please give information as to how to test for potash, nitrogen, lime and phosphorus in the soil. J. Kennedy, New Westminster Dist., B.C.

The only method of determining with accuracy the proportion of food constituents in a soil is by a chemical analysis. Such an analysis requires a large knowledge of analytical chemistry and a large amount of costly apparatus which can be had only in a fully equipped laboratory. Even with such a complete analysis as could be secured by a chemist, the value of the soil for crop production could not be definitely determined, as up to the present we have no accurate method of determining the amount of plant food in the soil that is available. The best method of determining the needs of a soil is by carrying on fertilizer experiments on small plots. The fertilizers giving the best returns on small plots are the ones needed in that field.

Plants themselves give valuable indications as to what fertilizers will give the best results. Lack of nitrogen in a soil is indicated by pale color and a lack of leaf and stalk growth. A bright color and vigorous growth of both crown and roots, if nitrogen is not lacking but does not necessarily indicate that more nitrogen could not be used to advantage. An excessive growth of the leaf and stalk accompanied by imperfect flowers, bud and fruit, indicate too much nitrogen for the amount of other food constituents present.

An abundance of potash is indicated by a luxuriant growth of such crops as corn, cabbage and potatoes. Fleshly fruits of fine flavor, texture and color also prove the presence of potash. When a soil produces good early maturing crops of grain with plump, heavy kernels, potash and phosphoric acid will not generally be found deficient.

Soils on which grow such crops as horsetail and sheep sora are usually lacking in lime. Very heavy soils that are hard to work can usually be improved by an application of lime. The best method of determining whether or not lime is needed, as with other fertilizers, is to experiment with a small plot.

Save Labor at Root Harvest

The laborious task of pulling turnips by hand and topping them with a knife, which was once the common practice, has been generally abandoned, and the custom of topping with a hoe and turning the roots back with a sharp-edged plow, with the mould-board removed, has been adopted. By striking the tops of two rows together, the roots can be plainly seen, and, if turned inward on the row of tops, are clearly visible for picking up to be thrown into a wagon.

With three men loading, the wagon straddling on one man on each side and one behind, loading is rapidly performed; but if only one or two hands are available, one row at a time may be as convenient. If the plow is well managed, most of the taproots will be cut off, but it is well where soil clings to the roots to rap two together to knock off the dirt before throwing them into the wagon.

A slatted chute should be provided on which to shovel the turnips, to screen the dirt out from them as they roll into the cellar. It is well, also, when the cellar is full, to pick back the turnips from the place they fell into, and remove any earth which may have accumulated there, as otherwise they will almost certainly heat and rot for lack of ventilation. Doors and windows of the cellar or root

house should be left open for ventilation whenever severe freezing is not to be feared.

ABOUT FITTING ROOTS

Where cellar room is insufficient for storing the crop, roots may be safely pitted. Mark out a pit five or six feet wide; plow and shovel out to the depth of the furrow; build roots up to a point four or five feet high. Cover with straw to the depth of eight or 10 inches, then with earth to about the same depth.

For ventilation, set three-inch drain tiles on top, with one end resting on the roots, 10 or 12 feet apart, or leave an opening to the straw along the ridge, to be covered with boards to carry off rain, and place two inch tiles near the bottom to cause a draft. Fill the tiles with straw before severe freezing.

Points About Clover and Alfalfa

The common red clover makes one of the best roughage crops for our dairy farms.

It can be grown in all parts of Ontario, but not to the best advantage on all soils.

It is desirable because it contains a fairly high percentage of protein which will help to balance the ration and it also collects nitrogen from the air.

Red clover is not quite as sure as some other crops but a failure is evident early enough in the spring to permit the sowing of a substitute crop, such as peas and oats.

Clover is always relied by cows if it is cut early enough and properly cured. For the best results clover should be cut before too ripe, or when in full bloom. It contains a high percentage of crude fiber which is the least digestible part and which increases very rapidly as the clover ripens.

Clover yields well and is not very difficult to cure. The second crop, if clean and well cured, is as good as the first.

Clover can be made into silage but it is difficult to handle in the field and generally it is better to use as hay with corn silage.

Alsike clover contains a higher percentage of protein and for this reason is of more value a ton for feed, but, as a rule, it does not yield as well as the medium and mammoth red clovers.

ALFALFA

Where alfalfa can be successfully grown, it is probably the best roughage or hay crop.

It yields well, even rivaling corn in the amount of digestible nutrients produced per acre. Besides this fact, it contains a high percentage of protein, for which reason it is especially adapted to feeding with corn, which is lacking in protein.

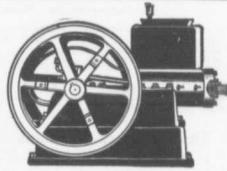
With good well-cured alfalfa hay it is possible to supply the protein needed for fairly heavy production of milk.

For the past six years, alfalfa at the Illinois Experimental Station has yielded an average of four tons of hay per acre. Out of seven sowings on the dairy farm, only once has there been a complete failure to get a stand and only on a part of the piece sown.

For two years the Illinois Station has been feeding a small herd of dairy cows on corn silage and alfalfa hay with a very little corn meal to the heaviest milkers. These cows produced an average of 8,500 lbs. of milk per year. These, however, were large cows capable of handling a large amount of roughage.

We need an improved cow and we need to feed her; or we might give the cow we have more food and better food. We must provide a water supply and furnish her all she will drink and induce her to drink all she will, at all times. Then we could put up a larger quantity of milk to chisel the cheesemaker and cheapen production.—D. Dorshshire, Leeds Co., Ont.

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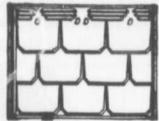
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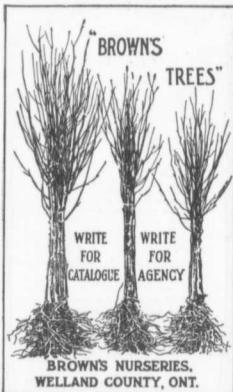
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HORTICULTURE

Points About Apple Packing

All barrels of apples should be racked when being packed, so that the fruit will settle, and the packer thus be able to tail his barrel so that the fruit will carry well. When the barrel is opened the fullness or slackness will indicate how well the fruit has been racked. Over-pressed fruit is usually found when apples have not been racked well. This may also be expressed by the terms firmness and compactness. The more solid the pack the better the fruit will carry.

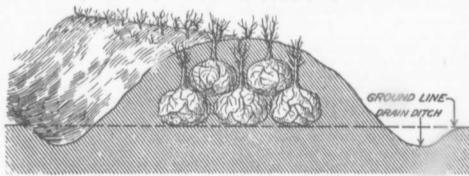
By tailing is meant the putting and placing of the last fruit into the barrel. All that is necessary in good tailing is to have the surface as level as possible with the stem end down when the apples are pressed. The care in tailing will be known when

is. Small growers who pack their own apples pack in the orchard and therefore the box cannot be used. Large buyers also, for the most part, go into those districts where the apples are to be had and pack in the orchard. Here again the box is hardly advisable.

"There are two places, however, where the box pack is advisable and can be used to advantage. Co-operative fruit growers' associations being located in the same place year after year and having their own packing establishment will use the box more and more. Syndicates that rent orchards over the country for a period of years, such as I am connected with, are also in a position to make good use of the box pack, and we are doing it. For the fancy grades of apples there is no pack so popular."

Fruit for Leeds County

What are the best varieties of berries, apples and plum trees to plant in this district? Where can they be had?—Mrs. G. M., Leeds Co., Ont.



A Suggestion for Those Without Storage Room Inside

Cabbage can be kept satisfactorily in trenches in the garden in winter when there is not room for them in the cellar. In addition to the earth protection shown in the illustration, a layer of straw over the soil four inches thick would be advisable in the cold climate of the greater part of Canada.

the barrel is open by the manner in which the fruit has been bruised when pressing.

The Box Pack is Coming

"In the packing of fancy grades of apples, the tendency is more and more towards the box package," said Mr. L. F. Metcalf, who is largely interested in an orchard renting syndicate, to an editor of Farm and Dairy recently. "This season we are putting up most of our fancy apples in boxes, the No. 1's and No. 2's going into barrels. We do not consider that we can afford to pack anything other than fancy apples in the box package. It costs more to pack and the package itself is more expensive.

"A packing house is almost necessary if the box package is to be used," continued Mr. Metcalf. "Were it not for this the box package would now be used more generally than it

I would suggest the following varieties of fruit for cultivation in Leeds Co., Ont.: Strawberries—Splendid, Warfield, Dunlop; red raspberries—Herbert; apples—Duchess, Wealthy, Snow, McIntosh. In plums you would probably be unable to grow the important commercial varieties, and I would suggest the following American native varieties: Hawkeye, Stoddard and Colonel Bryan.—Prof. J. W. Crow, O.A.C., Guelph, Ont.

Protect from Mice and Sunscald

W. T. Macoun, C.E.F., Ottawa Ont. We protect our trees during the winter with white building paper. It has an advantage over tar paper in that it keeps the tree cooler and sunscald is not liable to injure the trees. The paper is tied on with binder twine and a little earth heaped up around the bottom.

The best way to avoid the deductions of mice is not to grow them. Mice are not found in the same orchard with clean cultivation.

Some Apple Trees Observations

S. E. Todd, B.S.A., Lambton Co., Ont.

A study of the heading, pruning, and handling of our orchards offers us many excellent lessons. Look at the tree headed high up into the air. It takes a 30 foot ladder to get at the fruit. Probably the trunk has a bare patch on its side due to sun scald. The under branches are all pointing downwards and the tree is a generally undesirable type.

On the other hand we occasionally find the very low-headed tree. Its trunk is sound and strong, its upper limbs tend upward, the fruit is easy to pick, and its general appearance is desirable.

Again observe the tree that has been pruned out at the centre and all the big limbs bared of fruit branches and spurs. Each limb has a bunch of branches at its extremity like the switch on a cow's tail. The middle of such trees grow full of water sprouts. The fruit, being all forced to the extremity of the branches, is dragged them down unduly, and causes the trees to look like grotesque and distorted specimens of some variety of weeping willow. This, evidently is not the way to prune.

THE EFFECT OF CULTIVATION Take notice of the effect of soil culture in an orchard and notice the orchard's steady progression backwards from the first year onward unless manure or something else is applied in such quantity as to partly kill the sod.

All these observations in the orchards that our fathers planted teach us the value of better methods than have obtained in the caring for our apple trees. Many orchards stand in the county to-day, living monuments to the ignorance and carelessness of their owners.

BOYS AND GIRLS

A great number of girls and boys have won pure bred pigs, pure bred chickens and other valuable premiums through getting their fathers' farms and dairies. You can win some kind of prizes also. Will you try? Get busy after school or on Saturday and win the premiums you would like.

No farmer can afford to go without your valuable farm journal, Farm and Dairy. I will try and induce some others to join the growing list of your readers.—T. B. Rider, Stanstead Co., Que.

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THE STUMP



POULTRY

How About

E. F. Johnson, The snow will be high time that we getting ready and winter eggs, importance is the pullets with which the laying quartet lay a profitable loss must be early grown. We have is a month's difference of the pullets of three months diff which they start keep the early market the rest.

Have you adopted the new? We have freedom from draughts of a good Warmth was at this list, but that Wire netting on house is much more for the health of

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For best results, Poultry to us, ed Poultry, Bu. Crates Supplied.

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Fowl A Pair 4 for 1 and 10 for 1 year. Tell us which FARM AND DAIRY

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CANADA FUR AN 905 Ontario St. E.

POULTRY YARD

How About the Winter?

E. F. Johnson, *Middlesex Co., Ont.*
The snow will soon be flying. It is high time that we poultry men were getting ready for winter conditions and winter eggs. The point of first importance is the selection of the pullets with which we intend to fill the laying quarters this winter. To lay a profitable lot of eggs the pullets must be early hatched and well grown. We have found that if there is a month's difference in the age of the pullets there will be two or three months difference in the age at which they start to lay. We always keep the early hatched pullets and market the rest.

Have you adopted the open front house yet? We have, and with good success. Light, air, dryness and freedom from drafts are the essentials of a good poultry house. Warmth was at one time added to this list, but that idea is out of date. Wire netting on the front of the house is much more satisfactory both for the health of the birds and the

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861 Ontario St. E., Montreal, Que.

number of eggs they will produce than double sash windows.

With an open front house we have to give the birds every opportunity to work. A good supply of litter should be on hand. Six or seven inches of cut straw, shavings or leaves on the floor in which to mix the grain will keep the birds hustling, warm and healthy.

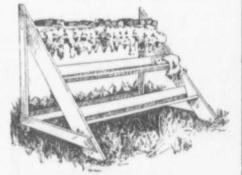
THE EASIEST WAY THE BEST

Life is too short to waste in mixing wet manures for fowls, especially when we can secure so much better results from dry manures. How much easier it is to dump a mixture of crushed oats, a little bran, cracked corn, and cracked wheat into a self-feeding hopper once a week than to mix a wet mash once or twice a day. In addition to the mash in the hopper we scatter whole corn and wheat in the litter, mixing it in with a rake. This keeps the birds busy. Sweeping up clover leaves and seed from the barn floor, or better still, alfalfa hay, is also appreciated by the birds.

And lastly, how about the supply of grit? A box of sand that can be got very readily before the ground freezes, comes in nicely. Cracked oyster shell, broken pottery and old mortar also make good grit.

To Make Fowl Attractive

A representative of one of our largest Canadian produce houses, when talking with an editor of Farm and Dairy recently, mentioned the value of properly shaping fowl before



Adding Value to Dressed Poultry
The appearance and value of dressed poultry can be greatly increased by being a few hours on a shaping board such as the one shown. It gives the fowl a square, plump appearance that is attractive to customers.

sending them to market. He told us of a consignment of fowl that he had sold to a Jewish retail merchant in Montreal. The fowl were in fair flesh, but no attention has been paid to pressing them into shape, and the merchant refused them, saying that they were inferior.

The birds were taken back to the packing house, thawed (as they had been frozen), put on a shaping board, frozen again and returned to the merchant. He thought he was receiving first-class poultry.

Much of the fowl that appears on the market can be improved 100 per cent in appearance, and in some cases 50 per cent in value, by properly pressing the fowl after they have been plucked. An arrangement such as seen in the illustration on this page, which can be easily made by any one, is a good style of pressing board.

As soon as the bird is plucked the wings are snapped in, the legs drawn in close to the side and the bird laid on its back on the pressing board. An ordinary building brick is then laid on the bird's breast. Birds even if only in medium fleshing, when treated in this way, present a square, plump appearance that is attractive to customers.

Farm poultry raisers would do well to follow this plan of improving their birds' appearance before sending them to market.

To Weed Out Poor Layers.—It is natural for all hens to want to set, but it is easy to break a good layer

of the habit. A broody strain is a poor laying strain. Poor layers can be weeded out by means of the trap nest, but this is an expensive way to find the boarders. An easy way is to weed out all broody hens and the laziest hens—those that are on the roost earliest at night and the latest off in the morning.—J. I. Brown, Montreal.

About Cholera and Black-Head

Please give me a sure cure for black-head and cholera in turkeys.—E. G.

I only wish I could give a sure cure for the disease named. Unfortunately, there is no such thing as a certain cure of either of these deadly diseases yet known.

As a possible preventive of black-head a teaspoonful of muriatic acid to a pint of the drinking water is recommended by Dr. Higgins, of the Veterinary Branch of the Health of Animals Department, Ottawa.

It is quite possible to mistake the symptoms of some other disease for that of cholera, which is, fortunately, an uncommon disease among poultry in Canada. The diarrhea consequent upon an attack of enteritis or acute inflammation of the lower intestine is often mistaken for cholera. And so it is where diarrhea which follows worms allowed to become numerous because unattended to.

A live but sick fowl suffering from the symptoms of either disease should be sent to Dr. Higgins for examination and report; this to discover the exact nature of the ailment.—A. G. Gilbert, C.E.F., Ottawa.

Winter Layers are Best Payers

When eggs are 40c. and 50c. a dozen, is the time you want your hens to be laying their best.

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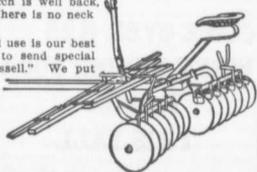


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FIGURE up the profit per year and the total profit your average cow pays during her lifetime. Then get the facts about the profits an IHC Cream Harvester makes—in extra butter-fat, in extra hog-profits from skim milk, in work and time saved, and in the many other ways, all shown in our catalogues. It won't take you long to see how you could profitably buy an IHC Cream Harvester instead of another cow. The total profits paid by an IHC Cream Harvester will amount to much more.

Keeping cows without a separator is like harvesting wheat without a binder. But you must be careful what you buy. If you want to be sure of getting the closest skimming, easiest turning, and easiest cleaning separator made—choose one in the IHC line—

Dairymaid and Bluebell

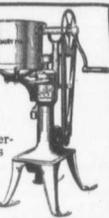
These are the only separators with dust-proof and milk-proof gears, which are easily accessible. The frame is entirely protected from wear by phosphor bronze bushings. These separators have large shafts, bushings, and bearings; the flexible top-bearing is the strongest and most effective found in any separator. The patented dirt-arrester removes the finest particles of dirt from the milk before the milk is separated.

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IHC Service Bureau

The purpose of this Bureau is to furnish farmers with information on better farming. If you have any worthy question concerning soils, crops, pests, fertilizer, etc., write to the IHC Service Bureau, and learn what our experts and others have found out concerning these subjects.

SWINE DEPARTMENT

Our readers are invited to ask questions in regard to swine. These will be answered in this department. You are also invited to offer helpful suggestions or relate experiences through these columns.

About Scalding Feed for Hogs

Would scalding or cooking the meal for hogs increase its feeding value? We have plenty of milk. What is the best method of feeding meal to hogs?—Thos. Weaver, Muskoka Dist., Ont.

The general consensus of opinion amongst our most successful hog men is that the scalding or cooking of meal does not increase the feeding value of the meal and may cause loss in feeding calves. At any rate the expense for fuel and the labor in cooking is lost.

An average of trials at five American and Canadian experiment stations shows a loss of six per cent of the feeding value of various meals through cooking. Potatoes and beans on account of the formation of the starch granules are improved by cooking, but these are the only two feeds we know of that will pay for the trouble.

The best method of feeding meal to hogs is by soaking it. Several experiments have shown a difference of about seven per cent in favor of wet or soaked meal over that fed dry. We would suggest that the meal soaked for several hours in skimmilk would be the best method of feeding.

A Cause of Sickness

The primary cause of many intestinal complaints of hogs is the fermentation set up in the hog tub, which refuses, often quite unsuitable for food, may be thrown, and in which refuse that may originally be suitable changes its character. It is

difficult to avoid trouble of this kind, but there is a need for some recognition of the idea that anything, however offensive, may be safely fed to pigs, for many cases of serious illness have been traced to the hog tub.

One who is especially called for—to beware of the presence of salt and soda in the swill. Both, in anything like large quantities, are poisonous to pigs, and this fact is not to be set aside because someone has given his pigs a little of either and found that no harm resulted. The swill in use in many places receives the remains on the dinner plates, on such a scale there is probably some salt, the contents of the washing up pans, and other kitchen liquids in which soda and salt have been used, and the amount that may unwittingly be given to the pigs in this way is sufficient to cause sickness.

Pig Feeding Pointers

Extensive pig feeding experiments with many feeds in various mixtures at the Maryland Agricultural College have led to the following conclusions:

1. Pigs allowed silage at will made faster and more economical gains than those having ground fodder mixed with their feed.

2. Young hogs made faster gain upon corn meal and skim milk than upon shelled corn and skim milk, but if cost of grinding was subtracted the difference in profit was small though still in favor of corn meal as against shelled corn.

3. Pigs fed a mixture of grains soaked for 24 hours made both faster and cheaper gains than either pig fed the same feed mixture dry, or those having it given freshly mixed with water.

4. Pigs fed for a period of 56 days on a ration consisting of shelled corn, wheat middlings and skim milk grew faster than those having chopped alfalfa substituted for part of the middlings in the above ration. When the test was continued, rejecting two sick pigs from the lot with alfalfa, the pigs getting alfalfa gave the latter results.

5. The substitution of wheat bran for one-fifth the weight of hominy chop did not increase the value of the ration but hominy chop alone gave better results than a mixture of three pounds hominy chop to two pounds bran.

6. Soft coal in unlimited quantity seemed not to be harmful to pigs in confined pens. Soft coal, wood charcoal and a tonic mixture ranked according to value as correctives in the following order: (1) Tonic mixture, (2) wood charcoal, (3) soft coal. The lot of pigs having no corrective made smaller gains than any of the other lots, but produced pigs more cheaply than the lot on soft coal.

For Better Crops

"For Better Crops" is the subject of a neat little book of 160 pages, just published by the International Harvester Co. of America. The subjects treated in this book cover a wide range of thought, and the matter is presented in a form convenient to the use of those practical farmers who are endeavoring to make their acre yield larger and more profitable returns.

Increasing fertility, the growing of small grains, corn, alfalfa and wheat, the use of farm power, the best methods of making hay, and the whole subject of farm machinery, are dealt with in a complete and comprehensive manner. The articles in this book have been contributed by such leading agricultural authorities as Cyril H. Hopkins, W. M. Hays, Jos. W. Waldo Brown and Professor Thos. Shaw. The book is as attractively illustrated as it is sensible in its matter. H. C. machinery takes a prominent part.

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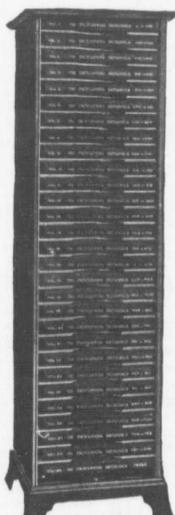
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THE supreme merit of the Encyclopædia Britannica, 11th Edition, as a gift is that it effectively imposes high standards. The recipient feels, especially if in the formative period, that the gift of a work of such learning and authority is a subtle tribute to his intelligence, and he feels that, in accepting it, he incurs an obligation to familiarize himself with its contents.

The number of directions in which the systematic use—and this comes naturally—of the Encyclopædia Britannica may influence for good a developing mind, is legion. For idle and listless reading, it substitutes an accurate scrutiny of the foundations of conclusions, opinions and beliefs. By its insistence on what is essential in every question, and by its exclusion of all that is irrelevant, it promotes habits of concentration and analysis, and instils a sense of intellectual values. In its thousands of biographies of the men and women who have figured prominently in the human story it opens new horizons and sets up new ideals.

To some readers, it may even indicate, for the first time, their real vocation. For it is a fact that, in nearly every efficient, useful life, there is traceable, at some parting of the ways, the determining influence of a book.

CAMBRIDGE UNIVERSITY PRESS (Encyclopædia Britannica Department)

Royal Bank Building - 10-12 King Street East, Toronto

Please send me the new India Paper Prospectus of the 11th Edition of the Encyclopædia Britannica.

Name.....
Profession or business.....

FARM AND DAIRY AND RURAL HOME

Published by The Rural Publishing Company, Limited.



1. **FARM AND DAIRY** is published every Thursday. It is the official organ of the British Columbia, Ontario, Eastern Ontario, Western Ontario, and Bedford District, Quebec, Dairymen's Associations, and of the Canadian Holstein, Friesian, and Jersey Cattle Breeders' Associations.

2. **SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance, \$3.00. On all checks add 5 cents for postage, except Canada and Great Britain, add 50c for each year's subscription free for a club of two new subscribers.**

3. **REMITTANCES** should be made by Post Office or Money Order, or Registered Letter. Postage stamps accepted for amount less than \$1.00. On all checks add 5 cents for exchange fee required at the bank.

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5. **ADVERTISING RATES** quoted on application. Copy received up to the Friday preceding the following week's issue.

6. **WE INVITE FARMERS** to write us on any agricultural topic. We are always pleased to receive practical articles.

CIRCULATION STATEMENT

The paid subscriptions to **Farm and Dairy** exceed \$100. The actual circulation of each issue, including copies of the paper sent subscribers who are not slightly in arrears, is 13,000. On all checks added from 15,000 to 17,000 copies. No subscriptions are accepted at less than the full subscription rate. Thus our mailing lists do not contain any dead circulation.

Signed detail of the actual circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

OUR PROTECTIVE POLICY

We want the readers of **Farm and Dairy** to feel that they can deal with our advertisers with our assurance of our advertisers' reliability. We wish to admit to our columns only the most reliable advertisers. Should any advertiser cause us to be dissatisfied with the treatment he receives from any of our advertisers, we will investigate the circumstances. If we should find reason to believe that any of our advertisers are unreliable, even if the slightest doubt exists, we will discontinue immediately the publication of their advertisements. When the circumstances warrant, we will expose them through the columns of the paper. Thus we will not only protect our readers, but our reputable advertisers as well. In order to be entitled to the benefits of our Protective Policy, you need only to include in all letters to advertisers the words "Farm and Dairy." Your advertisements in **Farm and Dairy** must be made to **Farm and Dairy** within the date of the date of the date. Complaints must be made to **Farm and Dairy** within the date of the date. If you wish an unsatisfactory transaction, with proofs thereof, and within one month from the date that the advertisement appears, in order to take advantage of the guarantee, we do not undertake to adjust trifling differences between readers and responsible advertisers.

FARM AND DAIRY

PETERBORO, ONT.

RETAIN DR. RUTHERFORD

Since Dr. J. G. Rutherford announced his intention of leaving the services of the Dominion Government as Live Stock Commissioner and Veterinary Director-General, Canadian stockmen have not ceased to express their high appreciation of the services rendered the live stock interests of Canada by Dr. Rutherford. They have continually urged that if at all possible his services should be retained by the Department of which for many years he has proved himself such a capable head.

Dr. Rutherford's efforts in connection with the stamping out of contagious animal diseases, Government meat inspection, the control and eradication of tuberculosis, and in many other lines, have earned for him a warm place in the hearts of Canadian stockmen. The public has confidence in him.

It is to be hoped that through the reorganization that may be expected to take place in the Department of Agriculture under the new Minister, arrangements may be made by means of which Dr. Rutherford's services may be retained for the Dominion. Hon. Martin Burrell can earn one of the first feathers for his new administrative cap by bringing this about.

TIME TO LEARN FROM THE WEST

The fact that the farmers of Ontario did not stand behind the Canadian Council of Agriculture in the recent Dominion elections is not altogether surprising. In Ontario not more than about three per cent. of the farmers are affiliated with the Dominion Grange which is the only independent farmers' organization, in the province. In dozens of counties in Ontario our farmers are without any form of independent organization. Surprising as it may seem also, not more than one farmer in three in Ontario takes a purely agricultural paper. All the information the great majority of the farmers of Ontario had in the recent elections, in regard to the program laid down by the farmers' deputation that went to Ottawa last December, was what they had been able to gather from the party papers. In other words, the people knew almost nothing about it. Under such conditions it is not surprising that the so-called farmers' movement in Ontario did not materialize.

The foregoing figures illustrate also how necessary it is that as farmers we should be better organized. Until we can get together at times when the air is free from election talk and as farmers discuss matters of mutual interest, free from the influence of our party organizations, we need not expect that any political party will treat us seriously during any election campaign.

In western Canada the farmers' organizations are supported by the great majority of the farmers of the prairie provinces. Because of this fact, they have been enabled to accomplish notable reforms. They have broken the elevator combines, forced their provincial governments to break up the telephone monopolies, and compelled the railways to amend their rates. In Alberta and Saskatchewan the farmers' organizations are almost all powerful. It is time for the farmers of Ontario to learn some lessons from the accomplishments of our brother farmers in the west. Is it not ridiculous that in view of the fact that we farmers comprise sixty-six per cent. of the population of Canada, there is not a real farmer in Premier Borden's Cabinet, while in Sir Wilfrid Laurier's there was only one?

A tax on farm improvements is a tax on industry.

The man who is afraid of doing more than he is paid to do is afraid of something that wouldn't hurt him.

An outbreak of cheese steaming is reported from Oxford County, Ont. It would seem that better police protection is needed in rural districts.

THE ENCYCLOPAEDIA BRITANNICA

What shall we farmers read, and wherewith shall we be educated?

The question is one for the individual to answer. There is, however, on every parent a responsibility in this connection; and that not alone in regard to himself,—the children must be considered.

Elsewhere in this issue **Farm and Dairy** readers will find a full page advertisement, introducing the **Encyclopaedia Britannica** in its new eleventh edition of 1911. The complete and modern exposition of human thought, learning and achievement bound in the twenty-nine volumes of this great work is a tower of learning that any man may well wish to place within easy access of his children and have it for his own use as an education and an ever ready work of reference.

The **Encyclopaedia** has come to be recognized as an institution and as one of the prized heritages of school-boys and readers, wherever the English language is spoken. We commend it to **Farm and Dairy** readers, every one of whom on obtaining this work, will thereby place within reach of himself and family something of real worth, something that will make life for each member of the family more happy, and something that will educate to sovereign knowledge, which everywhere is recognized as power.

The great advantages accruing to the families who purchase the **Encyclopaedia Britannica** and use it will have a lasting and ever growing value that will remain long after the price is forgotten.

PROFITABLE DAIRYING

Dairying and profitable dairying are often two very different things. Unfortunately many of us do not realize the difference between these terms until after long and unprofitable experience—or until we begin cow testing and get our eyes opened. Many of us are beginning to find that while a "cow is a cow," there is a big difference in cows.

Mr. Whitley's last report shows what several dairy farmers have found about the profitableness of various cows in their herds. One Quebec farmer, for instance, discovered that while one cow in his herd was making 6,328 lbs. of milk in a year, another cow made only 2,908 lbs. At present prices for feed the second cow was a loss to her owner. He would have been better off had he had only the one cow instead of two.

Numerous instances are given in the same report to show the variation in the average production of cows in different herds. One New Brunswick farmer mentioned by Mr. Whitley had a herd producing an average of 9,016 pounds of milk and 404.9 pounds of butter per cow in the year, while another farmer had a herd averaging only 3,389 pounds of milk, and 198.3 pounds of butter. These figures are illuminating and show the great need of systematic testing of the individual production of the cows in our dairy herds.

The most important thing in dairy-

ing is to know the production of each and every cow in the herd. Without this knowledge we can neither feed nor breed intelligently. There is only one way to determine this individual production—by the scales and Babcock test.

The change in administration at Ottawa endangers Government employees, not regularly under the Civil

Service Commission, insofar as losing their positions is concerned.

Among these employees are the inspectors who have been doing the testing in connection with the Record of Performance work. These men have for the most part been doing excellent work. They are in a much better position than the experience they have gained to carry on the work to the satisfaction of our dairy cattle breeders than new men would be. The best interests of dairying in Canada demands that none of these trained inspectors be replaced unless it can be shown that they have failed in the performance of their duties as inspectors and testers.

Many farmers make the mistake of purchasing farm machinery and supplies that are not perfectly adapted to the buyers' conditions. Before purchasing it would pay you to look carefully over the field. To this end correspond freely with the advertisers in **Farm and Dairy**, knowing that you have the advantage of our Protective Policy as published on this editorial page week by week.

The man who improves his farm is a public benefactor. His improvements give work to the working man, a larger business to the manufacturer, more business for the merchant and prosperity all around. How do we reward him? Why, we raise his taxes. A tax on improvements is a tax on industry. The removal of the tax on farm improvements and an increase of taxes on land value would be followed by the erection of new and better buildings and fences all over Ontario. Surely this would be desirable.

Strange

(Breeders Gazette)

It is not odd that some good thing have fairly to be forced on farmers: Alfalfa is the best illustration of this fact. The Illinois Alfalfa Growers' Association was organized to persuade farmers in this state to grow the plant that will yield them the greatest profit per acre of any they can produce.

It seemed to require an organized effort to induce farmers to put money in their pockets. That association has become affiliated with the Illinois Farmers' Institute and the machinery of the institute will be used in the alfalfa propaganda. Secretary McKee, at Springfield, desires the name and address of every Illinois farmer who has grown, or failed to grow, or wants to grow, alfalfa.

Mountain-high demonstration of the value of alfalfa in Wisconsin has been made during the last fifteen years and yet an alfalfa club has just been organized in that state to induce farmers generally to grow it. There are some things connected with poor human nature that are altogether past finding out. Philosophy has never plumbed their depths.

Creamery

Butter makers are contributions to this department on matters of interest and to suggest subjects for articles. Address letters to Creamery.

Paying for Quality

Are you paying for its quality, think that you are to spoil your good thing exactly as you who do not care who they send in? Do a cent or two more for good cream, greater inducement to send you good cream, the sermons on quality that you can

What salary would salesman who could touch with over every week? \$200 a week? I just tell him to compare his own figure with the figure of the DAIRY FARMER.

And if you are DAIRY FARMER, farms EACH YEAR ACRES, each with AGE INCOME \$1,500 annually—greatly totaling 1000—would be able man. Would the truth is, h valuable.

If, furthermore was highly respected company, and LOOKED FOR was of great MAT and ASSISTANT these farmers he still more.

The advertising Farm and Dairy service of such a be-had-in-any-other man.

"The cost?" use a WHOLE P you ONLY 44 C DRED to reach t

A QUARTER by 4 1/2 inches, ONLY ONE-NI- DON'T FAMILY

Don't mention of travelling sal- cent-saving circula- son with real val- service like this!

You have heard "It pays to adv- like these in the have advanced a the opinion stage- yond the question- vertising is profit-

It is now A C MARKETS, WHE PEOPLE AND H BEST REACH T

Through Farm can reach 10,500 of Canada. Whe them through th are getting to t this is

"A Paper Farm

Creamery Department

Butter makers are invited to send contributions to this department, to ask questions on matters relating to butter making and to suggest subjects for discussion. Address letters to Creamery Department.

Paying for Quality in Cream

Are you paying for cream according to its quality? If not, don't you think that you stand a good chance to spoil your good patrons by treating them exactly as you do the patrons who do not care what kind of cream they send in? Don't you think that a cent or two per pound better fat more for good cream would be a greater inducement to your patrons to send you good cream than all of the sermons on quality and cleanliness that you can preach? Money

I.

What salary would you pay a salesman who could bring you in touch with over 10,000 farmers every week? \$100 a week? \$200 a week? Or would you just tell him to come to work and name his own figure?

And if those farmers were DAIRY FARMERS, living on farms EACH AVERAGING 150 ACRES, each with AN AVERAGE INCOME EXCEEDING \$1,500 annually—thus in the aggregate totalling over \$15,000,000—he would be a pretty valuable man. Wouldn't he?

The truth is, he would be invaluable.

If, furthermore, that salesman was highly respected, kept good company, and was EAGERLY LOOKED FOR each week and was of great MATERIAL VALUE and ASSISTANCE to each of these farmers he would be worth still more.

The advertising columns of Farm and Dairy afford you the service of such an ideal—not-to-be-had-in-any-other-form—salesman.

"The cost?" Well, if you use a WHOLE PAGE it will cost you ONLY 44 CENTS A HUNDRED to reach these people.

A QUARTER PAGE, space 6 by 4½ inches, COSTS you ONLY ONE-NINTH OF A CENT A FAMILY!

Don't mention any proposition of travelling salesmen or even cent-saving circulars in comparison with real value and efficient service like this!

You have heard that slogan, "It pays to advertise?" Facts like these in their working out have advanced advertising past the opinion stage. We are beyond the question of whether advertising is profitable or not.

It is now A QUESTION OF MARKETS, WHERE ARE YOUR PEOPLE AND HOW CAN YOU BEST REACH THEM.

Through Farm and Dairy you can reach 10,500 Dairy farmers of Canada. When you appeal to them through this medium you are getting to them right, for this is

"A Paper Farmers Swear By"

talks. These are questions that creamery men would do well to consider.

The creamery men of at least one province of Canada have come to the conclusion that while sermons are all right in their place, those patrons who are not affected by good advice should be treated as they deserve and their cream cut in prizes. Money talks! In Farm and Dairy last week Mr. A. A. Munro, an Alberta creamery man, tells how in just a few months their proportion of No. 2 butter was reduced from 47 per cent. to 16 per cent. Alberta creamery men are unanimous in acclaiming the success of the cream grading system in that province. Saskatchewan creamery men in all likelihood will adopt the same system in the near future.

Can we creamery men in Eastern Canada afford to be left behind by our brethren in the West? Can we afford to see our butter taking a second place because Eastern patrons refuse to send in a decent quality of cream? Will not the system that is working out so perfectly in the western provinces and also in the United States work out just as well in Eastern Canada?

Farm and Dairy invites an open discussion in these columns of the practicability of adopting some system of cream grading and payment by quality in our creameries. This is the live question in the creamery world to-day. What do you think of it?

Old Cream Means Bad Butter

In spite of the various agencies at work in improving the quality of butter, as nearly as we can analyze the present situation, there is as much poor butter produced now as ever. The reason for this state of affairs is that the real source of all this trouble has scarcely been touched as yet. We refer to the age of the cream, which does more damage to the butter industry than all other agencies combined. We can improve the raw milk supply, better the factory conditions and increase the skill of the butter maker as much as we please, but as long as old cream will be accepted at creameries, just so long will the quality of butter be poor.

Cream is like an egg. Both are infected with putrefactive bacteria and both will be putrefying from the moment they are produced when kept under the temperature conditions under which they are usually kept and handled. Now, the damage those bacteria do in cream held a day or two, amounts to more than the millions of dollars expended annually in reducing their number by improving sanitary conditions and by teaching butter makers the best methods of controlling them during manufacturing process.

Now, how does the age of cream more than offset the influences that have been at work for the betterment of the quality of the butter? Here is an illustration: Suppose that where formerly there were four bad bacteria in the cream, there are only two now, as a result of better sanitary conditions. By letting the cream stand at prevailing temperature for an extra 24 hours the two bacteria will easily have developed into 200. Therefore, while sanitary conditions have caused a decrease of 50 per cent. in the number of bad bacteria, the age of the cream has caused them to increase 10,000 per cent.—Butter, Cheese, and Egg Journal.

After I had used scales for a month I noticed decided differences in the testing of cream. Patrons who always had a high test were getting higher tests than ever and patrons with low tests lower than ever. This showed that if the scales is the just method of taking the sample, and I believe it is, patrons paid by pipette method are being treated unjustly.—J. Almonte, Lincoln Co., Ont.



Save One Dollar, Lose Two

Isn't that just about the size of it—when something shoddy and cheap is foisted on you in place of the

De Laval Cream Separator

You see, the early disability of the shoddy thing, and poor performance while it does hang together, makes it a losing proposition, no matter how cheap.

The De Laval for Satisfaction.

Send for beautifully illustrated catalogue.

Agents Everywhere.

THE DE LAVAL SEPARATOR CO.

175-177 Williams St.

MONTREAL

WINNIPEG

VANCOUVER

Who Says Skates?

Say Boys! we have made arrangements for every boy—and every girl too—to have skates this coming winter.

Do you want Hockey Skates or do you want Spring Skates?

We have both kinds. Every boy and every girl who helps us may have a choice of either of these as shown below.

Your choice of either of these kinds of skates will be given free in return for only one new subscriber to Farm and Dairy, to be taken at only \$1.00 a year.

A better pair of Athletic Hockey Skates, of extra quality steel, and heavily nickle plated, for only two new subscriptions.

See one of your Father's neighbors after School, or on Saturday. Get him to subscribe. Then write us, sending the subscription, and we will send the skates.

Which of These Two Kinds Do You Want?



(Spring Skates)



(Hockey Skates)

In ordering skates send the size of the boot in inches from the extreme heel to the extreme toe.

Farm and Dairy, Peterboro, Ont.

Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters relating to cheese-making and suggest subjects for discussion. Address letters to The Cheese Maker's Department.

Some Pointers About Starter

B. A. Izeddick, Northumberland Co., Ont.

We get pure cultures from either Kingston or Guelph each spring and begin the season with two or three starters from which we select the best ones. The milk for the starter is selected from that delivered by the patron who takes best care of his milk and from that morning's milking.

The milk is sterilized immediately with dry steam. When water is used for heating the milk for the starter we can get it up to only 125 degrees, but with steam a temperature of 212 is easily reached. The milk is held

at a high temperature for three or four hours and then cooled to that temperature at which the culture works best.

Different cultures require different temperatures. It is necessary to study the culture and adapt conditions to it. We find that most cultures work best at a temperature around 68 degrees. When the milk is cooled to this temperature the culture is added immediately.

The greatest objection to pasteurizing the milk for culture is that spores are not killed. With dry steam at a temperature of 212 degrees, the spores are all killed. An objection to the higher temperature is that the cans are hard to keep clean, as a coating of albumen's burned onto them.

Handling Milk Cans Made Easy

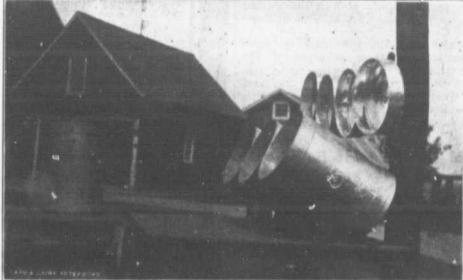
Mr. Jas. R. Anderson, of Prince Edward Co., Ont., does not believe in "lugging" 300-pound cans full of milk, nor does he believe in taking

If we had official testers appointed I believe the test system would spread rapidly. The knowledge that work is of no use unless the tests are absolutely correct has in the past kept makers from advertising it, but with official testers this objection would be removed.

Condition of our Cheese Trade

Jno. Humphries, Frontenac Co., Ont. The most curious phase in the various criticisms in connection with our cheese trade from "paid by test" to the "taste of the consumers" is that of totally ignoring the raw material as a factor in the production of fine cheese. We are starting at the wrong end in our efforts to improve the cheese trade if we leave the raw material as the last thing to be taken in hand and improved.

Considering the vital importance of the raw material as the first essential to success any criticism is quite superfluous till this is remedied.



Some Things About As They Should Be

By means of the truck shown in the illustration Mr. Jas. R. Anderson of Prince Edward Co., Ont., saves himself and his help a great deal of unnecessary lugging of heavy milk cans and yet has his building and barnyard to be sanitary, cleanliness about this equipment.

the time to carry the milk in pails from the stable to his milk stand, which is at a considerable distance from the building. The illustration on this page, reproduced from a photo taken by an editor of Farm and Dairy when visiting Mr. Anderson's farm recently, shows how Mr. Anderson has solved the problem.

The milk house and stand is located about 200 feet from the stable. A track is laid from the stand to the stable door, and on this a trolley is run. The cans are placed on the trolley, and the pails of milk have only to be carried outside the stable door to be emptied. When milking is over the trolley is then pushed with little effort to the milk stand. As the top of the trolley is on the same level as the milk stand, there is no heavy lifting.

Midway between the stable and the milk stand is the platform, shown in the illustration, on which the cans are washed and exposed to the rays of the sun.

Cheese Makers Don't Like Test

W. Waddell, Middlesex Co., Ont. Cheese makers are largely responsible for the slow progress being made in introducing pay by test. I have tested 500 samples of milk each month, but I have no man in my factory to whom I would care to turn over my work. Makers believe in the justice of the test but do not care to take it up.

The crying need amongst many of our patrons in the handling of their milk is more attention to work and more knowledge. Hundreds of dairy farmers are struggling to make a living, many of them not getting lack from their cows as much as the feed costs.

Such men cannot see why they do not get along better. Never in their lives, however, has it occurred to them that they do not know enough about dairying to enable them to make a success of it for themselves or anybody else.

THE GUILTY WITH THE INNOCENT

If every dairy man stood by himself alone, with only his own material and sold it direct to the consumer, it would not matter so much that his methods are wrong, because he would be the only one to suffer from his incompetency. But when the raw material is sent to the factory the many have to pay for the faults of the few or vice versa, according to existing conditions. To solve this problem is one of great difficulty. But this is the first question to be solved.

Once a general excellency in quality of the raw material can be established a corresponding excellency in makes is bound to result and better press assuredly will follow.

Would you hustle if paid well? We want a representative,—a real live one,—for the winter in your district to call on farmers. We will pay you well for work in spare time, or steady job. Write to-day for the proposition we have for you.—Circulation Department, Farm and Dairy, Peterboro, Ont.

The "Able Bodied" SHARPLES Tubular Cream Separator

Two farm "hands" ask you for a place. One is able bodied. The other uses a crutch. Which will you hire? Two kinds of cream separators are looking for a place on your farm. One's the "able bodied" Dairy Tubular Separator, a modern, patented principle, with twice the skimming force of others, and free from dinks. The others are built on an old style principle—they lack skimming force—they must use a crutch in the shape of dink or other contrivance. Which kind for you? The "able bodied" Separator, of course. Write for catalog 505.



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

CREAMERY FOR SALE

RIDGETOWN CREAMERY—A nice, well equipped brick building, with ice pond within ten rods. Situated in a nice town and fine farming country, with a good maker and no opposition. Rheumatism cause of sale. JAS. IRELAND, PROF., Ridgetown, Ont.

CHEESE FACTORY

FOR SALE AT PUBLIC AUCTION

The Thames Cheese Factory, near Nilsontown, Ontario, 7th November—3.30 P.M. on premises—First class Dairying district—90 tons last year.

For particulars apply Robert Sutherland, Dorchester Station, or Meredith & Fisher, London, Ontario.

A. M. HUNT, Auctioneer

London, Ont.

KODAK

means photography with the bother left out.

No dark-room for any part of the work; loading, unloading, developing, printing, all by daylight. YOU can readily make good pictures by the Kodak system. It's inexpensive too. Illustrated catalogue of Kodaks and Brownies (they work like Kodaks) free at dealers or by mail.

CANADIAN KODAK CO., LIMITED TORONTO, CANADA

Well DRILLING MACHINES

Over 70 sizes and styles, for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on sills. With engines or horse powers. Strong, simple and durable. Any mechanism operates them easily. Send for catalog.

WILLIAMS BROS., ITHACA, N.Y.

CHEESE AND BUTTER MAKER WANTED

Tenders will be received by the Directors of the Marion Beaver Cheese and Butter Co. to Nov. 15th, 1911, for a Cheese and Butter Maker. The maker to furnish all supplies, including ice, pasteurize whey, box cheese. Tenders will be opened at Palmerston on Nov. 15th, at 1 p.m.—G. V. Poole, Secy., Box 89, Palmerston, Ont.

\$3 a Day Sure

Send us your address and we will tell you how to make \$3 a day. Write to-day for the proposition we have for you.—Circulation Department, Farm and Dairy, Peterboro, Ont.

LATEST BOOK

TO DISCUSS THE General Care and Management OF Farm Animals

Horses, Cattle, Sheep & Swine THE MANUAL OF FARM ANIMALS

The author—M. W. Harper, Asst. Professor of Animal Husbandry at Cornell University, gives in this volume, of over 550 pages, a practical guide to the Choosing, Breeding and Keep of Horses, Cattle, Sheep and Swine. Important Chapters are those treating of the diseases of all these classes of stock. Invaluable to any Farmer and Live Stock Breeder. Of immense practical worth—it will be worth many times its price to any stockman of every year.

PRICE ONLY \$2.15 POSTAGE PAID

Book **FARM & DAIRY** Peterboro Ont.

THE "BAKER" BACK-GEARED WIND ENGINE

150 Acres. West half of lot 16, Con. 2, Smith township, adjoining the town-dairy farm for 25 years. Good state of cultivation. For price and terms apply JAMES STOTHART, Peterboro, Ont. R. R. No. 4.



Is Built for Heavy Duty. Neat and Compact in Design. Do Perfect Work. Because they are Built on Principles that are absolutely Correct, and the Easiest Running Mill Made.

The wheel is built on a hub revolved on long stationary set of spindles. As a result, there is less friction, and the hub will never become worn and cause the wheel to sag toward the lower.

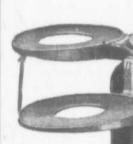
"BAKER" wheels have large numbers of small sails, without rivets, as compared with other makes.

The small sails develop the full power of the wind and enable "BAKER" mill to pump in the lightest breeze. The engine is so constructed that the gears cannot wear out of mesh. All working parts are covered with a cast iron shield that protecting same from ice and sleet. We make a full line of Steel Towers, Galvanized Steel Tanks, Pumps, Etc. Write for Catalogue No. 25.

THE HELLER-ALLER CO. WINDSOR ONT.

The Amsterdam With its Wonderful One-Piece Unispon Skimming Device

The Separator Without An "If"



We send it to you profits go up, you at our expense, separators—the cow you have gi



labor-making of Unispon Skimmers finely tempered way in which

BAKSON 5000, Factory Baskets

You may get the free and practical information you require—your great advantage

Name _____ Address _____

Write to-day for your free information

The Amsterdam
With its Wonderful
One-Piece Unispoon
Skimming Device

The
Separator
Without
An "IF"



GREATEST Cream Separator Offer

The Amsterdam Cream Separator Guaranteed for Fifteen Years

This is positively the first bona fide, no-money-down offer ever made on any cream separator. No manufacturer of any separator ever dared to make such a startling offer before. All others who have ever pretended to offer you a free trial or to send their separator without any money down, have taken care to get something out of you first. But we don't want anything. All we ask is your simple request. We send the cream separator direct to your farm absolutely without any money down. We can afford to do this because the Amsterdam sells itself. It has the most wonderful one-piece skimming device ever designed. Think of it! Only one piece to do all of the skimming—only one piece to clean—the most wonderful invention in modern cream separator building. We want you to read every word of this great offer. It is an offer, which, we think, proves our absolute faith in the great Amsterdam Cream Separator. You are given the opportunity of seeing just how much cream this marvelous separator will extract from your milk before we ask you to send us one cent. You never saw another manufacturer who was so open-handed in his offer. The reason is that no other manufacturer ever wanted you to know all about his machine before paying him anything.

Sent Without a Cent Down Thirty Days Free Trial

Some people pretend to give you a free trial, but they ask you to give them your money first. We are not afraid to let our separator speak for itself.

We send it to you for you to use it for thirty days absolutely without charge. Test the Amsterdam Cream Separator in every way, watch your profits go up, watch the increase of the amount of cream—then if you do not believe that you ought to have a cream separator, just send it back at our expense. If, however, you decide to keep this genuine Amsterdam—the peer of all cream separators—the separator that gives you greater profits than any other—the separator that makes every cow you have give you 100 per cent greater value and insures you greater profits from your dairy than you ever made before—we will allow you to keep this separator on extremely easy

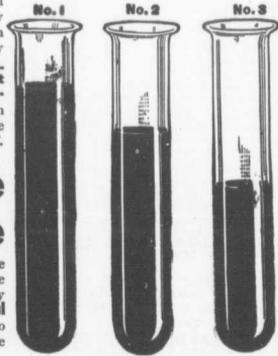
Monthly Payments

These easy monthly payments are so small that you hardly notice them.

You only pay out of your increased profits. You don't need to be without a cream separator when you can have the separator right in your dairy house while you are paying for it. In reality you are not paying for it at all. It pays for itself.

The Wonderful One-Piece Unispoon Skimming Device

The greatest discovery ever made in the history of separator construction. The skimming device that is absolutely perfect. Think of it! You are freed from the drudgery of the old-fashioned discs, wings, floats, beaters and all the other insanitary labor-making appliances that lie concealed in the ordinary type of cream separator. The wonderful Unispoon Skimming Device is complete in one piece. It is made of the finest German nickel steel, so finely tempered that a 200-pound man can jump on it without injuring it in the slightest. Not a single way in which it can possibly wear out or get out of order. Can be washed thoroughly in 20 seconds.



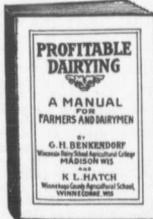
We give you here positive proof of the superiority of the Amsterdam Cream Separator over two other separators of acknowledged high grade. There is no more clinching proof than this—proof no other separator manufacturer would dare let you make if an Amsterdam were around. We show you here three test tubes, all of the same size. Three portions of milk, each portion the very same in quantity, were taken from the same cows. One portion of this milk was run through the Amsterdam and the other two portions were run through the other two well known cream separators referred to. Figure No. 1 illustrates the amount of cream extracted by the Amsterdam. You can see for yourself that it is at least 25 per cent more than that extracted by the separator whose product in cream is shown in figure No. 2. This separator cost \$85.00 more than the Amsterdam and yet you can see that only three-fourths as much cream was taken from the same amount of milk. This test was made not only once, but over and over again until there was absolutely no doubt in the minds of the judges of the superiority of the Amsterdam. In figure No. 3 we show the amount of cream extracted by a separator well known to the trade and looked upon as a "good" machine. This separator costs 20 per cent less than the Amsterdam, but it extracted 50 per cent less cream. No proof could be more positive—more sure than this. The Amsterdam is the peer of all separators, and we are willing to prove this by sending you the Amsterdam without allowing you to pay any money for it. We want to give you the proof in reality—before your very eyes—that we show here on this page.

Valuable Book—"Profitable Dairying"—Sent to You Free

Just ask for this book and it will be sent you free of charge.

This free coupon brings it. Place your name on the coupon, cut it out and mail it at once. Then we will send you our great free book, "Profitable Dairying," telling you everything about cows and dairying—butter and cream—how to feed and care for cattle—how to make them twice as valuable as they are now—how to make more money than ever before out of your cows. This book is written by two of the best known dairy scientists in America—Prof. G. H. Benckendorf, Wisconsin Dairy School Agricultural College, Madison, Wisconsin, and K. L. Hatch, Winnebago County Agricultural School, Wisconsin, Wisconsin.

We will also send you our free catalog, describing fully the great Amsterdam Cream Separator and telling all about our liberal terms. We will send it free of charge. Send the coupon now.



BABSON BROS. Factory Dist'rs—Amsterdam Cream Separator Company
355 Portage Ave. Dept. 7678 Winnipeg, Can.

Write to:
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Dept. 7678
355 Portage Ave., Winnipeg, Can.
Name _____
Address _____
How many cows do you milk? _____
Do you use a separator? _____
Describe present separator? _____
How much butter do you make a week? _____



WHEN we humour our weaknesses they force them selves continually upon our attention like spoiled children. When we assert our mastery of ourselves and compel its recognition, we stand secure in our sovereign rights.—C. B. Newcomb.

The Second Chance

(Copyrighted)

NELLIE L. McCLUNG

Author of "Sowing Seeds in Daffy"

(Continued from last week)

Pearl, the oldest daughter of John Watson, a C.P.R. section man living in Milford, Man., receives a large sum of money from the relatives of a young Englishman she had nursed when ill. She decides to educate herself and the rest of the family. The Watsons are joined by their Aunt Kate, who proves not an unmitigated blessing. Pearl proves an efficient and clever scholar and has dreams of being a school teacher. She sees that her small brothers are learning bad habits in the town and gives up her ambition to be a school teacher and suggests moving the family onto a farm, to which John Watson agrees. We are introduced to the children at a country school, Tom Steadman, a bully, in a game of shanty, intentionally strikes with his club Libby Anne Cavers, for which he is thrashed by Bud Perkins. Libby Anne does not dare to say the blow was intentional, as her father owns Mr. Steadman's money. Bud Perkins is angry, but forgives Libby Anne, as he understands the circumstances. In the meantime the Watsons are getting established on their farm. The Watson family begin to attend the country school. Pearl calls on Mr. Burrell, the pastor, and asks him to conduct services in their section.

WHEN Pearl opened her eyes she found herself dressed in a white dress, exactly the same as the one that lay on the bed—Cumberbuds and all!

"Oh, Camilla!" was all she could say, as she lovingly stroked the dress.

"I'm would not think of having anybody but you, and Dr. Clay is going to be the groomsmen."

Pearl looked up quickly.

"Dr. Clay told me," Camilla went on, "that he would rather have you for the bridesmaid than he was going to be the groomsmen than any other girl, big or little."

Pearl clasped her hands with a quick motion.

"Better's Miss Morrison?" she asked, all in one breath.

"Yes; better than Miss Morrison—at least, I suppose so, for he said you were the sweetest little girl on earth."

"Oh, Camilla," Pearl said again, taking deep breaths of happiness, and the starchy look in her eyes as Camilla wondered.

CHAPTER XIII.

THE LADIES' AID MEETING

Oh, was some po'er the giftie gie you To see ourselves as others see us.

—Robert Burns.

Pearl went to the Ladies' Aid Meeting, which was held at Mrs. Ducker's, and was given a little table to sit at while she took the notes. Pearl was a fairly rapid writer, and was able to get down most of the proceedings.

Camilla copied the report into the minute-book, and as Mrs. Francis did not think about it until the next meeting, when she came to read it, she found it just as Pearl had written it, word for word. The reading caused some excitement. The minutes were as follows:

The Ladies' Aid met at the home of Mrs. Ducker. There were seven present when it started; but more came. Mrs. Burrell doesn't know why they can't come in time. She



The Home of a Successful Haldimand County Farmer

The farm home of one of Farm and Dairy's staunch friends and a contributor to our columns, Mr. Stephen Oliver of Haldimand Co., is here shown. Mr. Oliver's article on the hired man question last spring will be remembered by Farm and Dairy readers.

Bates's place she'd let the girls go barefoot. Mrs. Bates is going to let Mildred go, but she can't let Blanche—she's so lanky—she'd look all legs, like a sand-hill crane. Mrs. Burrell says, Let's open the meeting by singing "How Firm a Foundation," but Mrs. Ducker says, Oh, don't take that, it's in sharps; take "Nearer, Still Nearer"—it's in flats, and Maudie can handle the flats better. Then they sang, and Mrs. Burrell and Mrs. Ducker prayed. Mrs. Ducker prayed longest, but Mrs. Burrell prayed loudest, and for most things. Mrs. Bates read the last report, and they said it was better than usual; she'd only left out one or two

things. Then they collected the money. Nearly every one paid only Mrs. Burrell couldn't find hers; she was sure she had it in her glove when she came in, and she couldn't see how it ever fell out. Mrs. Ducker will get it when she sweeps if it's in the house at all. Mrs. Williams had her ten cents in a tea-cup all ready, but when she went to get it it was gone, and she's afraid she gave that cup to one of the boarders by mistake. Mrs. Williams says that's the worst of keeping boarders, your home is never your own. Mrs. Forrest says if she only knew which one got it she would charge it up to him. Mrs. Williams wouldn't ever think of doing that. Total receipts of evening, \$2.20.

Then Mrs. Burrell asked what about the new stairs carpet. She's ashamed every time she takes anyone upstairs, it's going, something awful. Mrs. White hasn't had time to think anything about it, she's been doing up rhubarb; it's so nice and tender in the spring. None of Mrs. Bates's folks will eat rhubarb, and so she never does any up, though she really is very fond of it herself, done with pineapple, the shredded pineapple—half and half. Mrs. Ducker is doing rhubarb, too, it's nice in the spring when everything else goes flat on you. Mrs. Burrell says, What about the stairs carpet, now, if you're done with the rhubarb?

Mrs. Forrest said linoleum is better than carpet. Mrs. Ducker said it's too cold on the feet. Mrs. Grieves said, Land sakes, let them wear their boots—they don't need, to go canterin' up and down the stairs in their bare feet, do they? Mrs. Burrell said linoleum would do all right if they couldn't afford a carpet, but there wasn't any decent linoleum in town, and even if there was you have to pay two prices for it; but she saw in the "Free Press" that

jet. Mrs. Bates blackens easy. Mrs. Snider has her hands full, good news knows, since Aunt Jess has been laid up with erysipelas. Aunt Jessie is pretty hard to wait on, and doesn't like the smell of the ointment the doctor gave her. It's altogether different from what she got when she was down in the States. Mrs. Burrell said she would get the knives and forks herself if anybody would make a motion. Two made it, and three seconds it was done.

Mrs. Burrell said, How are the things getting on for the bazaar? Mrs. Ducker had a box of things sent from Mrs. Norman in Winnipeg. Mrs. Snider thinks Mrs. Norman must have been at a sale. You can get things so cheap there sometimes. When Mrs. Snider was in at Bonspiel time, she saw lovely lace stockings for eleven cents a pair, and beautiful flowered muslin, just the very same as they ask sixty-five cents here, going for twenty-nine cents. (Couldn't get all they said here, everybody talked at once.)

Mrs. Burrell said: Where'll we hold it, anyway, if we do get enough stuff? Mrs. Ducker thought the basement of the church. Mrs. Bates can't get used to holding sales in churches. Her mother never could do that. Mrs. Burrell said when the church was having the sale, what was the odds where it was held? No use turning up your nose at a sale and still take the things at the same old sales. Mrs. Burrell said when the church was having the sale, what was the odds where it was held? No use turning up your nose at a sale and still take the things at the same old sales. Mrs. Burrell said when the church was having the sale, what was the odds where it was held? No use turning up your nose at a sale and still take the things at the same old sales. Mrs. Burrell said when the church was having the sale, what was the odds where it was held? No use turning up your nose at a sale and still take the things at the same old sales.

Mrs. Burrell said, where will we meet next time? Mrs. Graham said, come to my house. Mrs. Forrest said it was too far. Mrs. Burrell said the walk would do her good, she had just been reading in the "Fireside Visitor" that that's what's wrong with lots of people, they don't walk enough. Mrs. Forrest is glad to know his, for she has often wondered what was wrong with lots of people, but Mrs. Forrest doesn't think much of the "Fireside Visitor"—it's awfully off sometimes.

Mrs. Brown would like to come every time if she had company home. Mrs. Burrell said bring Mr. Brown. Mr. Brown wouldn't come. You couldn't get him within three acres of a Ladies' Aid Meeting. Never could. Decided to meet at Mrs. Burrell's. R. J. P. Watson, Sec., Just for this time.

Pearl and Mrs. Burrell became very good friends before Pearl left the next morning. Mrs. Burrell well that they were washing up the breakfast dishes, apologized in her own way for her outburst against the country appointment.

"I'm a crabbled old woman, Peas," she said.

"Not old," Pearl said promptly, with wisdom beyond her years. She did not deny the other adjective. "I'm a crabbled old woman, Pearl," she repeated; "but I am always afraid he'll catch cold and get sick—he is so reckless, and never seems to have serious thoughts about himself, or realize what wet feet will do for him if he persists in them; and really, child, it's hard to be a minister's wife. You've so many people to please, and when you're pleasing one, some one else doesn't like it. Now, did you notice Mrs. Maxwell would get me out of the smallest link that with me over the smallest link thing."

(To be continued)

DON'T PUT OFF

Seeing your friends and have them join in right away for a club of new subscribers to Farm and Dairy.

The Upwa

Our Infinite

Grieve not the ho
—Ephesians 4: 30.

The most valuable has is that Divine which warns us of evil and which pro good. What are ar fulness and value, in this voice in the past become will be dete we observe its pro future. In exact r to follow the p directs us will o influence and power as we refuse to pay counsels will our liv fulness and value, in this downward pa help others and outical disappear.

One of the writt those books contain merit, but increas common to us all. Within." This inn the "subconscious m seekers after success but observe its v practical success by practically certain, mind," he writes, "is in such close tou within that the lin the within can be The capacity of s practically unbounde be absent; mental b on the increas going down with t average mind does, steadily advance it ments and greater longer the person m

Well,

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ONE DYE—ALL

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The Upward Look

Our Infinite Capacity

Grieve not the holy Spirit of God.—Ephesians 4: 30.

The most valuable gift each of us has is that Divine voice within us which warns us when we would do evil and which prompts us to do good. What we are is the result of how we have listened to and heeded this voice in the past. What we may become will be determined by how we observe its promptings in the future. In exact ratio as we endeavor to follow the path along which it directs us will our lives grow in influence and power. In proportion as we refuse to pay attention to its counsels will our lives decline in usefulness and value, until, if we persist in this downward path, our power to help others and ourselves will practically disappear.

One of the writers on success, whose books contain more than usual merit, has described this faculty common to us all, as "The Great Within." This inner voice he calls the "subconscious mind" and he tells seekers after success that if they will but observe its workings the attainment of success by them will become practically certain. "The strong mind," he writes, "is the mind that is in such close touch with the great within that the limitless power of the within can be felt at any time. The capacity of such a mind will be practically unbounded; weariness will be absent; mental brilliancy will ever be on the increase and instead of coming down with the years, as the average mind does, such a mind will steadily advance in higher attainments and greater achievements the longer the person may live. Develop

greatness by awakening the great within, and that power that can produce anything and realize anything. The perpetual awakening of the great within will produce greatness that is real greatness because to the powers and the possibilities of the great within there is no limit, neither is there any end."

This author has caught a vision that puts many professing Christians to shame. He has a faith in man's possibilities that many of us profess to believe in God and in His power and willingness to help us fail to possess. He is right, too, in what he says. Our ability to do things and to accomplish definite results is limited only by ourselves and is determined by our methods of thinking and of acting. A better name, however, for the "great within" than the "subconscious mind" is "the voice of God." It is the voice of God. In St. Luke 17, 21 we are told that the kingdom of God is within us. In Second Corinthians 6, 16, we are informed that we are the temple of God and that God dwells in us. God's power is infinite. This power will grow and increase within us just as we permit it to, by listening to God's voice when he speaks to us through our consciences and obeying instantly His commands.

Another writer has said: "Neglect your conscience for only two weeks and it begins to disappear; obey its faintest whisper for two weeks and it becomes as delicate as a woman's blush." Let each of us resolve hereafter to obey its faintest whisper. If we do most of us will find that it will work a wonderful transformation in our lives.—I. H. N.

Killing Friends and Feeding Enemies

C. R. Barnes, Minnesota

Every time a gun is fired and brings down an owl, a hawk, a crow, crane, heron, bittern or shrike, the farmer loses a friend; and then a note of welcome is sounded for the ever-increasing army of field mice—an army which now counts its numbers in billions, and which yearly levies upon the farmers of America a tax as great as the cost of the Panama Canal. For these birds are the natural enemies of the mice—they are the foremost of the agencies with which nature has proposed to keep the multiplication of these predatory rodents within bounds.

Almost as inviting to the mice is the welcome sounded whenever the gun brings down a fox, a weasel, a mink, a skunk, raccoon, coyote, lynx, badger or shrew. Except for an occasional tribute levied on the hen-roost—something against which it is easy to guard—all these animals are harmless, and they find in mice their natural feed. In the same category may be placed a great number of harmless snakes.

WE SUPPORT AN ARMY

If these birds and animals should be allowed to multiply unmolested, the farmers and the nation might soon be eased of the awful burden now carried to support the predatory army of mice. Let the figures above may fail to impress the reader's imagination, let it be said that each mouse actually consumes in a year 30 pounds of food, such as is suitable for a cow. Suppose this food to consist of hay only—one of the cheapest of feeds. We then find that a single billion of mice, eating 30 pounds each, will consume 15,000,000 tons. At \$12 a ton, the contribution of the farms to the support of the mice would foot up \$180,000,000 a year. But what of the grain, the fruit and the garden vegetables consumed? What of the costly orchards scoured and ruined by mice? Who will venture to say that the destruction wrought in these will not over-

balance the value of 15,000,000 tons of mere hay? * * *

Let it Pass

Has it been a weary day? Let it pass. Lots of others on the way—They will pass. Soon the rains will start to lighten All around begin to brighten. And misfortune cease to frighten—Let it pass. Does the world the wrong way rub you? Let it pass. Did your best friend seem to snub you? Let it pass. Chances are you were mistaken, None is ever quite forsaken; All for naught our faith was shaken, Let it pass. * * *

The Greatest Man of All

A man who has made a happy home for his wife and children, no matter what he has not done in the way of achieving wealth and honor; if he has done that, he is a grand success. If he has not done that, and it is his own fault, though he be the highest in the land, he is a most pitiable failure.

We wonder how many men in a mad pursuit of gold, which characterizes the age, realize that there is no

fortune which can be left to their families as great as the memory of a happy home. * * *

MAKE MONEY.

Women folks can make money, or win useful articles, household furniture, etc., by getting their friends and neighbors to subscribe to Farm and Dairy. Don't put off getting your friends to join in for a club of new subscribers. Now, is an ideal time to get them to subscribe.

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Is the Perfect Washer, the Washer that gives satisfaction, and that is guaranteed. Easy to work, runs on handkerchiefs to heavy articles with rapidity and the roughness will not be astonished to see how perfectly clean every article will be.



Do not do another washing in the old "back-breaking" way when we can supply you with a washer that will cut wash-day in half. Write for Booklet. J. H. CONNOR & SON, LIMITED, OTTAWA, ONT.

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I dyed ALL these DIFFERENT KINDS of Goods with the SAME Dye. I used **DIOLA** ONE DYE FOR ALL KINDS OF GOODS

CLEAN AND SIMPLE to Use. NO chance of making the WRONG Dye as the Goods have to color. All colors from your Druggist or Grocer. Price Color Cards and 5¢ DYE Booklet. The Johnson-Richardson Co., Limited, Montreal.

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WOMEN folks who do their own washing are foolish. Washday is only another name for drudgery day—the one day every week that makes women old before their time. A washwoman costs \$1.50 per day. In other words you can save the price of a New Century Washing Machine in less than six months—besides saving your health.

Work less and enjoy life more with the "New Century" wash for you.

The New Century is the "Top Notcher" of all hand-washing machines. Its design assures efficiency, simplicity and durability. A child can work the New Century—it's easy to work and cannot harm the most delicate fabrics.

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may cost a few cents more on the hundred pounds than other lump sugar. Good things always cost more than inferior quality.

However, ST. LAWRENCE "CRYSTAL DIAMONDS" are really the most economical Sugar, because they go further on account of their matchless sweetness due to perfect purity.

To appreciate the superiority of St. Lawrence Sugar, compare it with any other sugar.

The St. Lawrence Sugar Refining Co. Limited
MONTREAL 31

Prints Sell at a Premium

Mrs. Chas. Cocklin, Simcoe Co., Ont. We have established a reputation and a demand for our home dairy butter by making good butter and then putting it up in attractive prints. We at one time lived near Toronto and when on the market we occasionally saw printed butter. The idea struck us as being a good one;

something that would ensure to the customer a pound of good butter, as the name of the maker was on the wrapper, and a maker would not have his name on butter unless it was good and of full weight. When we moved to Simcoe county we found that practically all the butter in our neighborhood was sold in the store for trade. This trade system is now almost a thing of the

past. The butter was not graded and everyone got the same price. We put ours up in prints, on the wrappers, of which was our name and address, and our butter was soon in demand at three to four cents a pound more than the butter put up in tubs. We have enquiries for butter from people a long distance off, who had gotten some of our butter that was shipped, and, seeing the name and address on

the wrapper knew where to come for more of the same kind. We strongly advise all home-butter makers to print their butter, using the rectangular butter printers, have their name and address on the wrapper, and thereby build up a profitable cash trade in first class home dairy butter.

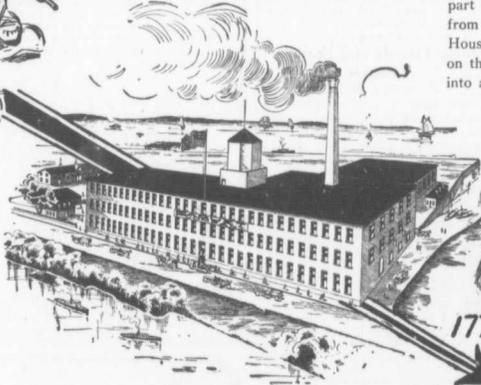
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Which is by far the largest establishment of its kind in Canada, and one of the largest in the world, is the only Fur Factory in AMERICA where every process, such as dressing, tipping, dyeing and finishing of Furs from the raw skins to the finished garment, is in operation under the one roof. Thus, in dealing with this factory, you save all the intermediary prices.



- The Fur Set Illustrated \$115.00**
No. 6025—Lady's "Noblesse" Stole, in Genuine Mink, falling to the waist in back, trimmed with heads and tails, lining of finest quality plain Satin. Special **\$70.00**
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OUR HOME CLUB

Mr. Dickinson's Opinions

Mr. Dickinson, in Farm and Dairy of October 19th, certainly strikes straight from the shoulder when he starts to talk about the relationship between the farmer and his son. As the editor has invited opinions of Mr. Dickinson's remarks I beg to offer a few opinions of my own.

From the article in question one would be almost led to believe that farmers as a rule were in the habit of treating their boys like slaves and driving them off to the city. My own observation is that Mr. Dickinson's remarks in full do not apply to

the majority of the farmers, though there are far too many just as bad as the English language can paint them. I happened to work for one of two who treated their sons like galley slaves.

Here are a few questions that I noticed in a newspaper recently for the considerations of those hard-working slave-driving farmers:

"Do not wake your boy at four o'clock in the morning to begin work. That is when his sleep is sweetest. He is resting then and growing, and you have no right to disturb his rest. He has earned it the day before. In calling him you might awaken his mother, which you have no right to do at that time. She is too tired and is enjoying a well-earned rest. Don't make any noise; you might awaken his sister, whom we wish to keep on

the farm as much as the boys. Lie still and rest lest you awaken yourself and thus do yourself an injury and an injustice, as well as your family."

It is that last sentence I wish to emphasize. The hard-working farmer is doing himself an injustice as well as disgracing the whole family with country life. We will get on just as fast in the world if we take it easier. The hard-working man is usually a non-thinking man. That explains it.

And just here let me put in the hired man's side of the case. He will stay with you longer and serve you better if you rise at a decent hour and quit in time to have a couple of hours for pleasure and recreation in the evening.—"Another Hired Man."

Salaries for the Family.—Why should the earning capacity of wife and children be rated at so low a figure? How many farmers would be willing to pay for their labor performed by the average family? They have assumed in his mind merely the character of very useful adjuncts to the farm work. Many an otherwise kind father would grasp at the offer of a stated salary being paid to one of the boys similar to that paid the hired man, and if the wife wishes a spring bonnet the eggs or butter must be brought into play.—Mrs. J. Bains.

THE COOK'S CORNER

Recipes for publication are requested. Inquiries regarding cooking, recipes, etc., gladly answered upon request, to the Editor, Farm and Dairy, Peterboro, Ont.

CREAMED OYSTERS
To one quart of oysters take one pint of cream or sweet milk, thicken with a little flour, as for gravy; when cooked pour in the oysters with liquor; pepper, salt and butter the mixture. Have ready a platter with slices of nicely browned toast, pour creamed oysters on toast and serve hot.

BAKED CUSTARD
Beat four eggs slightly, add one-half cup of sugar and one-fourth teaspoon of salt, pour on slowly four cups of scalded milk, strain into a buttered mold, set in a pan of hot water. Sprinkle with nutmeg, and bake in a slow oven until firm.

FIG PUDDING
Half pound suet, one pound figs, chopped; one pound bread crumbs, half pound sugar, one egg, one nutmeg, half teaspoonful of baking soda; grease the tin mould well, but three hours tied in a cloth; it requires milk enough to moisten it; one cup of flour; to be eaten with wine sauce.

WINTER SPONGE CAKE
Take four eggs, two cups of sugar, two coffee cups of flour, two teaspoonfuls cream tartar, two-thirds of a cup boiling water, and lemon to flavor; add the water last; pour into a pan and place into a well-heated oven. This, though apparently very thin, will come from the oven a most delightful cake.

FRUIT CAKE
Two pounds of raisins, stoned, two pounds of currants, one pound of butter, one pound sugar, one and one-quarter pounds of flour, ten eggs, one wine glass of brandy, one wine glass of wine, one tablespoon of cloves, one tablespoon of allspice, two tablespoons of cinnamon, one nutmeg, one teaspoon of sweet almond-meats blanched and cut in slices, two ounces candied lemon, two ounces citron, a little molasses improves it, nearly a teacup; flour the fruit, using it out of that weighed out for the cake; put a half teaspoonful of soda or one teaspoonful of good baking powder with it on the fruit; bake three hours slowly.

The Sewing Room

Patterns 10 cents each. Order by number and also. If for children, give age; for adults, give bust measure for waists, and style for dresses or skirts. Address all orders to the Eastern Department.

CHILD'S ROMPERS, 715.



Just such rompers as these are really necessary for the tiny child. In them he can creep and toddle and play to his heart's content without injury to clothing or without anxiety on the part of the mother. They are buttoned into place at the lower edges, consequently they are easy to adjust and they can be made from any simple washable material.

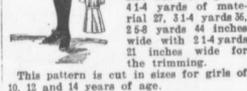
MISSES AND SMALL WOMEN, 718A



The simple tucked skirt is always a becoming one to young girls and to the small women of girlish figure. This one is adapted to all the fashionable thin materials.

For the 16 year size will be required 4 1/2 yards of material 27, 3 yards 36 or 44 inches wide, the width of the skirt at the lower edge is 2 1/2 yards. This pattern is cut in sizes for misses of 14, 16 and 18 years of age.

GIRL'S DRESS IN PEASANT STYLE, 717B



The girl's dress made with a gored skirt is a new and fashionable one. It is pretty and becoming and it conforms to the latest requirements. Young folk are quite certain to resist the fashions of their elders and this six gored model is new practically a modification of the one worn by the grownups.

For the 12 year size will be required 4 1/4 yards of material 27, 3 1/4 yards 36, 2 5/8 yards 44 inches wide with 2 1/4 yards 2 1/2 inches wide for the trimming.

SEMI-FITTED COAT, 176



The coat that is made with big pointed revers is new and smart. This model also includes the side closing that makes a feature of the season. The sleeves are finished with prettily shaped cuffs also and the model altogether is exceptionally attractive.

You will be proud of the bread you'll make with PURITY FLOUR

AFTER seeing a batch of big, golden-crusted, snowy white loaves, that you have baked from PURITY FLOUR, you will, indeed, be proud of your cooking-ability—and proud of your wisdom in deciding to pay the little extra it costs to procure such high-class flour. You will admit, too, that we are justified in the pride we take in milling this superb flour.



PURITY FLOUR

"More bread and better bread"

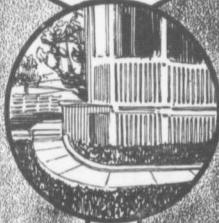


PURITY FLOUR is milled exclusively from the best Western hard wheat—the world's finest. More than that, PURITY FLOUR consists entirely of the high-grade portions of the wheat. The low-grade portions are separated and excluded during the PURITY process of milling. Such high-class flour, of course, expands more in the baking. It makes "more bread and better bread."

It makes lighter, flakier pastry, too, if you just take the precaution to add more shortening. On account of its unusual strength PURITY FLOUR, for best results, requires more shortening than ordinary flour.

Progressive dealers, everywhere, sell PURITY FLOUR and take pride in recommending it.

Add PURITY FLOUR to your grocery list right now. 106



\$3,600 in Cash Prizes for Farmers

ARE you one of the thousands of Canadian farmers who have used or intend using Canada Cement for the construction of some farm utility? If you contemplate building anything whatever of concrete, make up your mind right now to build it with a view to winning one of the prizes we are offering. Read the rest of this announcement and you will learn how you may try for a share in the \$3,600 we are giving away, to encourage the use of cement upon the farm. Throughout Canada the farmers have taken such a keen interest in our campaign that has inspired us to go further along these educational lines. We have decided, therefore, to offer a series of four \$100.00 prizes to each of the nine Provinces, to be awarded as follows:

PRIZE "A"—\$100.00 to be given to the farmer in each Province who will use during 1911 the greatest number of bags of "CANADA" Cement for actual work done on his farm.

PRIZE "B"—\$100.00 to be given to the farmer in each Province who uses "CANADA" Cement on his farm in 1911 for the greatest number of purposes.

PRIZE "C"—\$100.00 to be given to the farmer in each Province who furnishes us with a photograph showing best of any particular kind of work done on his farm during 1911 with "CANADA" Cement.

PRIZE "D"—\$100.00 to be given to the farmer in each Province who furnishes the best and most complete description of how any particular piece of work shown by photograph sent in, was done.

In this contest no farmer should refrain from competing, because of any feeling that he may have

little chance against his neighbor who he thinks might use more cement than he does.

For it will be noted that Prizes "C" and "D" have no learning whatever on quantity of cement used. The man who sends us the best photograph of so small a thing as a watering trough or a hitching post, has as much chance for Prize "C" as a man who sends a photograph of a house built of cement—and, the same with Prize "D" as to best description.

Canada Cement is handled by dealers in almost every town in Canada. Should there not happen to be a dealer in your locality, let us know and we will try to appoint one.

Contest will close on November 15th, 1911, and all photos and descriptions must be in our office by that date. Awards will be made as soon as possible thereafter. The jury of award will consist of: Prof. Peter Gillespie, Lecturer in Theory of Construction, University of Toronto; W. H. Day, Professor of Physics, Ontario Agricultural College, Guelph; and Ivan S. Macdonald, Editor of "Construction."

Now, you cannot hope to do concrete work to the best advantage unless you have a copy of our free book, entitled, "What the Farmer Can Do With Concrete." This book tells how to construct well-nigh anything on the farm, from hitching post to silo. Whether you enter the contest or not, you'll find this book most helpful. A post-card asking for the book will bring it to you promptly. Send for your copy to-night. From your cement dealer or from us, you can obtain a folder containing full particulars of contest. If you send to us for it, use the coupon provided in this announcement.

The Canada Cement Co.
LIMITED
MONTREAL, QUE.

Please send me full particulars of Prize Contest. Also a copy of "What the Farmer Can Do With Concrete."

Name.....
Address.....

MARKET

Toronto, Monday, Oct. 30. Some recovery from the past two weeks, but ordinary in some quarters. Full orders, while prices are slack in some lines, are said to be "better" than of late. The feature of the market is the growing strength in almost all lines of grain. Hay is firm at a high price, and not material. Stock and hogs are the market.

A summing up of the Ontario this year would show farmers will enter the market with stock on hand less than last year. There is no hay for sale.

WHEAT
Prices for hard wheat this week. Reduced estimate on Canadian crop caused an early part of the week in reduced prices. A western wheat trade is expected. Mr. Jno. Kennerly's Company points out that the United States market is unavailable. The price, however, is prohibitive. It is quoted here at 85c; No. 3, 81.02-1.2. Ontario wheat is firm at one cent. Deliveries are liberal than they were in winter wheat this year.

COARSE GRAIN
Quotations on coarse grain by leaps and bounds every department. Prices are to 10c this week. Malt is selling at 90c to 95c; for the buckwheat, 85c to 90c; No. 1, 81.10; oats, Can. No. 3, 47c; Ontario No. 1, 48c. The coarse grain market is stronger also. Quotations: Oats, Can. West. No. 3, 43.1-2; white, 48c to 49.1-2; No. 3, 47c to 47.1-2; corn, No. 1, 51.50 to 51.75; hard, No. 1, 51.00; feed, 64c to 65c to 66c.

MILL STUFF
Prices on mill stuffs needed to the prices ago: Manitoba bran, 82c; No. 1, 82c; shorts, 82c; prices are unchanged; No. 1, shorts, 82c; Ontario shorts, 82c.

HAY AND S
There are no changes in the market. All that is eagerly taken up and the market is unlimited. No. 1, at 81c to 81.50; No. 2, straw, 86.50 to 87 on small price for No. 1; for clover and mixed hay, straw, bundled, 81c to 82c. The hay market at Montreal. American buyers are liberal, and can pool are firm. No. 1, 82.50 to 83.50; No. 2, 81.50 to 82.50.

HIDES AND
An average of prices taken at country points: cows: Cured, 11.1-2; fresh and pelts, 8c to 10c to 14c; horse hides, 30c to 32c. Quotations here are as follows: No. 2, 11.1-2; No. 3, 10c to 12c.

SEEDS
Wool is quoted as follows: No. 1, 4c; washed, 4c to 5c.

Prices being paid by buyers: Alamo, fancy, 1.00; No. 1, \$10.00; No. 2, \$10.25 to \$10.50; tin, No. 1, 8c; No. 2, 8c.

HONEY
Wholesale quotations changed. Strained clover, 10c to 10.10; blue clover, 10c; buckwheat ho

MARKET REVIEW AND FORECAST

Toronto, Monday, Oct. 30.—Trade shows some recovery from the depression of the past two weeks, but there is still a tendency towards conservatism. Full orders, while practically normal in most lines, are slack in others. "Profits and better" is the general comment of the trade.

The feature of the farmers' market is its growing strength in coarse grains. The lines of grain show an increase this week. Hay and straw continue firm at a high level and wheat prices are unchanged. Live stock and hogs are the weak feature of the market.

A summing up of crop conditions in Ontario this year would show that the farmers will enter the winter with somewhat less stock on hand and less food for last year. There will be less grain and hay for sale.

WHEAT

Prices for hard wheat have not changed this week. Reduced estimates of the Canadian crop caused an advance in the early part of the week. Large sales later at a reduced price. A feature of the western wheat trade is the large amount of wheat that has been sold to date. The report of Mr. Jno. Kennedy of the Grain Growers' Company pointed out in a recent issue that this year's crop in the United States market would have been invaluable. The duty of \$25 a bushel, however, is prohibitive. No. 1 northern wheat is quoted here at \$1.07 1/2; No. 2, \$1.08; No. 3, \$1.02 1/2. The market for hard wheat is firm with an advance in price. Dulwich wheat are light but are liberal than they have been. No. 1 winter wheat is quoted at 87c to 88c cask.

COARSE GRAINS

Quotations on coarse grains are going ahead by leaps and bounds. In almost every department the market has advanced. No. 4 white barley is now selling at 90c to 95c; feed barley, 80c to 85c; buckwheat, 55c to 60c; rye, 80c; peas, 81c to 81 1/2; oats, Can. Wes. No. 2, 45c; No. 3, 47c; Ontario No. 2, 44c to 44 1/2; No. 1, 47c to 47 1/2; corn, 75c; local stiffs, 40c to 41 1/2; No. 3, 47 1/2 to 48c; No. 4, 47c to 47 1/2; No. 1, 47 1/2 to 48 1/2; No. 2, 47 1/2 to 48 1/2; No. 3, 47 1/2 to 48 1/2; No. 4, 47 1/2 to 48 1/2; No. 5, 47 1/2 to 48 1/2; No. 6, 47 1/2 to 48 1/2; No. 7, 47 1/2 to 48 1/2; No. 8, 47 1/2 to 48 1/2; No. 9, 47 1/2 to 48 1/2; No. 10, 47 1/2 to 48 1/2; No. 11, 47 1/2 to 48 1/2; No. 12, 47 1/2 to 48 1/2; No. 13, 47 1/2 to 48 1/2; No. 14, 47 1/2 to 48 1/2; No. 15, 47 1/2 to 48 1/2; No. 16, 47 1/2 to 48 1/2; No. 17, 47 1/2 to 48 1/2; No. 18, 47 1/2 to 48 1/2; No. 19, 47 1/2 to 48 1/2; No. 20, 47 1/2 to 48 1/2; No. 21, 47 1/2 to 48 1/2; No. 22, 47 1/2 to 48 1/2; No. 23, 47 1/2 to 48 1/2; No. 24, 47 1/2 to 48 1/2; No. 25, 47 1/2 to 48 1/2; No. 26, 47 1/2 to 48 1/2; No. 27, 47 1/2 to 48 1/2; No. 28, 47 1/2 to 48 1/2; No. 29, 47 1/2 to 48 1/2; No. 30, 47 1/2 to 48 1/2; No. 31, 47 1/2 to 48 1/2; No. 32, 47 1/2 to 48 1/2; No. 33, 47 1/2 to 48 1/2; 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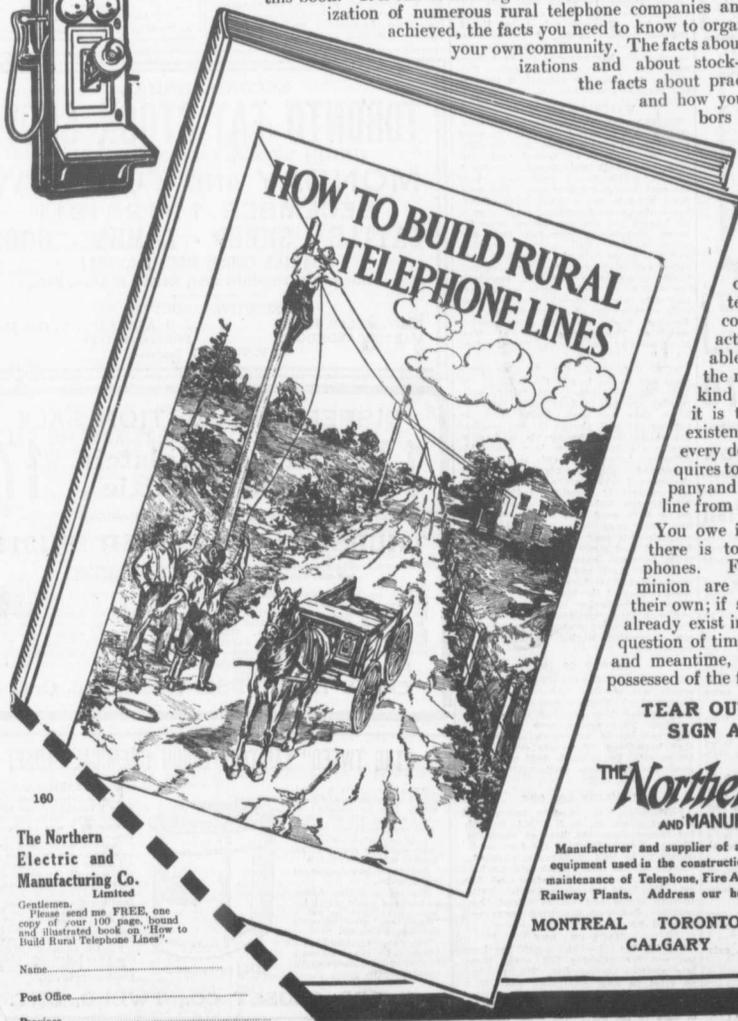
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