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FARM AND DAIRY

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RURAL HOME

PETERBORO, ONT.

MARCH 17, 1910.



THE FIRST HARVEST OF THE YEAR IS IN FULL SWING ON MANY CANADIAN FARMS. A noteworthy feature of the maple syrup industry of to-day is the modern equipment that is rapidly displacing antiquated methods of handling the sap. Farmers, even those with small maple orchards, who a few years ago strongly contended that the old way was good enough, and that the expense of installing modern equipment would not be warranted, have changed their views. Each year sees a larger number of sugar camps fitted out with evaporators, improved spiles, buckets, and other paraphernalia, and the best thing about it all is that it pays. Photo taken in Mr. L. C. McConnell's sugar bush, Elgin Co., Ont.

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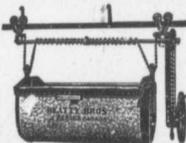
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The Labor Problem

Editor, Farm and Dairy:—Your correspondent of March 3rd, "A subscriber from Elgin Co.," appears to me to look at a young man's life from a wrong point of view. He measures it as if hours of pleasure were to be the object of his life, instead of days of study for improvement and a satisfaction in work well done.

No young man, whether in the city or on the farm, will make a success of life unless he *earns more than he is paid*. The man who is looking at his watch for the hour of leisure to arrive, or considers himself only as a machine to be rated by the number of hours he puts in, is not the one who gets "moved up," in any office, in fact he is generally the first to be "moved out." His heart is not in his employer's work, he has no staying powers, he is not looking forward and upward. Such, however is not the view point of most of the young men alongside of whom I have worked, nor with whom I have come in contact.

CONDITIONS MISREPRESENTED.
In making comparisons of pay on the farm, and in the town it was scarcely fair to misrepresent the conditions. He says: "all they can get from the farmer is \$15 to \$25 a month for eight months, or from \$150 to \$225 a year" and "in the city from \$30 to \$100 a month or from \$500 to \$1,500 a year." A little arithmetic would show that the farm earning is under stated and the city earnings exaggerated, but this would appear to have been so put as to catch the uncalculating reader.

The lad who gets \$15 a month on the farm is not a farmer, but only a farmer in the making. The man who gets \$1,500 a year in a city office has gained his position by many years of service, and of ability, and with equal energy in the country would most probably have won a farm for himself and have become his own master.

But the wages stated in the country include board and lodging and leave four months more of time to work, while those stated in the city are for a full year and from them must be deducted the cost of board and lodging, from \$12 to \$20 and more a month, or the city man cannot live on air. Ask any one who has tried both places and he will tell you how much more the one nets out than the other.

If amusements, theatres and side-walks are the aim of life, men there is nothing more to be said. The young man is not fit to be a farmer, nor a master, but only a "pay by the hour."

THE FARM OF TO-DAY

But farming is not now, as it used to be, merely being able to drive a team or plow after a plow. It is to apply intelligence to the methods of working, to study the fields and crops, to raise more from one acre than many do from two, from one cow than many men do from three, and to become from being a manual laborer, to become an art and a profession. The young man, Mr. Northcott of your issue Feb. 17th, has proved this.

The real trouble is that older farmers have been striving to put away their surplus savings in Loan Societies or in banks to such extent that there are millions of farm moneys on deposit, and being used by other men in their mercantile or other business projects.

To take the money out of the business of their farm and lend it to others at three and one-half per cent. a year, instead of putting it back in improving their own business—care of dairy, or orchard which would pay better, or by draining their own acres whose 100 per cent. can be made in three years.

If farmers would do these things, pay their sons an allowance regularly in cash, as well as boarding them, send them to take Short Courses at the Agricultural College, then the sons

would remain on the farm, there would be more intelligence in cultivation and the Ontario farms would soon double their output.

The Canadian boy is looking for better employment on the farm, not, as Subscriber thinks, for amusement in the town. The remedy is more agricultural education.—"Countryman," Durham Co., Ont.

Bill to Regulate Automobiles

Sympathetic support from both sides of the house was accorded a measure aiming at materially restricting the conduct of automobiles and curbing the tendency to reckless driving, which was before the Ontario Legislature last week, when it received its second reading and passed on to committee. Mr. Valentine Stock, (Perth) was sponsor for the bill.

The bill provides that every person having control or charge of any motor vehicle on any public highway shall at all times manage such vehicle so as to prevent the frightening of horses and to insure the safety of any person riding or driving. Outside the limits of a city or town the driver of the motor shall, if going in the same direction as the horse vehicle, signal his desire to pass, and shall give the driver of such vehicle an opportunity to turn out so that he may be passed in safety. The clause states that where the driver of a motor vehicle comes within 100 yards of a horse and the driver of a woman or of children apparently under the age of 16 years he shall immediately stop his motor.

DRIVERS MUST GO SLOWLY

Whenever a motor vehicle is passing a horse, whether the latter is standing or moving, the motor must

Finds It Most Satisfactory

I am glad to be able to inform you that my advertisement in Farm and Dairy brings me most answers, and I find it most satisfactory. E. S. Osler, Lakeview Farm, Bronte, Ont.

not proceed faster than five miles an hour. If the horse becomes frightened the driver of the motor vehicle shall at once stop his car and keep it stopped until the horse has passed. In cases where the horse is standing or moving in the same direction as the motor the driver of the latter shall stop his motor until ample provision has been made to avoid accident or damage or until directed by the driver of the horse to proceed. The driver of the motor shall render all necessary assistance in avoiding accident and all reasonable assistance requested by the person in charge of the horse.

A clause of the bill provides that no light shall be used which is stronger than 32 candles or any lamp, lantern or lamp made of brass or other bright metal upon any motor vehicle shall during the day time be completely covered by some dark material to prevent glare.

HEAVY PENALTIES PROVIDED

Another clause makes the penalty for violation upon conviction \$50 or one month's imprisonment or both, and for the second offence or any subsequent offence a fine of \$100 or six months imprisonment or both, in addition to the cancellation of his license. The bill also provides that every person, whether owner or not, shall at all times carry his license with him and upon conviction before a Police Magistrate the date and particulars of conviction must be stamped or written upon the back and the license must be produced whenever called for by the authorities. If a second offence be committed within 12 months from the first offence, the Magistrate must cancel the license upon conviction.

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FOR WEEK ENDING MARCH 17, 1910.

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The Evolution of Sugar Making

L. C. McConnell, Elgin Co., Ont.

MANY years ago when the writer of this article was a small boy on the old homestead on the lake shore of Elgin County, Ont., he began to help in the making of maple sugar—the real article. This product can only be appreciated to the full by following it through all the details of manufacture from the time it leaves the tree until it reaches the consumer.

The first season that I took an active part in the sugar bush my father tapped the trees with the axe. He made a gash about four inches across by about an inch in width in each tree, the bottom stroke of the axe being slanted downward so as to cause the sap to flow to the lower end of the cut. At this point an insertion was made with an iron gouge that would accommodate in its place a wooden spile concave so as to conduct the sap to the lower end where it was delivered into a wooden trough. This trough was about two feet long and was made by splitting a log (usually basswood), about one foot in diameter and digging out the inside to the desired capacity.

The sap was gathered into pails and carried on yokes by the men to the boiling place where it was emptied into kettles. These kettles were hung by various devices to a long pole braced up against two convenient trees. A large log on either side of the row of kettles helped to conserve the heat. Here the sap was boiled, exposed to all the things, such as bugs, ashes, cinders and smoke, that were very apt to get into it. Is it any wonder that we hear some people say that they can't get maple syrup to-day with the same flavor it used to have? I should hope not!

PERIODS OF TRANSITION

I just had one year of such experience, then we took a step forward, buying wooden pails, tapping with an auger, about a three-quarter inch hole, and using a spile made of sheet iron which was driven into the bark of the tree. The next forward move was to get a gathering tank placed on a sleigh. After this came the arch made out of brick laid up in clay mortar and a Loiler made from two-inch planks, 10 inches wide, with sheet iron nailed on the bottom edges. This equipment brought about a great improvement in the quality of the product and we made some really good sugar and syrup. (I may digress just here to state that at this time the market was almost entirely confined to sugar and that the product could be disposed of only in ex-

change for groceries. We used to exchange one pound of maple syrup for two of yellow sugar.)

Other changes might be mentioned, did space permit. I am now starting on my third year with a Champion Evaporator. This equipment is far ahead of anything else I have ever seen for this work. There is just one other system that under proper conditions, might be superior, and I have never seen it tried, viz., boiling by steam heat. It seems to me this latter should make beautiful goods. However the Champion is within the reach of any man who has a bush of any size from 100 trees up.

The time has come when every man who has a maple bush should take as good care of it, as he would of his orchard of Baldwins and Spys. I am tapping 600 trees and am covering not more than 15 or 17 acres of land; in a few years if given proper care the suitable trees on this area will increase to 1,000.

DOES IT PAY?

Some will ask, does it pay? This might be an-



The First Harvest of the Season in full swing on an Ontario Farm

No one would expect to make a fortune out of maple syrup manufacture, but where the sugar maple trees are available it can be made a most profitable branch of the farm. The evaporator and a shanty are now recognized as being essential. Evaporators are made in various sizes and are thus adapted to handle the sap from few or many trees. Photo taken on Mr. L. C. McConnell's farm, Elgin Co., Ont. Mr. McConnell, the writer of one of the articles adjoining, may be seen nearest the shanty doorway.

swered in various ways. I don't expect to get rich at the business, but it comes at a season when, for the most of the time at least, the average farmer is not very busy. The annual product of a sugar bush will run from one to two and sometimes three quarts to the tree, the higher yield being when a tree is tapped in more than one place which practice I very frequently follow. Then the market for goods that are absolutely pure maple is practically unlimited at from \$1.25 to \$1.50 a gallon and the more customers get of this class of goods, the more they want the next year.

By using the Grimm spouts the injury to the tree is reduced to a minimum. In two or three

years after you could hardly tell where the tree had been tapped; in fact, I saw a tree yesterday that the hole bored last year had almost completely grown over. I trust that my experience as stated may lead someone to give a little more thought to the care of his maple orchard and that Farm and Dairy may have every success.

The Maple Industry Up-to-date

A. Waller, Chateauguy Co., Que.

Sugar making with the up-to-date utensils now in vogue, has lost much of the slavishness of former days. So much progress has been made of late years both as regards the color and quality of syrup and sugar, that those who would make a profit out of the business have discarded the old pans and heaters and have installed evaporators, large or small, according to their needs.

In sugar making as in all other kinds of work on the farm where help is scarce and hard to get it is to the advantage of everyone to use whatever labor saving machinery may be available for the purpose. Even when the Lush is small such equipment has proved to be the best and most profitable. In this section of Quebec where the industry is largely carried on one might travel for miles and not find any of the old-time methods employed.

FOR THE SMALL BUSH

Five years ago when we decided to do away with the old pans and heater we were only able to tap about 500 trees. We bought a 3 ft. x 12 ft. Champion Evaporator. Last year we were able to tap 900 or 1,000 trees and exchanged it for one 5 ft. x 16 ft. Such a practice I would not have one think to be always the best plan. Those whose trees have reached their full growth would do best to buy an evaporator that would meet the present and future need.

Some claim that a 3 ft. x 12 ft. evaporator is large enough to boil the sap from 900 or 1,000 trees, and of course you can do it, but the quicker the sap is gathered and boiled after it has run from the trees the better the quality of the syrup and that is what counts in these days of keen competition. A larger evaporator also requires less storage room for sap, less time, and less wood when all things are considered.

Many contend that because they have only 400 or 500 trees it would not pay them to invest in an evaporator. From my experience I know that it does pay when rightly handled and a thing is better left undone than not done properly.

It is a good idea to have everything in readiness before the season commences so that no time may

be lost. The first runs of sap are always the best and it does not pay to lose any by carelessness. Have your evaporator and storage tanks in place, your spouts and buckets ready so that you may be able to tap for the first runs.

TIME TO TAP

No hard and fast rule can be laid down for the proper time to tap; a good deal has to be left to one's own judgment. When speaking on the subject a gentleman once remarked that the proper time to tap was when sugar weather arrived, but we often have days about the 15th or 18th of March that much resemble sugar weather but are only the forerunner of a storm. There is nothing made by tapping at such a time, as after a certain time the holes bored are apt to dry and blacken causing a decrease in the flow of sap. It is claimed that the new galvanized spouts prevent this and so increase the flow of sap at least a third more than the old iron spouts. That it does increase the flow of sap has been proven beyond a doubt. There are so many kinds of spouts that are really good that much has to be left to individual preference in the selection.

We do not consider it advisable to use a bucket larger than 10 quarts, as buckets should be emptied frequently. The buckets should be made nearly straight so as to hold as has been remarked, "the full of it." It is not to have a market where sugar or syrup can be shipped while fresh so as to bring the highest price. To this end an attempt has been made to form a sugar makers' association. It would at least serve a two fold purpose, that of providing a market and also in a measure preventing adulteration, which is so detrimental to the best interests of sugar making.

Spring Care of the Spring Calving Cow

J. H. Grisdale, Agriculturist, C.E.F., Ottawa

The great majority of cows in the cheese making districts of Eastern Ontario and Western Quebec, calve in the months of April and May. The good farmer usually makes some effort to get his cows in passable condition. Too many of our farmers are satisfied to let the cow get through the winter as best she can, or at most try to improve matters by giving the cow some little extra feed in March and April, after having let her gradually lose flesh all the rest of the housing season.

This neglect or indifference to the well-being of the cow in the spring is one of the weakest points in our dairy farming system in Canada. Badly wintered cows start out giving poor yields of milk and can never be expected to give anything like the generous flow that might have been expected had they been fed suitable rations during the whole winter through and more particularly during the spring months before and immediately after calving till the grass is plentiful and of good quality. Such as have not fed well up to the present stage of the game, cannot, of course, make up entirely for past delinquencies. They can, however, by judicious and generous feeding from now on do much to atone for past faults and to ensure a much more than usually successful season in 1910. From now on, the cow coming to the calving in April or May should receive excellent care, an abundant and nutritious ration and every kindly consideration possible.

As to care, I would suggest grooming every day or two and letting out only when ground or yard is not so icy as to endanger her falling. By an abundant and nutritious ration, I would understand good ensilage and roots, if available, chaff or cut straw, mixed therewith, say one pound thereof to each five or six pounds of ensilage, three or four pounds long hay and a couple of pounds meal, say equal parts bran and oats and oil cake meal or gluten meal. The dry cow should be putting on flesh. There need be no fear of milk fever, even with the best of cows, provided always proper precautions are taken at the calving time.

Very few cows are good enough to make any danger from good feeding at all probable in that direction.

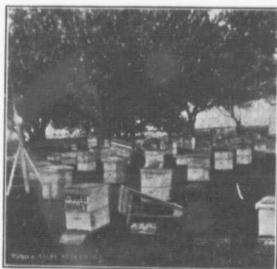
Every cow coming to the calving in good flesh and contented with her lot as a dairy cow is sure to do anywhere from 10 to 50 per cent. better than usual. Let us take advantage of this fact for the increased returns are sure to pay many times over for the slightly increased cost of feeding.

Bees from Cellar to Stands

J. Storer, Victoria Co., Ont.

After having kept their bees for nearly five months confinement in a dark cellar most beekeepers are anxious to see them on their summer stand. My experience has been that if the hives are clean and dry and the bees fairly quiet it is better to leave them where they are until there is some sign of growth in vegetation. When the soft maples begin to bloom is a good time to remove bees from their winter quarters.

Last year my bees were put on their summer stands on April fifth and sixth,—three weeks too



Don't Hurry Bees to Summer Stands

Mr. James Storer gives some practical advice on this point in the adjoining article. The apistry illustrated is that owned by Mr. Albert Pife, Wellington Co., Ont.

soon for that season. If a beekeeper has only a few hives he may easily take them out on a fine day and let them have a cleansing flight and return them to the cellar again.

Rabies, a Most Dreadful Malady

Dr. H. G. Reed, V.S., Halton Co., Ont.

Rabies is one of the oldest known diseases of animals. It has been described by Aristotle in the fourth century, B.C. Even at the present time very erroneous opinions are held by many as to the real nature of the disease. Some persons believe that the disease will develop spontaneously as the result of great heat, thirst, nervous excitement, anger, too high feeding and other causes. However during recent years authorities agree that the only cause of the disease is a specific micro-organism which must first be introduced into the system of an individual before it is possible for the disease to develop.

The germ of Rabies has not yet been identified, but experiments have proved that such an organism exists. It is thought to be so small that the best modern microscopes are unable to detect its presence. The saliva of a rabid animal is the most frequent and so far as at present known the only means of spreading the contagion.

A DISEASE OF THE NERVOUS SYSTEM

Rabies is a disease of the nervous system and the brain and spinal cord are the parts most affected in animals suffering from an attack.

While all warm blooded animals are liable to contract the disease, the dog because of his natural habits, disease prompt him to bite in his own defence, is the animal most likely to become infected and also for the same reason most likely to spread the contagion through a community.

After the virus has been introduced into the system it may develop rabies in a comparatively short period or it may not develop for a considerable length of time. It will depend somewhat on the amount of the virus introduced, the location of the bite and the resisting powers of the individual. It is believed that the nearer the bite is to the brain or spinal cord the shorter the incubative period and when the extremities are bitten the longer it will take to develop the symptoms.

The disease has been divided into two forms, viz., Furious and Dumb Rabies. In the case of furious rabies the brain is thought to be the part most affected and in dumb form of the disease, the spinal cord. In furious rabies we have extreme excitement, in dumb rabies we find stupor or paralysis. In the last stages of the furious form we almost always have paralysis.

SYMPTOMS OF VARIOUS STAGES

Again furious rabies has been divided into three stages: first, melancholy stage, second, maniacal stage, and third, paralytic stage. The first or melancholy stage lasts on an average from 12 to 48 hours, in which the animal will become restless, frightened or sullen, his manner will be entirely changed, he will show a taste for abnormal food, or possibly refuse food of any kind. He will lick cold objects and may have difficulty in swallowing. The second or maniacal stage lasts three or four days and is characterized by attacks of fury which may last for some hours, and is often followed by convulsions. In this stage the animal will evince a great desire to run away from home, if on the chain it will make enormous efforts to break away. It will run in an aimless way and often come many miles in a few hours and will bite and snap at anything that comes in its way, even at posts or stones or anything that obstructs its progress. This is of course the dangerous stage of the disease.

The third or paralytic stage will find the animal in a most miserable condition, much emaciated, hair standing on end, sunken eyes, staring and glassy and a generally loathsome appearance.

The lower jaw will droop, the saliva will dribble from the mouth and paralysis of the hind quarters will render him unable to walk. There will be attacks of convulsions and usually death about the 10th day since the disease developed.

A DANGER ALL TOO REAL

This most dreadful malady is attracting special attention just now because of the "mad dog" scare and the action of the government has been severely criticised in many quarters for the ordering of dogs to be muzzled. But while there is no doubt that many of the cases reported in the press of rabid dogs have no real foundation in fact so far as rabies is concerned, and although many a poor dog has no doubt been hunted to death without real cause, yet to those more closely in touch with the situation the danger is unfortunately all too real. We have had rabid dogs in the country and any means that would help to rid the state of such a dreadful disease should be encouraged by all thoughtful, law abiding citizens.

After all a muzzle does not irritate a dog to any great extent after he has become a little used to it, a young horse will resent a bridle when it is first put on just as much as a dog will a muzzle and yet we hear no cry against the use of a bridle. The danger will soon be past and our dogs may run again in their former freedom. The danger is at present with us. Let us all unite to stamp it out.

It is thought by some that the harder the spray liquid is blown or thrown against the tree, the better. Such is not necessary for good results, and has even been known to prove damaging by driving the spray liquid into the stomata or breathing pores of the leaves.

Where Cow Testing is Popular

J. E. Jewson, Welland Co., Ont.

It is difficult for me to place on paper a true idea of the interest that our local Cow Testing Association has created among our dairymen. At a meeting of the Bertie Cow Testing Association recently held it was very gratifying to note the general satisfaction expressed by all its members and a unanimous desire to carry on the work. The records of the various herds during the past year have revealed many surprises and likewise many disappointments for it is quite common to hear the expression, "My best cow is the poorest," and vice versa.

The writer has knowledge of a grade Jersey cow considered by the owner to be just an ordinary producer. Although this cow has not completed a full lactation period yet I am safe in saying that the amount of milk will exceed 6,000 pounds with an average test of six per cent. butter fat. Another herd with two two-year-old grade Ayrshire heifers each gave milk that tested almost the same per cent. fat, yet one gave nearly 1,700 pounds more milk than the other. The following opinions are expressed by some of the members.

Mr. W. Sexsmith says: "To me the true value of the cow testing association is in testing one cow against another in my own herd under similar conditions, and not my herd against another herd under different conditions. The cow I considered about the best in my herd has turned out to be about the poorest. The fact that your herd might claim a record inferior to that of your neighbor should not keep any man from testing his cows."

Jas. E. Laur says: "I hope to increase my profits during this year by disposing of two unprofitable cows."

Mr. J. Miller says: "I am well satisfied with the results."

Geo. Sexsmith says: "I want to continue the work as long as possible."

The membership of our association has recently been increased by two while others are thinking seriously of taking up the work which shows that the influence of the association is being extended. Meetings held frequently during the winter months would be most beneficial. At the last meeting of this association, a stock company was formed to purchase a high-class dairy bull. The all importance of a good sire is becoming more fully realized.

Artificial Hatching and Rearing

H. Denhart, Macdonald Co., Man.

While my experience in artificial incubation is somewhat limited, extending over three years, I have been successful in that side line of mixed farming. I ran one "Peerless Incubator" two years ago and two last year.

In hatching I simply follow instructions given with the machine. I follow these to the letter not nearly to the letter. By giving strict attention to the machine and not trusting to Providence and the machine altogether, if a sudden turn in the weather occurs at night, I find it very easy to get a good hatch every time.

REARING THE CHICKS.

The stumbling block in the business is the raising of the chickens after they are hatched. I leave the chicks in the nursery drawers of the incubator not less than 24 hours after they are hatched, often 36 hours. In the meantime the brooder is thoroughly aired, cleaned, heated up and dry chaff put in. While the instructions call for 90 degrees in the brooder, when chicks are put in, I am satisfied with 85 or 86 degrees, because the temperature will raise considerably as soon as the chicks are in.

As soon as the chicks are transferred to the brooder, I feed them hard boiled eggs, finely cut up. I place these on small boards and tap them

lightly, imitating the mother hen in calling her young, and in that way I get the whole lot to come up to their first feed and begin to pick it up, after which there is no more trouble. The second feed contains granulated oatmeal and dry bread crumbs. On this diet with the addition of pulverized charcoal, ground oyster shells and fine sand, they live for six or eight days. This grit is in my estimation the most essential factor towards keeping young chicks healthy, and I have seen chicks get well from bowel disease after two or three feeds of charcoal.

THE ROUTINE AFTER SIXTH DAY.

After the sixth day I begin to feed everything that may be good for a chicken. Boiled potatoes, wheat, onions, cabbage, fine cut green grass, in short, anything that will give them a change and keep them eating. I always clean the feed boards after the chicks are done eating, never putting left-over food before them a second time. Fresh water, and from the fourth or fifth day on, sweet milk are given regularly with every feed.

I am very particular in feeding the chicks regularly every two hours, and always remove what they don't eat up in a reasonable time. Cleanliness of brooder and brooder house are, of course, first essentials in order to keep chicks healthy.

Two years ago I raised about 500 chicks out of three hatches with a 200-egg capacity incubator. My first hatch last year was 71% of the fertile eggs, an excellent percentage, considering the early hatch done under the most unfavorable conditions as to climatic circumstances.

Culture of the Tomato

John N. Watts, Frontenac Co., Ont.

The tomato plant demands a cultivation different in some respects to that of other plants.



A Panoramic View of a Portion of the Waste Sand Lands in Durham Co., Ont.

The field in the foreground at one time was part of a productive farm. Now it is occupied rent free, the company owning it realizing its insignificant value, allows the present occupant to retain and work the land, and has ceased to bother him at all concerning the interest on his mortgage. The hills in the distance are Counties' Council of Durham and Northumberland has asked the Ontario Government to advance money.

—Photo by an Editor of Farm and Dairy.

The success of growing tomatoes depends largely upon the starting of the young plants.

To secure good healthy, thrifty plants, sow the seed in March if required for very early, and about the first week in April for a general or late crop. Sow in a good warm hotbed but not too hot as too much heat forces too rapid a growth and consequently a weak delicate plant is produced.

Sow the seed thinly to produce good strong, stout, healthy plants. Sow in rows about five or six inches apart and cover to a depth of one inch. Before sowing the seed use a bushel or so of well sifted coal ashes, scattered over your hotbed and raked in to a depth of half an inch.

When the plants are two to three inches high transplant into a warm bed in gallon pots if so desired; or set out about 9 or 10 inches apart to prevent crowding and to produce a sturdy, stocky plant. Give plenty of fresh air on fine days and protect from frosts at night.

When all danger of frost is over, set the plants out in a well prepared piece of land which has had a liberal supply of well rotted manure plowed in the previous fall. A week or so after the plants have been set out give a gentle hoeing around the plants after which go through the rows twice in a place, once a week with a fine tooth cultivator till the plants cover the ground. The remainder of the work should be done with the hoe. In an ordinary season, not too dry, success is sure to follow.

Some Alfalfa Queries Answered

While delivering an address on "Feeding the Dairy Cow," in Peterboro before a meeting of dairymen, Mr. Henry Glendinning, the well-known authority on alfalfa was asked a number of questions relating to this crop. These questions with Mr. Glendinning's answers, follow:

- Q. Will alfalfa grow on wet low land?
- A. No, one would only lose the seed.
- Q. Will it grow on gravelly soil?
- A. Yes, alfalfa often will do exceptionally well on such soils.

Q. How much seed do you use and how many crops will it give in a season?

A. The quantity of seed depends upon its source and its vitality. Of good seed, one should sow, from 15 to 25 pounds to the acre, 20 pounds being the quantity that we generally sow. There is danger in buying imported seed as we are liable to get new weeds. Alfalfa will grow two or three crops in a year. We only cut ours twice last year. We cut two big crops. It was a late spring and the second crop yielded as good as the first one which is an uncommon occurrence. We could have cut another crop. In early fall it was standing at least 13 inches high. Rather than cut it, I pre-

ferred to keep that top. Alfalfa is too valuable a crop not to give it proper care. It requires lots of top and while we might have cut or pastured it as many would, we found it best to leave that top there to protect it for winter.

At this juncture, Mr. Glendinning asked for a showing of hands as to how many in the meeting were growing alfalfa. Two hands went up. Mr. Glendinning counselled them not to pasture alfalfa for by so doing they might lose it. "I do not say," said Mr. Glendinning, "that you will lose it, but the probabilities are that you may. It pays to look out for the worst years. In a severe winter, if it has been previously pastured, there is quite a danger of losing alfalfa altogether. Had I know this when I first began to grow alfalfa, 14 years ago, it would have saved me a great deal of money. I used to keep the cattle off during the first year and then let them on it the next year. The following spring, I would not have much alfalfa. All alfalfa growers are coming to

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FARM MANAGEMENT

Going to Try Alfalfa

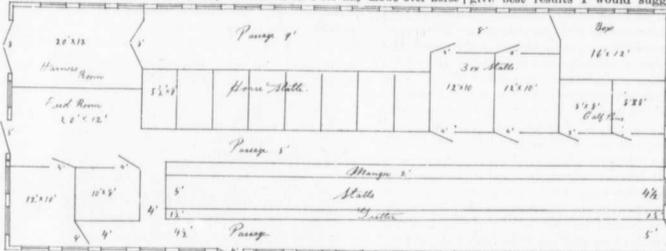
I have heard of alfalfa clover, and would like to try a little. I have a small piece of high land just pastured for two years, and last year had potatoes on it. It is very rich. I thought of sowing barley in the spring, and in August sowing the alfalfa. Would that be right, or would it be better to sow the alfalfa with the barley?—E. A. R., Missisquoi Co., Que.

The field you describe would appear to me to be very well suited for alfalfa. I would suggest that you work the land with disc harrow, or spring tooth harrow next spring, get it into proper tilth and afterwards seed down with alfalfa seed at the rate of 20 lbs. per acre. Get the best seed

and corn has to be grown, then some commercial fertilizer might suggest be advantageous. I would suggest as a suitable application: from 300 to 500 lbs. of the following: 300 lbs. Superphosphate, 150 lbs. Nitrate of Soda and 150 Muriate of Potash. This would likely be of most value if the field whereon the corn were sown had been in pasture or hay the preceding year. It should be applied just before harrowing for the last time.—J.H.G.

Enquiries re Barn Plans

I intend building a barn 80 ft. by 36 ft., with concrete basement 3 ft. (not in the ground). Would you publish plans of some handy barns of that size? Will use drive house 24 by 36 crosswise for end of barn, which will have 15 ft. post rafters, top 12 ft., bottom 13 ft. Please give me plan of upstairs with one driveway between two mows of equal size, not counting the 24 ft. by 36 ft. building, which will still be used for hay mows over horse



A Barn Plan worth the Careful Study of any Prospective Builder

This plan is described in the article "Enquiries re Barn Plans." Note the provision made for light, the windows being designated by the lined spaces. Ninety-nine barns out of every 100 are not provided with sufficient light.

stable. What width drive floor would you advise? Please give plan of stabling for basement to the 20 cows and four yearlings and three box stalls for cows when milking. Horse stabling for eight tied horses and three box stalls for cots. Would you advise stable lengthwise or crosswise? Please give amount of material, gravel in yards, also cement for walls, leaving out four doors and as many windows as would be best. Also separate amount for floors and mangers.—O. R., Lincoln Co.

To accommodate such a large number of horses and cattle will require a larger barn than 80 feet by 36 feet. The smallest building in which so many animals may be comfortably accommodated should be about 100 feet by 36 feet. Such a building will require about 100 barrels of cement, 40 yards of sand and 90 yards of coarse gravel, or 100 yards average gravel to build the walls. The floor would require about 60 barrels cement, 30 yards of sand and 50 yards coarse gravel. If small field stone is plentiful they might be used in the construction of the wall and so reduce very materially the amount of other material say 25 per cent. to 25 per cent.—J. H. Grisdale.

Fertilizer for Corn Crop

Would you advise using commercial fertilizer on land for corn crop, not having sufficient manure to cover all the land? If so, how should it be applied to the land of best quality per acre? The land is a clay loam.—M. S., Russell Co., Ont.

I would not advise commercial fertilizer to replace barnyard manure. Why not get a cartload of manure out from Ottawa. If, however, barnyard manure is not available or procurable

ing part of the crop of hay to stock in winter? Stable manure is ungettable in any quantity.—A. W. W., B.C.

The land in question I would advise you to treat as follows: As soon as conditions will permit next summer, say in August, after you have pastured for a time or cut the hay, plow with a moderately shallow furrow, say five inches deep. Roll and disc alternately till in good tilth. Work at intervals during the fall and in October ridge up with double mould board plow. If not possible to handle in this way, then plow again with a slightly deeper, well made up furrow, say six instead of five inches deep and leave all winter. The next summer as soon as you can get on the land, that is of course, when it is fit to work, break down by means of disc or spring tooth harrow, work thoroughly and seed to grass without nurse crop. As grass seed mixture is likely to give best results I would suggest al-

Timothy meadow well looked after will last indefinitely. I know of one timothy meadow 40 years old. It has been pastured more or less each fall. To keep in good shape for any length of time an occasional application of barn yard manure is absolutely necessary. Be careful not to pasture too closely in fall.—J. H. Grisdale, Agriculturist., C.E.F., Ottawa.

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Management of Pasture Land

Would you kindly let me know what the best thing to do with about 20 acres of pasture land; half of it is clay land, the other half is sandy. I have had cattle running over it for three years. Last year there was very poor grass for the cattle. Have no other place to pasture them. They will have to run on it this coming summer. What fertilizer would you recommend?—G. F., Nipissing Dist., Ont.

The best fertilizer for pasture would be barnyard manure applied well, spreader early in May. Lacking this then nitrate of soda, about 200 lbs. and in the fall is in a condition to break. Please tell me what would be the best grass seed or seeds to sow to it. Since it is under water in the spring, I take it oats would be impossible as a nurse crop. Would it be possible to sow in the fall after breaking and discing well to some seed that would establish the roots of the sough grass. Timothy does fine here but this ground seems almost too wet for this grass; water does not seem to hurt this grass, but there are probably other grasses that would suit better, and I would like to know if it would take root on fresh breaking. How long should it be left good for, cutting for hay in summer and pasturing stock in fall, and feed-

I am enclosing herewith \$1.00 to renew my subscription to "Farm and Dairy." My e-mail is sandy@rogers.com. My paper, Thomas McIntyre, Wentworth County, Ont.

The Feeders' Corner

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

Meal Ration for Dairy Cows

Can you give me the proper ratio of ground feeds that a cow should get in order to give best results? I feed ground oats and barley and buckwheat, also oil cake, gluten-meal and bran. I feed the meal with the silage night and morning "Quebec."

I would suggest a mixture of about the following proportions of the feeds you mention. Bran 600 lbs., ground oats 100 lbs., barley 100 lbs., buckwheat 100 lbs., gluten 100 lbs., oil cake meal 200 lbs. If it is not desired to mix all the feeds then the dropping of one or two, or all of the oats, barley and buckwheat will not materially affect the value of the meal ration. If they were all left out then it would be well to add 100 lbs. more of oil cake meal or gluten. If only one of the two gluten or oil cake were to be used, then an amount equal in weight to what was suggested for the two. If gluten feed is meant, that is if material showing less the 30 per cent. protein is meant, then proportionately more gluten will be required if oil cake meal were omitted. Feed the mixture at the rate of about one pound of meal to each four pounds milk produced. The meal mixture including all the feeds mentioned is likely to give better results than a meal mixture of two or three of the materials.—J. H. G.

Alfalfa for Horse Feeding

An Ohio farmer who is regarded as an authority on alfalfa and its feeding value, says in the "Breeder's Gazette":

Bearing in mind that good alfalfa hay has about the same composition as oats, one should be able to estimate the difficulties in feeding it. One can readily overfeed a horse on alfalfa hay. It will not cause founder or acute disorder, but it is not good for the horse to overeat any nitrogenous feed. Any excess of protein in the diet must be eliminated through the kidneys. A horse overfed on alfalfa hay will not be so strong or enduring as he would if properly fed, or even a little underfed. Slightly underfeeding is better than gross overfeeding, whether with horse or man.

A horse should never be given as much alfalfa hay as it will consume unless it is emaciated and one wishes to clothe it in flesh. As to the question of how much to feed a horse, let us get at it in this way. A horse weighing 1,000 pounds needs, when at rest in the stall, 20 pounds of dry matter, and 1.5 pounds of protein for a day's ration. If moderately worked, it needs 21 pounds of dry matter and 1.7 of protein, and if hard worked 23 pounds of dry matter and 1.8 pounds of protein. Thus the horse fed alfalfa hay will furnish most of its protein would need, if at rest, about 10 pounds of hay; if moderate-ly worked, about 12 pounds; and if hard worked about 14 pounds for each 100 pounds of weight of corn. The grain ration with alfalfa hay is best of corn, since this more nearly balances the alfalfa than would oats or any other grain.

From Bailey's Cyclopedia of Agriculture in the table of computing balanced rations I find that when I feed this horse of 1,000 pounds of weight at moderate work, 15 pounds of alfalfa hay and eight pounds of corn, I come near giving the ideal ration. To be accurate, the horse ought to have a ration with 21 pounds of dry matter, 1.7 pounds of digestible protein, 11.18 pounds of carbohydrates and fat, totalling for the digestible

portion of the ration 13.5 pounds. In reality, with the named amounts of corn and alfalfa, we got of protein, 2.024 pounds of carbohydrates and fat 10.929 pounds, totalling of digestible nutrients 13.053 pounds or a little too much protein and a little less in bulk than is desirable. So, in addition to the 15 pounds of alfalfa hay, I would add, say two pounds of timothy or oat straw or something to fill up with, containing not much nutriment.

Assuming, then, as we fairly may, that the standard ration for a horse at moderate work is 15 pounds of alfalfa hay and six pounds of corn for a day, we can readily compute what a larger horse should have. A 1,500-pound horse would eat 22 1/2 pounds of corn, alfalfa hay and nine pounds of corn, with a chance at a little bright straw or timothy for filler if need be. And any excess of alfalfa above these specified amounts would be fed at a positive disadvantage to the animal. As to which crop to use, we prefer the first or second crop, letting it get fairly mature, but cutting before the leaves drop from the stems and curing well. We have horses that have eaten no other hay than alfalfa in their lives and absolutely no ill results have followed. Alfalfa fed rightly never causes heaves in horses. It is absolutely no better feed. Alfalfa has often been used in developing fine horses, whether for the track or stud.

Pure Bred Stock for the West

A large shipment of pure-bred live stock was sent to Western Canada recently by the Live Stock Association of Ontario. The shipment, which filled a long palace horse car and a fitted box car consisted of 17 horses, 12 cattle and 27 sheep. Clydesdales were largely in the majority among the horses, there being 13 Clydes, 2 Shires, 1 Thoroughbred and 1 Standard-bred. There were 3 Shorthorns, 4 Jerseys, 2 Aberdeen-Angus, 1 Ayrshire and 2 Holsteins. The sheep were Shropshires, Oxford and Suffolks. Much of the stock was purchased by Western breeders on personal inspection and the balance was secured through correspondence. Buyers were represented by 22 parties in the West whose shipping stations were scattered from Winnipeg to Calgary.

It is expected that another shipment will go out the latter part of March or early in April. Parties requiring space should send their application to the Secretary, A. P. Westervelt, Toronto.

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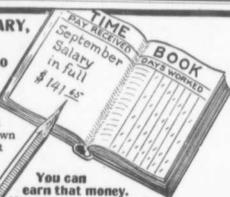
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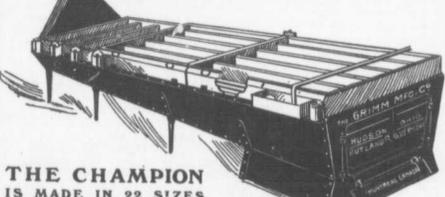
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HORTICULTURE

Profitable Peaches

Mr. T. A. Farrand of Michigan, speaking before a large body of Niagara Peninsula fruit growers last week, gave the following as his choice for the six best yellow flesh peaches: Yellow St. John, Engol's Mammoth, Kalamazoo, Alberta, Smock, Salway. He considered Engol rather harder than the Early Crawford which he now omits from his list altogether, and it is about of the same season. Kalamazoo is much like New Proflic. He omitted Triumph, but mentioned a peach called Yellow Swan, which was of about the same season. The Dewey he claimed was a better peach than Triumph.

Mr. J. Wesley Smith, of Winona, Ont., gave the following as his choice: St. John, New Proflic, or Early Crawford, Alberta, Yellow Mammoth, Lemon Tree, Smock. In his opinion the Fitzgerald and the Garfield were not superior to Early Crawford. Smith's Superb was a trifle earlier than Lemon Tree, but not as prolific. The Leamington was a great bearer, much more productive as a rule than Early Crawford. Longburst was profitable on real good, deep sandy loam, rich, moist but well drained; otherwise too small.

In planting, Mr. Farrand advised trimming the young trees to whip stalks and then cutting them back to about 18 inches from the ground, so as to make leadheads, and then keeping them well cut back every year. If, however, the head had been formed higher and allowed a year's growth, it was too late to change to a whip lead. For distance, he advised 20 feet each way.—W.

Fruit Institutes in Georgian Bay District

The fruit growers of the Georgian Bay district are fast awakening to the fact that they must pay more attention to their fruit if they intend to hold their present enviable reputation of producing the best quality of apples. It has been said in the past that there was no necessity of spraying in that district since the cold weather would not allow the injurious insects to thrive. However, this neglect of spraying has allowed the oyster-shell bark-loose to get a good foothold and also has given the codling moth a chance to become well established. Pruning has been much neglected, also, and grafting needs to be done in many cases. Frequently no manure or fertilizer has been applied for a number of years, and the consequence is that the apples have been getting smaller and smaller in size and numbers.

Mr. I. F. Metcalf, the representative of the Department of Agriculture for that district, is very much alive to the necessity of better treatment of the orchards and, in co-operation with the Georgian Bay fruit growers, he has just conducted a couple of fruit institute meetings, one at Meaford and one at Thornbury. The Meaford meeting was held on March 4 and the Thornbury meeting followed on March 5. Pruning and grafting of fruit trees and the marketing of fruit were taken up by P. J. Carey, the Dominion Fruit Inspector. The spraying of fruit trees was dealt with

by Mr. Robt. Thompson of St. Catharines and Mr. Fraser of Burlington. Mr. B. Leslie Enock of the Potash Syndicate handled the fertilizer question. In spite of the bad roads, which were almost impassable, a large number of fruit growers turned out to the meetings at both places and took a great interest in the addresses. It is not saying too much for these meetings that better fruit should be turned out of Georgian Bay district as a result of their being held.

Hotbeds and Cold Frames

(Continued from last issue)

A cold frame is a simple construction of boards for wintering over young plants, cabbage, lettuce, cauliflower, broccoli, etc., and is also extremely useful to protect and harden off plants from the greenhouse or hotbed before fully exposing them in the open air.

Select a dry, southern exposure, form a frame four to six feet wide and as long as required. The back should be fourteen to eighteen inches high and the front eight to twelve, with a cross-piece every three feet. The frame may be covered with sash or cloth. Seeds of the vegetable to be wintered, sown in open border, early in September, will be ready to plant in cold frames about the last of October. The soil should be well prepared and smoothly raked before planting.

Admit air freely on pleasant days, but keep close in severe weather. These frames are particularly useful in the southern districts and may be covered more cheaply with cloth shades than by sash. The shades are made as follows: Make light but strong wooden frames to fit over the bed and of a width to receive some of the common brand of cotton cloth. The cloth may be unbleached and should be stretched over and securely tacked to the frames.

TRANSPLANTING

In transplanting, the main points to be regarded are: care in taking up the plants so as to avoid injury to the roots, setting out as soon as possible to prevent the air coming in contact with the roots, setting firmly so as to enable the plants to take a secure hold of the soil, and shading to prevent the hot sun from withering and blighting the leaves. Where a rank or soft growth of tops has been made in the hotbed it is frequently desirable to trim off some of the larger leaves before taking up to transplant so that evaporation later may be retarded.

In transplanting from a hotbed, harden the plants by letting them get quite dry a day two before but give an abundance of water a few hours before they are taken out. It is most apt to be successful if done just at evening, or immediately before or during the first part of a rain, when the ground being wet it is impossible to sufficiently press it about the plant without its baking hard. If water is used at all it should be well freely,

and the wet surface immediately covered with dry soil.

WATERING

The best time to water plants is early in the morning or in the evening. Watering may be given to the roots at any time, but should never be sprinkled over the leaves while they are exposed to bright sunshine. If watering a plot has been commenced, and continue to supply it as it is needed, or more injury than good will result from what has been given. One copious watering is better than many scanty sprinklings. The ground should always be stirred with a hoe or rake before it becomes so very dry as to cake or crack.

Complaints of Canadian Fruit in England

Trade Commissioner MacKinnon, Birmingham, in Report of Department of Trade and Commerce.

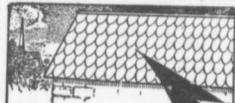
A complaint which reached this office some time ago, and upon investigation proved to be well founded, was held over to be reported on along with other similar complaints which might come in. The season is now approaching the end, but so far the attention of this office has not been called to any infraction of the Canadian law or of fair trading methods.

FRAUDULENT CHANGE IN MARKING

The fruit in question bore the names of J. C. Dudley & Sons, their marks being 'Sunflower Brand, 100 Russet' in pencil, 'XXX,' and the name 'Prince.' Being No. 1 fruit, as the marks would indicate, these russets were decidedly second-rate, both as regards size and color. A remarkable feature was the fact that while the first two crosses were in black lead pencil, the third was a larger cross made with purple indelible pencil, evidently after being marked 'XX' some one over anxious for profit had 'raised' the grade by the addition of the third 'X.' The second barrel similarly marked, but with the name 'Smith,' was found properly graded No. 1. The first barrel, bearing the name 'Avery' and marked in the same manner, showed small, poor spotted fruit, some of which was absolutely rotten.

Other barrels, which were examined, with the names 'Collins,' 'W. A. Seed' and 'Prince' upon them, all tended to bear out the salesman's statement that 10 barrels out of 21 were decidedly inferior to the grade marked upon them.

At another firm, barrels were again seen where the third 'X' had been added and the fruit in two barrels upon examination was found to be small and spotted, being in one case fair second grade and in the other third-rate. The names (presumably those of packers) were Collins, Seed and Prince.



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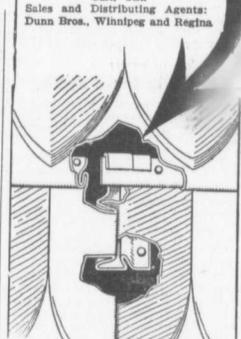
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To Cure the Egg-eating Habit

Now, that our hens have started to lay after having taken a long rest for most of the winter, they have taken to eating their eggs. What remedy do you advise other than to chop their heads off—C. S. Bruce Co., Ont.

The egg eating habit is hard to cure. If the hen or hens are not vaccinated the best plan is to kill those addicted to the habit. It is a habit that will soon spread to the whole flock. I have heard of persons curing the habit by giving the flock eggs from the incubators to eat, all they will take. Another plan is the filling of empty egg shells with pepper, mustard and so on. Be sure the hens have plenty of cayenne shell and green food and give them all the exercise possible. Feed all grain in a heavy

are not so satisfactory. If hens are kept in the backyard and will not be on the lawn a general purpose breed such as the Plymouth Rocks, R. I. Reds, Wyandottes or Orpingtons make very good fowl for a city lot. If it is the intention to let the fowl run on the lawn no fowl looks quite as nice as a white or colored bird. As far as laying goes the Leghorn is usually considered to be the best layer. A good laying strain of the American Breeds however, give very good returns as well as being good table fowl. Eggs from most of these breeds could be had from advertisers in Farm and Dairy or from Macdonald College of the O.A.C., Guelph.—F.C.E.

Crop Bound Fowls

Robert Smith, Lambton Co., Ont. This, the commonest of all crop diseases, is easily detected. The crop hangs down and is hard. The trouble is caused from the bird having eaten long pieces of grass or indigest-

The following are the chief factors in winter egg-production: Early-hatched and well-matured pullets; dryness, light, fresh air in the poultry house, and exercise and careful feeding.—H. B. Webster, Port Hco., Ont.

FOR SALE AND WANT ADVERTISING TWO CENTS A WORD CASH WITH ORDER

BRED FOR EGGS and size—White Wyandottes, beautiful white birds; eggs, 15 \$1.00; 55, \$3.00; 110, \$6.00. R. J. Gibb, Galt, Ont.

EGGS GIVEN AWAY in return for new subscriptions. Settings of eggs of any standard variety of fowl, given away in return for two new subscriptions to Farm and Dairy. Send to Circulation Manager, Farm and Dairy, Peterboro, Ont.

White Wyandotte Cookeries, \$3 and \$4 each.
Buff Orpington Cookeries, \$2.50, \$3.50 and \$4.00 each.
HARRY T. LUSH, 182 Dublin St., Peterboro

POTATO PLANTER



1909 MODEL
With or without fertilizing attachment, opens the trench, drops the seed, covers it and marks for the next row, all in one operation. Does not bruise or mar the seed in any way. One set of potatoes can plant from four to six acres per day.

Write for catalogue.
CANADIAN POTATO MACHINERY CO., LTD.
GALT, ONTARIO

Seed Oats

Scotch Grown REGENERATED BANNER

This is the best Oat for Ontario If you are interested in and grow Oats, you cannot afford to be without this grand variety. Send for our sample. While the stock lasts, we offer them at, single bush, \$1.50; 5 bush, lots, \$1.25 per bush. Bags free.

O. A. C. No. 21 Mandcheuri Barley
Just received our stock from the grower. It is the finest Barley we have ever seen. Send for a sample and see for yourself. It will pay you to get it if you grow Barley. While the stock lasts, we offer it at, single bush, \$1.50; in five bush lots, \$1.25. Bags free. Send for catalogue.

GEO. KEITH & SONS
SEED MERCHANTS
124 King St. East TORONTO

Elm Grove Poultry Farm

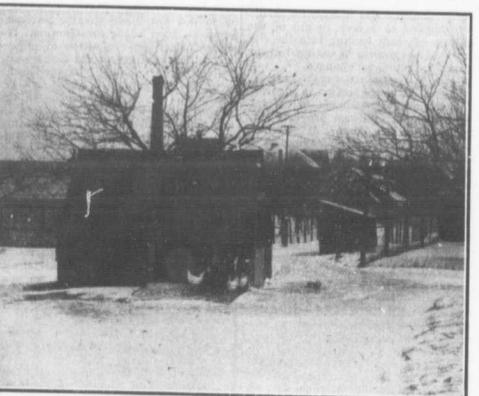
Guaranteed Fertile Eggs for sale from the following breeds: Rose Comb Brown Leghorns, Wyandottes, Darkings, Light Brahms, Turkeys, Hamburgs, Brousses, Turkeys, Kambden Geese, Hosen Ducks.

J. H. RUTHERFORD, Box 62, Caledon E., Ont.
Member of the Leghorn Club of Canada
Telephone 7 on 8

FREE EGGS

Guaranteed hatchable from our big-brooded, heavy-laying strains of the Rhode Island Red, White Wyandotte and White Leghorn. Send for catalogue and Fed for Laying, Eggs, \$1.50 per 15; \$2.50 per 30; \$6 per 100. Every 15th setting given free.

J. H. McCauley, Ontario
Churchville



A Winter View of Some of the Poultry Houses at the O.A.C. Guelph

The house in the foreground is a low down single ply board house with straw house gave excellent results during the winter of 1909-3, both in health of stock and egg production.—Cut courtesy Institute's Branch.

litter so that they have to scratch for it and if this does not help matters the axe had better be used on the worst of them.—F.C.E.

Chickens for Town—Best Layers

What would be the best kind of chickens to keep in town and what are the best layers? I am thinking of getting thoroughbred. How much would I have to pay a setting, and where can I get them?—A Subscriber, Elgin Co., Ont.

People who keep fowl in a town require a breed that is easily handled. Light hens that fly over any fence and get into the neighbor's garden should not be kept in city lots. They also make considerable noise with the crowing and cackling and for that reason

ible fowl, such as chaff and wire-grass. It is also frequently caused by the fowl eating an over-amount of grain. Birds not being fed for some days and then being given all they desire will eat more than they can to digest this malady.

Treatment.—Pour some castor oil into the bird's mouth and force it to swallow; then work the crop with forefinger and thumb and endeavor to loosen the contents. Pour oil in small quantity frequently into the crop during this operation to soften the hard substance. When the contents become loosened try to work them out through the mouth. If unsuccessful try the following, which, if rightly performed, is positive: Pluck or cut the feathers from a place on the upper part of the crop, make an incision an inch long through the skin; then press the skin aside and make a similar slit in the crop. When released the cuts will not be immediately opposite each other. Work contents through the opening and sew both incisions with white linen thread. Feed nothing for 24 hours, then feed mash till the bird recovers.

I think Farm and Dairy the best paper a farmer can take, as it contains advice from farmers who have experience in all the different branches of farming. I also enjoy the market review.—L. Linkletter, P. E. I.

This crop is poultry—the crop that knows no "bad years" You can raise the crop on your farm, no matter where in Canada it is. You can raise poultry successfully, make money doing it, and be sure of a good market for all you do raise. You need make no heavy investment to start at all. You need no elaborate equipment, you don't have to try to raise a big stock of your birds in poultry-raising, even if you go into it on a pretty big scale. Now is it hard work to

This Is How You Can Make Your Own Farm Pay Better

First of all, sit down now and drop a pin on a card with your name on it that will bring you a book you can read. It tells you just why the Perles' law is so successful. One reason why the Perles' law is so successful is because it is so simple. You can raise poultry successfully, make money doing it, and be sure of a good market for all you do raise. You need make no heavy investment to start at all. You need no elaborate equipment, you don't have to try to raise a big stock of your birds in poultry-raising, even if you go into it on a pretty big scale. Now is it hard work to

Very Little Money Will Start You Right

Don't suppose for a moment that you need a great deal of cash to start that the Perles' law is so successful. One reason why the Perles' law is so successful is because it is so simple. You can raise poultry successfully, make money doing it, and be sure of a good market for all you do raise. You need make no heavy investment to start at all. You need no elaborate equipment, you don't have to try to raise a big stock of your birds in poultry-raising, even if you go into it on a pretty big scale. Now is it hard work to

You Get, Free, The Advice And Aid of Experts

Another very important thing about The Perles' law is that you get, free, the advice and aid of experts. One reason why the Perles' law is so successful is because it is so simple. You can raise poultry successfully, make money doing it, and be sure of a good market for all you do raise. You need make no heavy investment to start at all. You need no elaborate equipment, you don't have to try to raise a big stock of your birds in poultry-raising, even if you go into it on a pretty big scale. Now is it hard work to

We Trust You Willingly

When it is not just convenient for our customers to start on a cash-down basis, we willingly arrange such a plan. We will accept the Perles' law as a term that the Perles' equipment will be paid for in full. We will accept the Perles' law as a term that the Perles' equipment will be paid for in full. We will accept the Perles' law as a term that the Perles' equipment will be paid for in full.

make a good poultry raising—not anything like the work it takes out everywhere to make over a pasture of Perles' law to follow and the certainty it provides for, and to get into right away. Consider the matter carefully. Send for our book of what follows, and act upon its suggestions.

We Find a Buyer For Your Product

Here is another valuable service you get when you follow The Perles' law. We guarantee to find a buyer for your product. Here is another valuable service you get when you follow The Perles' law. We guarantee to find a buyer for your product. Here is another valuable service you get when you follow The Perles' law. We guarantee to find a buyer for your product.

Best Paying Business For You

For the work involved and the money required, poultry-raising is the best business there is. It is a school of a year, it gets started with a few dollars, it is not a farm on which poultry will not pay better than any other crop. Here is another valuable service you get when you follow The Perles' law. We guarantee to find a buyer for your product.

FREE Poultry Book

You can probably think there is no sense in getting a free poultry-raising book. Here is another valuable service you get when you follow The Perles' law. We guarantee to find a buyer for your product.

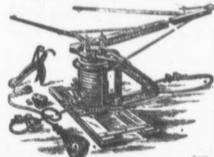
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Let us ship you this and trust you for it. We pay freight and give you a 10-year guarantee.
We carry ample stocks in our big distributing Warehouses at Winnipeg, Regina, Calgary, Edmonton and Vancouver, for the convenience of our Western friends. Address all letters to Head Office at Pembroke, Ontario. They will receive prompt attention.
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487 Pembroke Avenue

STUMP, BUSH AND TREE PULLER



If you have land to clear, no matter where it is, with stumps, standing trees or small bush alders or willows, we have the machine and apparatus for doing the work, and we sell our machine on a guarantee that it will work faster, be easier and more convenient than any other machine on the market. It is also the only Malleable Iron Stump Machine made. Do not fool away time and money with old dilapidated cast iron machines if you write for Catalogue "W" you will get full particulars. Address

Canadian Swensons Limited, Lindsay, Canada

Peerless Jr. Poultry Fence

Close enough to keep chickens in. Strong enough to keep the cattle out.

Saves Expense

PEERLESS JUNIOR Poultry Fence will do all you wish of a poultry fence and will do much more. It is built close enough to keep the chickens in, but it is also built strong, rigid and springy. These heavy, hard steel top and bottom wires, together with intermediate laterals, will take care of a carelessly backed wagon, or an unruly animal and spring back into perfect shape again. It is the most handsome and most effective poultry fence on the market. At every intersection the wires are firmly held together by the never-slip PEERLESS Lock.



The Fence That Saves Expense

because it never needs repairs. It is the cheapest to put up, too. It is stretched up like a field fence. More than half the price can be saved in posts and lumber alone, as required by some other poultry fences. Write to-day for our printed matter. It tells you how to get your full money's worth in fences. We build fences for every purpose.

BANWELL HOXIE WIRE FENCE CO., Limited
Dept. H
WINNIPEG, MAN. HAMILTON, ONT.

Preston Steel Shingles are safe-locked on all four sides

TOP LOCK

You can only get the safe-lock construction in PRESTON Safe-Lock Shingles.

See how the sides of the shingles hook over each other. This is on the principle of the sailor's grip. It is utterly impossible for shingles locked in this way to pull apart. The heavier the strain the firmer the grip.

The top of a shingle is where the greatest strain falls. Now look at our top lock. It is twice as strong as our wonderfully secure side lock. Notice that it consists of three thicknesses of sheet steel. The top of our shingle shrinking by strains due to settling of building or

PRESTON Safe-Lock Shingles are proof against rain, snow, wind, frost and lightning. The only way to get them is to remove the nails one by one and unlock each shingle separately. When you put PRESTON Shingles on your roof they are on to stay.

PRESTON Safe-Lock Shingles are the only shingles made and galvanized according to British Government Specifications. Shingles galvanized according to these specifications are good for twice the service of shingles

PRESTON SAFE-LOCK SHINGLES

galvanized in the ordinary way. They are also the only shingles with a Free Lightning Guarantee.

Send today for our free booklet "Truth About Roofing." We did intend to charge something for this booklet. But we will send it free as a reward to those who will fill in and mail the coupon to us. Do it right now.

METAL SHINGLE AND SIDING CO., Limited, PRESTON, ONT.

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Dover Street Factory. Please send me your new booklet, "Truth About Roofing." I am interested in roofing, and would like complete information about PRESTON Safe-Lock Shingles and British Government Specifications.

Name.....
P. O. Address.....
County..... Province.....

Good Roads' Under Discussion

The Executive Committee of the Good Roads Association, which met in Toronto two weeks ago in annual convention, was authorized to investigate and report at the next convention on the advisability of pressing the Provincial Government for a system of provincial roads and that they should submit for approval such amendments as they might deem necessary to improve the highway laws of the Province. During the three days convention, speakers repeatedly emphasized the benefit that would accrue by the joining up of the good county roads already in existence with others to be constructed by the Province. Speakers from the American side helped to popularize the idea by explaining the system on which state roads are managed south of the line.

At the opening session of the convention, sentiments were strongly voiced in favor of increasing the provincial appropriation towards the construction and maintenance of county roads; that the city of Toronto should be subjected to a levy in aid of the up-keep of leading roads in the city and that the system of taxing railway property should be changed.

TAXING RAILWAYS

In this latter connection, a vigorous appeal for the amendment of the system of taxing railway property was made by J. F. Bean, of Welland County. The system of levying \$5 or \$6, a mile against railway property was antiquated. Railways, he claimed, should be assessed on the basis of a percentage of their gross earnings and that the revenue from this source should be largely available for the maintenance of roads through the townships. Mr. Bean considered, furthermore, that the Act should be amended so as to increase the provincial grant to at least 50 per cent., that as the law now stood it was a great injustice that rural townships should be obliged to pay about two-thirds of the cost of all roads throughout the country.

The president of the Association, Mr. W. H. Pugsley, Richmond Hill in his opening address cast considerable light on the present situation as regards the good roads campaign. He said that of the 35 counties of On-

tario, only 16 had taken advantage of the provincial Act whereby the province contributes to the county roads fund. To date, \$700,000 had been contributed by the province towards county roads.

ROADS IN NEW YORK STATE

Considerable enlightenment was derived by delegates at the meeting from Mr. Geo. Diehl, engineer, of Erie Co., New York. He spoke on the road construction in New York State and said that it had been demonstrated that 25 cents would go farther than a day of road work as applied under the old statute labor regulations. The statute labor system, he thought, should certainly be abolished in Ontario as it had been in many of the States. It had been found that much better results could be obtained by placing road construction under competent supervision. About 6,000 miles of macadamized township roads had been constructed in New York State under the supervision of state officials. Mr. Diehl expressed surprise that a large and wealthy province like Ontario did not make greater advancement in good roads construction. He agreed with the suggestion of imposing a liberal share of the cost on cities because it would be impossible, he held, for townships on their own resources to create good roads. In the States, cities were forced to assist in the maintenance of roads leading into the great centres of population. Buffalo for instance had paid out \$2,000,000, during the last 10 years towards the Erie County road fund, this money being applied approximately within the radius of 25 miles from the city. Ontario, in Mr. Diehl's estimation, stood in need of a better system of highways, better methods of construction with expert supervision, and also the construction of model sections throughout the county, so that the municipalities could note the advantages accruing.

TO MAINTAIN EARTH ROADS

Speaking of earth roads, and how most economically to maintain them in ideal condition, Mr. W. B. Riemanhouse, of Beamsville, gave it as his experience that tile or underground drainage was better than surface drainage in nearly all cases, in providing a good bottom. He cautioned against undertaking macadam roads except for main highways. After cutting up and grading the road, the speaker said they got the traffic directed along the centre of the road by driving a wide-tired wagon carefully along the centre of it, and all others will follow that track; when ruts form, the road is dragged and levelled again. It cost less when a good road was once made, to keep it good by constant care. Most road work should be done early in the season when the earth is soft; it could be done then more easily and better.

The auditor's report showed that the association had a balance of \$272.84 there being \$293. left over from last year, the county grants amounting to \$120, and Government grant to \$200. The convention next year will be held in Toronto on the first Tuesday, Wednesday and Thursday of March.

OFFICERS ELECTED

The following officers were elected for the ensuing year: President, W. H. Pugsley, Richmond Hill; Vice-President, Thos. L. Kennedy, Cooksville; Secretary-treasurer, Col. J. E. Faroway, Whitby; Assistant Secretary, W. A. McLean, Toronto; Executive Committee, R. H. Jupp, Orillia; Warden Hall, Prescott; K. W. McKay, County Clerk of Elgin, and L. A. Hamilton, Lorne Park.

The first annual meeting of The Farmers' Dairy Co., Limited, will be held at the York Township Offices, No. 40 Jarvis St., Toronto, at the hour of one o'clock sharp, in the afternoon, on Saturday the 26th day of March, 1910.

Some Alfalfa Queries Answered
(Continued from page 5)

recognize that they must not pasture it and that they must not cut it late in the fall."

Q. Did you ever lose any stock through pasturing alfalfa?

A. No. I never had any bad results from alfalfa. It is very palatable, however, much more so than other clovers and if one were to pasture it, great care would need to be exercised that they were not allowed to eat it while it was wet or when they were particularly hungry.

Q. How many years will a stand of alfalfa grow crops?

A. It is hard to say. The longest that I have ever grown it in a continuous stand was five years. I saw one field last summer near Goderich that had been cut for 16 years. That field had not been pastured.

NITRO-CULTURE

Mr. Glendinning at this juncture asked one of those present who was growing alfalfa if he had sown it for the first time this year. He replied "Yes."

"Did you sow any nitro-culture with it?"

"No."

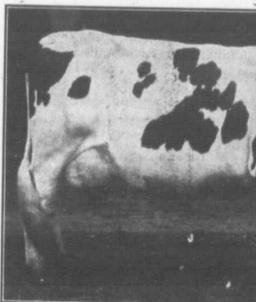
"How is it doing?"

"Not very well. Lately it has taken on a sickly yellow color."

"That is just what I thought would

happen. The alfalfa that had been treated was up and in bloom and as high as the barley. I had thought the whole field to be alike and had no particular faith in nitro-culture. My son was driving the binder in that field and after the first half day's work, I asked him about the alfalfa. He said that the untreated part was no good, that it would have to be plowed up. On close examination, however, I found that there were small spindly plants each with only a few leaves on top. These plants were about as high as the stubble and those on the same field and on the same kind of land as the rank growth which bunched the butts of the sheaves and make them difficult to dry out, where the alfalfa had been treated with the nitro-culture. There were plenty of plants on the untreated part but they were all small and spindly save in some patches where perchance there had been some of the necessary bacteria.

The stock was kept off that field and the untreated part seemed to improve. The first cutting the following year was much inferior from that where the culture had been used. The second cutting, however, showed less difference. I accounted for this fact in that the whole field had in the meantime become inoculated. I would not advise any one to plow up the patchy field of alfalfa unless it were too bad.



This Grade Cow Gave 366 lbs. Milk in 7 Days, November, 1909

Any man who keeps cows now-a-days cannot afford to "go it blind." It is distinctly to his interest to know what each cow gives each day, each month, each year. The cow illustrated is one of those on the Trethewey Model Farm, York Co., Ont.

Le your answer," said Mr. Glendinning. "Alfalfa needs bacteria to work on its roots and it will tend to be weak and spindly and will take on a sickly appearance. The O.A.C. at Guelph supplies this bacteria in a very convenient form put up in a small bottle and it can be had for the nominal cost of 25 cents for enough to treat a bushel of seed. There are other means of inoculating a field than by this bacteria, such for instance as by taking the soil from an old alfalfa field and scattering it on the new area. Without the bacteria in the soil, the lower leaves drop off the plant and it does not do well."

Q. How do you account for an alfalfa field at the first seeding being patchy?

A. There is in all probability more of the necessary bacteria present where these patches are. There is enough seed sown, it may be safely said, but not enough of the necessary bacteria with it. If one gets a field inoculated with this bacteria, he will never need to apply it again. My whole farm is full of it now and hence I can see no difference on our land sown from inoculated as against untreated seed. I sowed 12 acres more last spring.

A few years ago, however, it was quite different. On one particular

it may turn out to be a pretty fair crop after the first cutting.

FAILURE FROM INOCULATED SEED.

Q. I treated my alfalfa seed last spring but the stand I secured was exceedingly patchy.

"How did you sow it," enquired Mr. Glendinning.

"The same as I sowed other small seed," said the questioner, "behind the drill and then harrowed it in after a few hours."

"Did it ever occur to you," said Mr. Glendinning, "that the bacteria on the seed were all killed before you harrowed it in? You would not think much of a man who would buy 100 apple trees, distribute them over the orchard to be planted, one every 30 feet of distance, and then come along in the evening and dig holes and put them in. Those little plants known as bacteria are more tender than any apple trees. They must be harrowed into the soil immediately before the sun has had time to bring about their destruction."

Q. Are coal ashes of any use for alfalfa.

A. Chemists say no. Wood ashes are very beneficial. We should step in and make use of the wood ashes produced in our country rather than allow the Americans to export them to their country.

APRIL 7

IS THE DAY

Our Big Dairy Special Will Appear

ARE YOU going to take advantage of the EXTRA CIRCULATION this number will give you as an **ADVERTISER** to reach the best class of Farmers in the country at a time when they need your goods, and you want to sell them? If you would, drop us a card requesting space, at the same price as our weekly edition (7 cents per line) and we will reserve it for you, but don't wait until the last minute before making up your mind. The quicker your card arrives, the better location you will receive.

THIS SPECIAL NUMBER is for Dairy Supplies, Gasoline Engines, Silos, Cream Separators, Roofing, Fences, Stock Foods, Cattle Remedies, and anything that a Farmer can use at this time of year.

Don't Forget—**HE WILL BUY THEM, BECAUSE HE NEEDS THEM.**

April 2nd is the last day on which we can receive copy.

FARM AND DAIRY - - - **PETERBORO, ONT.**

When to Tap the Sugar Bush
W. R. Ball, Bromo Co., Que.

It is not possible to give any fixed rule as to the proper time to tap since this is governed largely by the conditions existing in each individual sugar bush. A bush with a warm south or east exposure, and in which the snow does not lie deeply, may be tapped as soon as the weather is warm enough to draw the sap from the trees. On the other hand, a sugar bush on a cold exposure and where the snow lies deeply, it will be useless to tap until there has been sufficient warm weather to melt the snow away from the trees, for in cold winter weather the frost has followed the tree through the snow

to the ground and this portion must be thawed out before the sap can rise from the roots.

It is for this reason that trees on north and north-west exposure of the sugar bush do not run sap early in the season like those trees more favorably situated.

Horses' shoes should be removed every six weeks. Even with farm horses, the shoes should not be left on much longer than that, and yet, some men will allow a shoe to stay on till it drops off and after a time will wonder why their horse is going lame.—Dr. H. G. Reed, V.S., Halton Co., Ont.

AUCTION SALE

30 HOLSTEIN-FRIESIAN CATTLE 30

At Maple Stock Farm, Bealton, Ont.

WEDNESDAY, MARCH 30th, 1910

Eighteen females and 12 bulls. Herd represents several of the greatest families of the breed: De Kol, Johanna, Wayne, Pieterje, Poosh, Mechtild, Schulling, Merona, Bonheur, etc. Nearly all the mature cows are in the advanced register making good records. The bulls rising one year old are a choice lot, good color, good size. Count Merona, Faforit at the head of the herd. His dam, Faforit 7th, Grand Champion at Toronto and London, 1905-6. His sire's dam, of- ficial record 22.5 lbs. of butter in seven days, 112 lbs. in thirty days. Freshening soon enough before the sale will be officially tested. Catalogues will be ready by March 21st, 1910. Maple Stock Farm is situated three miles north of Villa Nova Station. The advertiser has made arrangements with the M. C. R. to stop train from the East due at Villa Nova at 10 a.m., and train from the West at 10:35 a.m. Both trains will be met at the station. Train leaves Villa Nova at 10:15 a.m., connecting with the C.P.R. at Hagersville. Train for the West leaves at 4:30, connecting with T. H. and B. Ry. at the Westford.

Sale commences at 1 p.m., sharp. Terms, 6 months credit on approved notes; 3 per cent. for cash.

AUCTIONEERS: W. Almas, Brantford and J. Wigg, Cayuga.

WM. SLAGHT, - - - BEALTON ONT

SALE HELD UNDER COVER.

DISPERSION SALE

OF OVER

40 HEAD HOLSTEIN-FRIESIAN CATTLE

At MADOC, MARCH 25th, 1910

Including the great bull, SARA JEWEL HENGERVELL'S SON, whose dam has an A.H.C. butter record:

In 7 days of 28.12 lbs.; in 30 days of 10.18 lbs.

and the only cow in Canada that ever produced in official test one hundred pounds of milk in one day.

All the females old enough are bred to this great bull, and by the time of the sale there will be 20 calves sired by him.

Catalogues will be ready by March 1, 1910. Positively no reserve.

Stages connect with C.P.R. at Ivanhoe and C.O.R. at Eldorado for Madoc, and will deliver on date of sale all intending purchasers my farm. The G.T.R. runs into Madoc, and arrangements are complete for transportation from G.T.R. station to the farm.

COL. D. L. PERRY, Columbus, Ohio, J. A. CASKEY, Prop.

Auctioneer Madoc, Ont.

Cheap Rates on All Railways

FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



FARM AND DAIRY is published every Thursday, it is the official organ of the British Columbia, Manitoba, Eastern and Western Ontario, and Bedford District, Quebec, Dairywomen's Associations, and of the Canadian Dairy Producers' and Jersey Cattle Breeders' Associations.

SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance. Single copies, 12¢ a year. For all countries, except Canada and Great Britain, add 50¢ for postage. A year's subscription free for a club of two new subscribers.

REMITTANCES should be made by Post Office or Money Order, or Registered Letter. Postage stamps accepted for amounts less than \$1.00. On all checks add 20 cents for exchange fee required at the banks.

CHANGE OF ADDRESS.—When a change of address is ordered, both the old and new addresses must be given.

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

WE INVITE FARMERS to write us on all agricultural topics. We are always pleased to receive practical articles.

CIRCULATION STATEMENT

The paid subscription to *Farm and Dairy* exceed 5,550. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 5,000 to 10,000 copies. No subscriptions are accepted at less than full subscription rates. Thus our mailing lists do not contain any dead circulation.

Sworn detailed statements of the circulation of the paper, showing its distribution by countries 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 veracious reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber have occasion to be dissatisfied with the treatment he receives from one of our advertisers, we will investigate the circumstances fully. Should we find reason to believe that any of our advertisers are unreliable, even in the slightest degree, we will discontinue immediately the individuality of their advertisements. Should 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. All that is necessary to entitle you to the benefits of this Protective Policy is that you include in all your letters to advertisers the words, "I saw your ad. in *Farm and Dairy*." Complaints should be sent to us as soon as possible after reason for dissatisfaction has been found.

FARM AND DAIRY

PETERBORO, ONT.

CONSTITUTION OF FIRST-CLASS SEED

What constitutes first-class seed? There is a great difference in seeds, even those classed as No. 1. We cannot be too careful therefore in making selections from samples from which we will ultimately secure a supply for the spring seeding.

In the eyes of the law, No. 1 seed may be defined first as being comparatively free from noxious weeds—those black-listed by the Seed Control Act, 26 in number. As much as one noxious weed seed is allowed to every 1,500 of the good seeds. This figures out for red clover 12 weed seeds per ounce or 192 a pound. This rating is fixed by the Governor-in-Council and is liable to be changed at any time. This allowance is termed "a margin of tolerance," and is more for the protection of the seed dealer than to act as a standard.

No. 1 seed should be absolutely pure. It has become possible to get such seed in limited quantities from farmers who sow pure seed and weed out the

crop when it is growing in the field. Seed merchants with their up-to-date machinery can extract from fairly clean lots the weed seed impurities and make such seed, from the purity standpoint, first-class.

Another requirement of first-class or No. 1 seed, so far as the law is concerned, is that 99 seeds in every 100 shall produce useful plants. If seeds of foxtail, trefoil or lady's-thumb, often found in red clover, constitute, along with other weed seeds more than one per cent., such seed is barred from grading No. 1. Ninety per cent. of the seed should grow. If the clover seed be fresh and it does not contain too many shrunken discolored brown seeds, it is most likely to give a germination of 90 per cent.

Points other than those mentioned should also be considered. No. 1 seed should be uniform, large and well colored, indicating maturity. It should be as far as possible free from other kinds of seeds. For instance, red clover seed which contains more or less timothy and alsike should not be considered as good as seed all red clover. One should not pay red clover prices for timothy seed, not to mention weed seeds.

All points considered, provided the price is not too high, No. 1 seed will be found to be the cheapest grade on the market. It is the grade to buy. Even with the best grade it is well to have an analysis made in order to make certain that one may not unwittingly introduce noxious weeds upon his farm. In this connection remember that the Seed Branch, Department of Agriculture, Ottawa, will test seeds free of charge and that samples may be sent there by mail free of postage. Don't hesitate to take advantage of this service.

LABOR—FARM VS. CITY

The farm labor problem so far as the laborer is concerned is dependent much upon the point of view. It depends upon his idea of what constitutes success. If the prime object of a man's life is pleasure, such pleasure as comes from idle hours, then the farm, under ordinary circumstances, ill compares with the brighter side of life in cities. If one seeks pleasure, that kind derived from the satisfaction of work well done, from health, from a good living and from what in years turns out to be a competence—property and a substantial income, then the farm stands peer above all callings.

The labor problem discussed unfairly by "Subscriber" in *Farm and Dairy*, March 3rd, is well answered this week by "Countryman." Any one not firm in his own mind as to the comparative opportunities of farm and city workers should ponder well the points raised by "Countryman." The farm right managed has in the past upheld its own. Prospects for farming were never brighter than they are to-day. A brilliant future awaits young farmers. With proper application of the information that is available pertaining to their work and life, the chances are all in favor of successful realization of their ideals.

THE NATIONAL COUNCIL OF AGRICULTURE

The need for an organization, national in character and representing the farmers of the Dominion, has at last led to the formation of such a body. It is called the National Council of Agriculture. The project was discussed and endorsed a few months ago at the annual meeting of the Dominion Grange held in Toronto. The United Farmers of Alberta have lately endorsed the project, thereby completing the organization.

Hitherto, our farmers have been organized on different lines in the various provinces or have been without organization of any kind. Each provincial organization where such has existed, has felt the need for a national body. The New National Council of Agriculture is composed of the Dominion Grange, which is really the Ontario Grange, the United Farmers of Alberta, the Saskatchewan Grain Growers' Association, and the Manitoba Grain Growers' Association. While each of these provincial organizations will retain its present character they are all linked in the National Council of Agriculture. This is going to make it possible for the farmers of the four provinces to unite in making their views known on national questions.

The farmers in each province must now set to work to strengthen their local organizations. Those provinces that still lack a provincial organization should organize as speedily as possible. In Ontario there is great need for the strengthening of the Grange. Our farmers' clubs might well unite with the Grange. As organized at present they lack independence and the cohesion that affiliation with the Grange would give. The National Council of Agriculture has many difficulties to overcome before it can become as strong as it must be if it is to represent our interests as farmers effectively. We will have only ourselves to blame if we fail to do our part by supporting our provincial organizations.

THE POPULARITY OF ALFALFA

Alfalfa is said to be one of the oldest plants known to man. It has come down through the ages, yet strange to say only in isolated cases has it become thoroughly appreciated and understood save in recent years. Alfalfa has become the great forage plant of various states of the American Union. It is now enjoying an increased popularity in Canada. Last year, it would appear that it was more widely grown in this country than ever before and this coming season bids fair for an increased acreage to be devoted to alfalfa.

The name "Alfalfa" is from an Arabic word meaning "The Best Fodder." Those who know it best accord it first place among fodders. Chemical analysis of prime alfalfa shows 11 pounds of it to equal 10 pounds of hay. With bran selling at or above \$20 a ton, one need not be much of an arithmetician to be convinced that alfalfa is a most profitable crop to

grow; it yielding in favorable seasons three cuttings and an average for the season of four, five, or more tons to the acre.

So much for theory, how does it work out in practice? Those who follow the most approved cultural methods realize to the full all that is claimed for alfalfa. Others who fail to observe even the minor points essential for its successful culture, come short of realizing a full crop, and with some it fails completely.

Soil conditions should be the first consideration if one would grow alfalfa. It must have rolling, well drained soil on which water will not stand. The success of alfalfa is enhanced through inoculation with nitro-culture, which supplies the bacteria so necessary to its welfare. It may be sown with or without a nurse crop. These points have been and are dealt with from time to time in *Farm and Dairy* by men of practical experience.

Alfalfa is not a crop that any one can grow. It is useless to sow it on flat low land. Where there is a possibility of its succeeding, a trial plot a few acres in extent should be seeded. Alfalfa being such a valuable crop where it will succeed, considerable effort is warranted in getting it established. After having given it trial on a small acreage, one is in a position to judge of the area that can be devoted to it with advantage.

AUTO DRIVERS MAY BE CURBED

The Ontario Legislature may rest assured that they have the backing of their farmer constituents on the bill to regulate automobile traffic that was before the house last week. Drastic legislation against reckless driving is necessary. Chauffeurs must be brought to understand that their right to the road is altogether secondary to that of the pedestrian and the horse driver.

It is fortunate that this bill for which Mr. Valentine Stock (Terth) as sponsor, received sympathetic support from both sides of the house. It may become law. The bill was approved by the Legislature on its second reading and passed on to the committee. The bill when it becomes law, as it should, will give those with horse driven vehicles, in a measure, the protection they have so long needed.

The farmers in a number of constituencies are arranging for the holding of public meetings during the Easter vacation when their members in the House of Commons will be called upon to explain the navy proposals. This is a wise move. Similar meetings might well be held throughout the country. There are a good many members in the House of Commons who would soon find themselves in deep water if they tried to argue their stand on this question. They have followed their leaders blindly and know but little about where the proposed expenditures may lead to and what proportion of the burden will have to be borne by our farmers.

Why not see your neighbors and get them to join in with you and form a cow testing association?

Agriculture in Nova Scotia*

E. S. Archibald, B. S. A., Truro.

As a province we realize the need of agricultural advancement in every branch. Probably the greatest need is agricultural education, and I assure you that the work of the Canadian Seed Growers' Association is very materially aiding us in the solution of this problem. Not in the advancement of seed interests alone, but also in other matters, is this association demonstrating the advantages of modern farm practices, such as shorter rotation of crops, superior tillage, the handling of fertilizers and allied problems.

The question of drainage is extremely important with us, and the action of the N.S. Government along this line might come under the category of experiments. We have purchased a drainage machine and proposed for the coming year to survey and dig drains for farmers at nominal prices, in order to stimulate this much needed operation. There is also proposed a loan to farmers, who desire underdrainage, yet who cannot find ready cash for the same. This as yet has not materialized, but in general outline is similar to that of the Ontario Government, and promises well.

CROP IMPROVEMENT.

All these problems must be considered in order to form a solid foundation, and maximum returns from branches, such as seed improvement. The interest taken in crop improvement is growing rapidly. To illustrate: At the Short Course of 1906 the seed classes were poorly attended, while in the past two years they were the most popular of all classes, Live Stock included. This growing interest is due largely to the stimulus given by the C. S. G. A., together with aid received from the Ontario Agricultural College, Macdonald College and the Central Experimental Farm, Ottawa. I would like to call particular attention to our Maritime Seed Inspector, Mr. S. J. Moore, who in his routine of seed inspection, as well as seed fairs, farmers' meetings, etc., has had a marked influence on the rapid progress of improved seed in Nova Scotia.

As there was a strong demand from our farmers for greater attention to variety tests, registered seed, fertilizer tests and the like, our department deemed it advisable to carry on experiments on a larger scale. For the year 1909 I was given charge of the same. The results, even as one year's records, bring out many interesting and valuable facts. In the 15 varieties of oats tested in one-hundredth acre plots, the leading variety was the Early Blossom, which yielded over 64 bushels to the acre. The seed of this was registered by and obtained from Mr. Donald Innis, Tobique River, N. B., who is a very prominent worker in the C. S. G. A. The variety standing third in this list was the Black Tartarian, at 45½ bushels per acre. This also being from a member of the C. S. G. A. In fact, the seven leading varieties were all from seed which had been selected for several years. This is certainly a strong recommendation to the farmers of Nova Scotia in obtaining not only pure seed, but also varieties suitable to their conditions, and from hand selected stock. Other experiments made with oats were re rates of seeding and continuous selection.

RATES OF SEEDING.

Amongst the farmers of our province there is a wide variation in rates of seeding of oats, varying from two to six bushels per acre. Although the season of 1909 was not advantageous for the stooling of oats, yet banner oats seeded at the rate of two bushels per acre, gave the heaviest yields;

at the same time, maturing grain, which weighed heavier per bushel, and gave a lower percentage of hull. I would like to hear the experience of Profs. Zavitz, Klinek and others regarding the relationship between rates of seeding and date of maturity, weight per bushel and percentage of hull. The questions of weight per bushel, and hull content, are comparatively new to our farmers, but they are grasping the importance of the same, and already we can see good results. Mr. Harry Brown of Wallace Bay, who is a member of the C. S. G. A., has already done considerable valuable work in the selection from his breeding plot of Banner oats, plants which mature earlier, are thinner of hull and weigh heavy per measured bushel.

SIX BUSHELS PER ACRE MORE.

We also conducted an experiment regarding the comparative yield of heavy versus light seed, as it came from a first-class grain grader and fan. As a one year's test, this was very satisfactory. The yield from the heavy plump seed, averaging six bushels per acre over the others. I have also made a hand selection of Banner oats, sufficient for quarter acre plot, during the coming year. Our farmers are also very much interested in variety such as Regenerated Abundance, Regenerated Tartar King and other varieties put out by the Garton Seed Company. We propose testing some of these varieties, in quarter acre plots, during the coming season.

We also tested varieties of barley, with very good success. This is a crop which needs promotion in our province, there being only 10,600 acres during the season 1909, averaging 23 bushels per acre. The two-rowed varieties are by far the most commonly grown, but I think for the average districts a good six-rowed variety would give far greater yields. For the past year on plots the Oederbrucker led with 58 bushels per acre, while our best two-rowed variety, Duckbill, yielded only 42½ bushels.

Farm Accounting

A simple, convenient and practical way of showing the gains and losses of the year's work the farm is someone every farmer who keeps, or should keep, accounts, is in quest of. The Farmer's Record Book is designed to meet this need. With its accounts are simple and easily understood. Specimen accounts are given and its pages are gotten up in such a way that if records are kept, it would be an easy matter to know whether the farm is paying in every department or whether some branch of work is being carried on at a loss.

The accounts in the Farmer's Record Book are so arranged as to include all branches of farm work; extra pages are provided in case individuals should require further divisions for any special accounting. In addition to the ruled space for accounting, instruction is given on how to keep farm accounts. A compendium of useful information is also featured, this including rules for farmers, tables of weights and measures, and many facts worth knowing such as formulae for mixing fungicides and how to apply them.

This Farmer's Record Book consisting of 50 pages, is bound in red cloth. It is given free for one renewal or for one new subscription to Farm and Dairy. Those who are in need of a farm account book and all those who heretofore have found farm book keeping to be too intricate for them to carry on, should not miss this opportunity to secure the Farmer's Record Book, free, under the conditions named above.

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FARM AND DAIRY

PETERBORO, ONT.

Amatite ROOFING

Will End Your Roofing Troubles



If you will write to-day for a free sample of "Amatite" the end of your roofing troubles is in sight. After you have submitted it to every test that you can think of, you will be prepared to order it not only for your new buildings, but for your old roofs as well. You will find that it is cheaper to cover them with Amatite than to continue painting and repairing them.

We make a strong point of our "Free Sample" offer because the smallest sample of Amatite speaks for itself. It is more convincing than yards of talk.

There are all kinds of ready roofings on the market—so-called "rubber roofings," so-called "guarantee roofings," so-called "sand surface roofings."

The "rubber" roofings are no more made of rubber than a cow is made of saw-dust. The "guarantees" that are promiscuously handed out with many brands are

hoped around with so many provisions that it will take three lawyers to dissect them and find out what they are all about. The "sand surface" has little or no protective value.

The point to remember is that all of these roofings have to be painted every year or two to keep them tight. In other words, it is the paint that protects, and not the roofing. If a man will sit down and figure out exactly what this paint costs, he will find that it is more than the roofing itself. Amatite, on the other hand, has a surface of real mineral matter and we seal the goods on the broad statement that you need never coat or paint this roofing.

You can lay Amatite on a roof and then forget all about your roofing troubles. No painting, no coating, no worry. The man who puts Amatite on his buildings is insured against leaks and trouble for many years.

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If you have any doubts about the matter and want to investigate our claims, send for sample with a booklet to day. The sample tells its own story; the booklet is written for practical men. It hits straight from the shoulder.

Address our nearest office.

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TORONTO MONTREAL WINNIPEG VANCOUVER

GET IN EARLY

The Special Dairy Number will be out April 7th. This is going to be a big number, and you should not fail to get your copy here in plenty of time. Cut this advertisement out and keep it as a reminder. Get your copy here at least a week before issue comes out.

NOW IS THE TIME

To look over your equipment and find out what you need for your 1910 season. The time is drawing near when orders will be rushing in at break neck speed, and the sooner we receive your order list the quicker you will receive your supplies and the more satisfactory they will be to you

Remember we will give you the best value for the money of any firm on the market.

Drop us a line for quotations. Do it to-day while you have it in mind.

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Dairy Supplies. STRATFORD, ONT.

It is desirable to mention the name of this publication when writing to advertisers

Creamery Department

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

Let Patrons Demand Right Methods

Editor, Farm and Dairy: Regarding the question of weighing or measuring the samples of cream for the Babcock test, I think that it is acknowledged by all who have made comparisons, that weighing is the more accurate method.

We have used the scales in our work for over a year and previous to using the scales we tested our pipettes by weighing 18 grams of cream at various different qualities from .20 to 40 per cent. We had at that time a small scale used for making alkaline solution. On it we could weigh one sample at a time. We found practically no difference when the cream tested between 20 and 30 per cent. Between 30 and 40 per cent. we found a difference of from one to two per cent,—weighing the samples giving the higher tests.

Occasionally we have found a difference in pipettes, so we decided to use the scales, altogether. As a result of their use we have had on the average a slightly lower percentage of over-run, due to the higher readings of the tests obtained by weighing. However, that is not the main question. First of all is the question of justice, and justice can be dealt to each and every patron by the honest and careful use of the scales in sampling.

Surely it is not required that the creamer-men of Ontario be compelled to deal justly with their patrons, but rather that just as soon as they are aware of right methods they will adopt them. If there are any creamery-men or patrons who are so blind to their own interests that they will not see, why not let them suffer?

Let the patrons demand up-to-date and right methods and it will be unnecessary to enact laws of compulsion concerning this industry. There is the principle of seeking the best welfare of all to be considered and compulsory and prohibitory laws are often necessary for the best welfare of some who will not or cannot look after their own best interests.—W. G. Meid, Huron Co., Ont.

The Pipette All Right

Editor, Farm and Dairy.—Having followed the discussion on scales vs. pipette in Farm and Dairy I say that my experience has been altogether with the pipette and I am not going to discuss it to any great length. I consider the pipette is not satisfactory for all kinds of cream. If you have a cream testing anywhere from 16 to 25 per cent., I find that if one tests those samples over again there is practically no variation with the pipette, but when you go up to 35 and 40 per cent., then there is sometimes a slight variation in two samples tested from the same jar. There is, however, no doubt in my mind but that if the high testing cream were tested fresh that the pipette would be perfectly accurate.

I have had no experience with the scales but if I was going to stay in the butter business I would like very well to try them as I think they would be more accurate for gassy cream.

Some have the opinion that the creamery business will never be right till every farmer has a Babcock tester of his own; but, sir, I think that there is only about one in every 10 who would handle it properly if he had a Babcock tester.—Jas. Walker, Butter Maker, Bruce Co., Ont.

Creamery Work in Eastern Ontario

J. F. Singleton, Creamery Instructor, Kingston

The creameries which I have visited during the past season are slightly larger in the counties of Ontario and Victoria.

The make for 1909 was about the same as that of the previous season, some creameries showing a slight increase in make, while others show a slight falling off. The average selling price of butter for the season was slightly lower than that of 1908.

My work and time during the past season has been entirely under the direction of the chief dairy instructor, Mr. Puhlow, and I visited the creameries at such times as instructed to do so by him. In all I spent about 60 days on creamery work, travelling calling on creameries and creamery patrons.

The butter, as a rule, has, in my judgment, been fairly well made during the past season. In a few creameries there was some slight unevenness of color in the first few days' make, but otherwise the work, as far as was within control of the maker, was usually well done. The flavor of the butter was not all that is desired, but in only one creamery, as far as I know, has there been any serious trouble in this respect. About 55 samples of butter were tested for moisture content, and showed an average of 13.63 per cent. The moisture content usually ranges between 12.5 per cent. and 13.5 per cent. In three of the samples tested the moisture content exceeded the legal limit of 16 per cent.

THE ABILITIES OF MAKERS

The makers are, as a rule, quite competent men, and, in many cases own the creamery they are managing, and have had a long experience in the business. Of the 16 I visited, seven were dairy school graduates, four had attended a dairy school, but not graduated, and five had not attended any dairy school. The two or three men of the 16 whom I consider poor men are included in the last five, and these men should take some steps to make themselves more proficient in their work.

The creameries are generally clean and sanitary, with good water and good drainage. Two of the creameries installed septie tanks during the past season, both of which are giving excellent satisfaction. Of the 16 creameries I visited, 13 are equipped with concrete floors. The refrigerators are the weakest part of the creamery equipment, and in many cases should be improved, as not over five of the 16 creameries have suitable refrigerators. As nearly all the creameries are now operated on the cream-gathering plan, the hauler's outfit may be considered as a part of the creamery equipment.

HAULING OUTFITS

Two of the creameries use individual cans, one using the tanks, and 13 are using the jacketed cans, which are, except at one creamery, of very good condition. The individual can creamery manager has an opportunity to examine each patron's cream, and usually a better raw material is secured when delivered in individual cans.

One creamery provides tarpaulin covers to protect the gathering cans from sun, rain and dust, and this is something with which every cream wagon should be provided.

Practically all of the cream is collected only twice a week. It would be better were it collected three times each week, yet it appears that the business must expand in the creamery before it will be profitable to gather more than the average. Cream can be delivered sweet and of good condition and only gathered twice a week if a fairly heavy cream is separated and properly cooled.

OUR FARM HOMES

WE need only obey. There is guidance for each of us and, by lowly listening, we shall hear the right word.

—Emerson.

The Ways of Providence

By Agnes Booth

SUNNYSIDE Farm was in the state of collapse, usual at the close of a busy season. The lawn was worn bare in spots, the flower-beds showed an utter absence of blossoms, the kitchen-garden was stripped to nakedness, there was a regrettable dearth of young male society in the chicken runs, and even the cows wore a weary air, chafed listlessly as if they realized the hardships of life and sympathized with the other denizens of a joyless world.

The hay-rack, loaded with trunks and bags, had been followed down the dusty road by the Sunnyside carryall and the borrowed buggy, conveying the last of the summer boarders to the station to catch the eleven-thirty city-bound train.

Luella Whitman sank upon the ground near the doorstep, the perfunctory smiles of *bon voyage* fading from her face.

"Sit down, ma," she urged, pulling her mother's dress-skirt. "For goodness' sake, sit down! It'll be the first time since last May."

The woman smiled down upon the girl, but there was a pathetic air of weariness about her.

"I don't know but I've forgot how," she confessed, "and I'm afraid if I once get down I'd never be able to stand up again."

Luella stretched out her young limbs luxuriously and made the most of her opportunity to rest.

"I hope Mrs. Parker won't starve before she reaches home! She said she wanted just a trifle of something to stay her appetite in case the train should be delayed, but she told me different things to put into the box until I had put up lunch enough for a hired man's dinner. Isn't she the greediest thing you ever saw in your life?"

"I'm glad you did, Luella," Mrs. Whitman ignored the question as one which she deemed it unkind to her patron to consider, "for Mr. Parker gave me five dollars over, because, he said, he knew that Mrs. Parker had made a good deal of extra work for us and he felt as if he wanted to make it up to us in a way."

"I forgive her everything," cried Luella jocosely, "if he did that, for we can put that in with the piano money, can't we, ma?"

Mrs. Whitman looked perplexed, for this was a new problem for her.

"I'm wondering how I can get that five away from the rest without your pa noticing it, for maybe he wouldn't like it," she said.

Luella sat up excitedly.

"Why, take it away, of course. Here, give it to me, ma!" and the girl stretched out her hand eagerly.

"I can't, Luella, it's in with the rest—he owed forty-five dollars and he gave me a fifty-dollar bill and told me that would make us square."

She sat awkwardly down beside Luella and shook the bills out of an envelope into her lap.

"There's the fifty," touching it tenderly as she put it out near the edge of her apron, "forty-five of it board money and five for us—you and me, Luella. He said so particularly.

him this five in change," and Luella seized a five-dollar bill and waved it about in triumphant solution of the problem.

Mrs. Whitman's worn face brightened, but only for a moment, as she realized the obstacles.

"I couldn't say that, Luella," she objected, "for it wouldn't be true; besides your pa would know better; for Mr. and Mrs. Parker and Muriel went with him in the carryall—the other boarders hadn't come down. Your pa knew none of 'em had paid except Mr. Parker, and he knew that I hadn't any money except the fifty cents that Mrs. Jenks paid me this morning for butter."

Luella groaned as she saw the hopelessness of the situation, and put the coveted five-dollar note back into her mother's lap.

"How much have we got in our bank now, ma?" she whispered, lest someone should overhear.

"Ninety-five dollars," answered the mother, whispering also, for it was their most guarded secret.

"If we could only have the five to put with it we'd have a hundred—and then, only fifty more to get—Oh, ma, we must have this five! We've just got to think of some way to do it."

"I don't see how I could manage—"

Mrs. Whitman murmured thoughtfully.

"Manage!" repeated Luella, her face flaming with unwonted anger. "Ma, why don't you keep it all—every cent of it? The whole seventy-two dollars, just as it is! Pa has had all the board money ever since we began taking boarders, and for goodness' sake, who earns it if you and I don't? I'm sure pa doesn't do any-

"Don't get excited, daughter," Mrs. Whitman spoke soothingly. "I don't think Mr. Allen meant any harm when he spoke that way. He knew you are only fifteen, and probably thought of you as a little girl."

"Probably," returned Luella with hot sarcasm, "but I notice he always called Muriel Parker 'Miss Parker,' and she is only twelve!"

"Let's roll this up and count our ninety-five again," Mrs. Whitman suggested, trying to lead away from a subject which she saw was distasteful to Luella.

They counted the precious money twice, lingering long over each bill, smoothing out imaginary wrinkles, and finally making it into a compact roll again. Luella snapped on the elastic band with a decisive air, but the question had not yet been solved.

"We must get that five out some way. Oh, ma," she cried eagerly, "we can put that fifty in with ours and put forty-five of ours into the board money! Give me the big bill and I'll show you how we can fix it."

She hastily began to undo both packages.

"Wait a minute, Luella," protested her mother, "don't hurry so. Let me have a chance to think. You've got me all confused, child."

"But, ma, that will make it just right—the board money—and if you don't hurry pa'll be back, and then it will be too late to do anything about it."

Mrs. Whitman still hesitated.

Her mind was slow to grasp the details of the exchange suggested by Luella, and her habitual dread of her husband's displeasure held possession of her, for whatever she did seemed to be the wrong thing.



"Pa Whitman, You're the Meanest Man That Ever Lived!"

There's the five and the two that Miss Martin paid and the ten and five that Mr. Allen paid."

Luella counted it all over carefully.

"Fifty and seven are fifty-seven, and ten is sixty-seven, and five is—Why, ma, sixty-seven is all you've got to give to pa; keep one of the five and we're all right!"

"But your pa," returned the mother anxiously, "will be sure to know that one person paid that fifty, and that is five more than anybody owed."

"Yes, but ma, this is the way that happened: Mr. Parker paid you the fifty, and you, of course, had to give

him the amount of work we do. You've stood in that hot kitchen and cooked for four o'clock in the morning until seven at night! I've washed dishes until I'd like to eat off wooden plates the rest of my life! I've waited on people when my bones ached and I've grinned like a Cheshire-cat when that horrid Mr. Allen would say, 'See Luella's pretty pink cheeks, when I'd have liked to punch his head instead! The money ought to be ours, ma, we've worked and suffered for it, and I don't see what right pa has to expect us to give it to him.'

"Maybe you don't want it to go in with the piano money," Luella's tone was full of disappointment. "Mr. Parker gave it to you, and you do need a lot of things yourself—"

"No, no, I want it to go for the piano, Luella. You know I want you to have that piano as much as you want it yourself. I've looked forward to it for years. Here, you fix it, quick, before your pa comes."

(Continued next week.)

Have you forgotten to renew your subscription to Farm and Dairy?

The Binding Tie

(Concluded from last issue)

"I've some important work to attend to today," he said to his wife, "but I'll come home early."

"And he did come, went out. He immediately sought rest, but no sleep came to him, for the child could not be stilled. He arose and went upstairs. He spoke in misery.

"Elizabeth, I must sleep. My head is throbbing now. Can't you keep the baby quiet? What does he want?"

"My entire attention," answered Elizabeth. "Go downstairs, Doane. I'm going to take him out for a little while."

Elizabeth knew now that the baby must be removed temporarily. He demanded constant amusement except when sleeping. If Doane needed quiet Elizabeth realized that he could not get it at home if the baby should remain.

It hurt her to arrive at this conclusion, that she must take a child to her sister. But it had come to this; either Doane or the baby! So sadly she packed the little belongings and dressed the child.

When she returned her eyes were pink but her lips formed a resolute line. Doane lay sleeping peacefully, and she stooped and kissed him. Even when asleep he put out his hand and sought for her.

Then followed a beautiful week of companionship. Doane and Elizabeth took delightful rides into the country. The tired man stretched beneath the trees and his wife sat close beside him. Once Doane spoke sadly.

"Ours isn't the tie that binds, is it, Beth?"

Elizabeth caught her breath. "It hasn't been, Doane," she answered, "but it will be. When you know him better you'll like him."

"Beth!" he exclaimed, and his eyes were misty. He thought of the desperate fight through which she went some months since, when he prayed that she might live.

"Yes, Doane," his wife went on, "he will bind us closer now. We'll work together for his good. If you feel that sternness is best for him, then you—"

"We'll not talk of that," interrupted Doane; "but I'll be glad to see him at home again."

Elizabeth's face lit with rare leaviness at his words. How passionately devoted she was to the child, how thoughtful Doane. But there was no jealousy in the thought. She put her hand on his.

"I love you, my husband," she said softly; "never again shall we move apart."

When baby came home he opened loving arms to his mother, but he would not leave her. Doane sat watching the mother and child. He was stronger, and he felt that with Elizabeth's love and confidence he could do anything.

When the child's bedtime came Elizabeth undressed him, lingering tenderly over the beauty of the white neck and arms.

"He should go right to sleep," said Elizabeth softly.

"Let us put him in his crib then, dear," said Doane. He looked at her wistfully. "Do you want to rock him?"

"No," she answered, smiling. "We must work together for his good."

But baby protested masterfully against being put in his crib awake. He had always been rocked to sleep; why not now?

Elizabeth took no notice of his cries. Her hand sought Doane's. It was hard to let the baby cry. But he must be taught. And her heart ached, for she knew she had brought this on the child. Once Doane crossed to the crib. He spoke in a low tone to the little inmate, but the cries continued.

"Can you stand it, Beth?"

"Yes, dear," she replied. Then she crept closer to him and again slipped

her soft hand in his. So together they sat for some time while the baby still cried. Then Beth spoke, and her voice was low:

"If you think best, Doane—touch him—gently—as you did before—"

With a prayer of thankfulness Doane now knew that his wife's entire love and confidence were again his. He put his arms about her and kissed her tenderly.

"Not now, darling," he whispered, "but I thank you for those words."

Then as suddenly as he had begun the little monarch stopped his useless cries. He looked wonderingly at his father. A peculiar feeling crept about the man's heart as he caught the baby glance. He remembered that the fact told her that this bit of his own flesh was no pleasure to him. He leaned over and his lips brushed the velvet skin.

The child smiled and put forth his little hand. Inarticulately he murmured, but the sound was plain to the parents: "Da-da."

Doane slipped to his knees beside the crib, and Elizabeth knelt beside him. Both men clasped the hands of his wife and son.

"God bless and keep my two treasures!" he said tremulously.

The Upward Look

The Fuller Life

Delight thyself also in the Lord; and he shall give thee the desire of thine heart. Psalm 37, 5.

The true Christian, the one who walks and talks with God in his or her daily life, should be the happiest, most joyful individual in the world. Why is it then that so many people have the impression that becoming a Christian means a relinquishment of many, even most of the pleasures of life? Why should any hold that, as a class, Christians are austere and almost gloomy rather than full of joy, peace and abounding in life and in happiness?

The fault lies in our tendency to discount the glorious promises of God. When, as in our text, we are told that if we delight ourselves in the Lord He will give us the desires of our heart we are apt to act and talk as if we believe that God intends to give us only some of those desires. When we read the assurance that "no good thing will He withhold from them that walk uprightly" (Psalms 84, 11) we are prone to suspect that

God really intends to withhold a good many good things from us. We are even apt, sometimes to think that good people, who are too honest to do wrong, are not so likely to prosper in worldly matters as are other less scrupulous individuals and that it is their very goodness that keeps us from having many of the best things in life. With this thought, of course, goes the sister thought, that what we lack in this life will be made up to us in the life that is to come. Christians, who talk in this way are inclined to have much to say about being resigned to what of God. One might as well talk of being "resigned to Paradise."

What a great mistake it all is! The fact is that God loves us. That he desires to give us every good and every perfect gift. Just as our earthly father desire to give us those things, and only those things, that they believe will be for our good so God longs to shower blessings of all kinds, not only spiritual but material as well, upon us. (Matt. 7, 11). If there are blessings that we would like but which we lack God does not want us to sit down and say that we are resigned to abide by His will. It is God's will to give them to us. We must not, therefore, blame God but we must blame ourselves. We must try to find what it is in our life that is leading God to withhold the desired blessing and if we ask God who show us He will do so. Then we must be willing to do God's will whatever it is. With many of us the fault is lack of faith. We do not believe that God will give us the desired blessing although Christ Himself has said: "And all things, whatsoever ye shall ask in prayer, believing ye shall receive." (Matt. 21, 22) and because we do not believe we try to excuse our lack of faith by endeavoring to persuade ourselves that we should be resigned to God's will. When we have reached the stage of being resigned to our disappointments we have come to the point where it is difficult for us to interpret God's will aright. "Too often," as one writer has said, "has the acceptance of God's will been held to be a spirit of the abandonment of despair, or of the mere inertia that ceases from striving and from aspiration." Instead, we should strive to lift the ordinary daily events and circumstances of our lives to the spiritual plane and thus to find in them the signs and indications of the Divine leading. "The events of life are the language in which God speaks to us." As we strive to interpret God's will towards us through them we draw

closer and closer to God and we thus learn what it is to walk and talk with God. During the next few weeks we hope that it will be possible to discuss the nature of God's will towards us more fully in this little corner of Farm and Dairy.—I.H.N.

Warsaw Women's Institute

A most interesting and enthusiastic meeting was held March 10, by the Warsaw Women's Institute at Warsaw, Ont. Although the travelling was very hard, a large attendance was present and the subject chosen "The Separate Pursue," was most energetically and enthusiastically discussed by nearly every member present. Mrs. David Miller, the president of this Institute prepared a most excellent paper on this subject which will appear in the near future in these columns.

This Institute has prepared very neat printed programs for the year's meetings, which show that subjects of various kinds all tending for the good of the home and country have been or will be taken up at the meetings. The April meeting will have for its subject, "House Cleaning in Its Various Aspects." The May meeting betakes of a patriotic nature, which seems quite appropriate. The subject for it will be the "Prosperity of Canada," and "Memories of our Late Queen." This should prove a very enjoyable meeting.

Have you forgotten to renew your subscription to Farm and Dairy?

How often do you eat this food?

A short time ago there appeared in the columns of one of the prominent magazines an article on building brain and muscle by the proper selection of the foods you eat.

A good many people were surprised to find oatmeal placed at the top of the list of foods recommended; but if the article had appeared in an English or Scotch paper every reader would have expected to see first place given to good oatmeal.

As a matter of fact Great Britain and Europe came to us for tremendous quantities of Quaker Oats because it represents to them perfect food, being the richest in flavor and best in cleanliness and purity, of all oatmeals.

Americans should eat more Quaker Oats; the results would soon show themselves in improved conditions of health and strength.

Premiums for the Housewife





Morris Reclining Chair, solid oak frame, with quarter-sawn oak arms, rubbed and polished to a rich golden color, strongly constructed spring seat and back upholstered in best quality velvet or plush in various colors, green or brown, as desired. The back can be adjusted to four different positions with our automatic ratchet attachment, complete with casters.

Open Book Case, ha-wedwood, rich golden color, oak finish, 87 in. high, 26 in. wide, 13 in. deep, brass rod for curtain and rings, well made and constructed, three adjustable shelves.

Solid Oak Rocking Chair, Golden or Mahogany Finish, polished fancy carved panels in back, embossed collar seat.

You can own this by sending us a club of Thirteen New Yearly Subscriptions to Farm and Dairy, at \$1.00 each. Start a club to-day.

For only Seven New Yearly Subscriptions to Farm and Dairy, at \$1.00 each.

For Five New Yearly Subscriptions to Farm and Dairy at \$1.00 each.

A beauty worth winning. Sure to please you.

Write Circulation Department, Farm & Dairy, Peterboro, Ont., for Sample Copies

A WORK FOR HORTICULTURAL SOCIETIES AND THE SCHOOL.

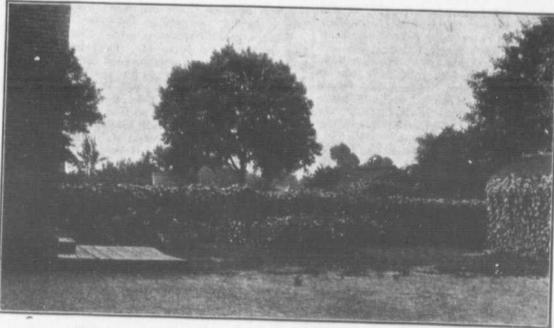
(S. Silcox, in *The Canadian Horticulturist*)

When a country has been denuded of its primitive forest and artificial products have replaced natural vegetable growth, it becomes essential for the inhabitants to beautify the bare and unattractive landscape with a second growth of flowers and shrubbery. Any one who travels through Ontario will discover that people have lived in houses for ten, fifteen or twenty years and have planted nothing to make those houses homes in the true sense of the word. This is more inexcusable when we consider that within a mile or two of any house in Ontario may be found shrubs, vines and annuals which could easily and successfully be transplanted to the grounds, or homes or schools, where they would transform the barren surroundings into bowers of beauty. The reason this is not done is due to one of two things, ignorance or lack of interest in anything better than that which exists, or probably to both.

What can be done to change this state of affairs? It seems to me that there are only two organizations in Ontario which can bring about a change but these organizations are equal to the task. They are the public school and the horticultural societies and the latter will do their best work by using the former for the medium of transmitting their views. Of course this means that school gardens should be established in connection with our schools, more particu-

larly in our city schools. One teacher who has done good work in connection with a small city school in the way of decorating a very intractive backyard, says:

"The garden gives pupils a practical lesson in the rights of citizens. When they have assisted in digging, planting and weeding, they have a sense of ownership in the garden and they expect that it will be allowed to



Outhouses and Fence Covered with Morning Glory—Work of School Children
Boy's yard, Manitoba street school, St. Thomas, Ont., Miss A. McCall, Principal. All the work done by pupils of first and second book classes.

grow and flourish, unmolested by the passerby; therefore, they do not pick the flowers or interfere with the property of their neighbors.
"Anything that opens the eyes of

the child, even a little, to see the beauty of color and form in the world about us or that helps to show him how a little expense and labor will transform what was ugly into a delight is well worth while. For example our fences and outbuildings are now a 'thing of beauty' in their dress of morning glories, upon which the eyes rests with pleasure.

"Our garden serves as a means of beautifying their own homes. The children are at liberty to pick the seeds of any of the seed-bearing plants

In the Kitchen

Do not let tea and coffee remain in the paper bags they come in, or they will lose their flavor. All stores should be taken at once out of their paper bags and put away in their different receptacles in the store cupboard.

If the oven gets too hot when baking meat, it is a better plan to lower the temperature by placing a basin of water in the oven than by leaving the door open. When the water becomes heated, the rising steam prevents the contents of the oven from burning.

In buying table linen remember that Irish linen is considered the best. The French loses its gloss, which is its chief beauty, and the Scotch is partially bleached with chlorine, which weakens the fiber. The Irish is grass-bleached and improves with time. Many housekeepers claim that household linen should be kept in piles on shelves rather than in drawers, where they are likely to become tumbled. If kept on shelves they should be protected from dust by thin curtains.

In cutting breakfast bacon lay the rind side down on the meat board, cut down to the rind as many slices as are needed, then cut it off in a block. Turn sideways and cut off one end, then the other end, and the inside, and last the rind, and you will have trimmed all the slices nearly as quickly as you could have trimmed one.

Nothing is more unpleasant than to find that a knife, fork or spoon smells and tastes of fish or onions, and it very often occurs. The speediest method to remove the disagreeable odor is to put the articles to soak in a basin of cold tea and leaves. Let them soak for ten minutes or so, then wash them in the ordinary way.

Broken china may be mended by brushing the edges with white lead, such as painters use; press the pieces together and tie them in place, then leave them two or three days until thoroughly dry. The dish can be broken as easily anywhere else as at the old break.

In packing bottles, first see that the corks or stoppers are securely fixed. Then slip the bottle inside an old kid glove, his round it firmly. Place the bottle next, cork foremost, into a stocking which is turned down, as if for putting on the foot; and secure it with a pin. Place the bottle between two layers of clothes, taking care that they are not in contact with anything hard.

A Popular Premium

One of the most popular premiums that the women readers of *Farm and Dairy* are interesting themselves in is that of the dinner set, which is given for a club of nine new subscriptions. The last winner of one of these premiums is Miss Daisy Warnock, of Al-Farm and Dairy as follows: "I received the dinner set for securing a club of nine new subscribers to *Farm and Dairy* all right and am more than pleased with it. Two of our friends happened to be visiting at our house one afternoon and they were glad to subscribe to *Farm and Dairy* when I showed it to them. The next day father drove me around among the neighbors and I secured the other seven subscriptions without much trouble."

When a bottle of glue or cement is opened, rub mutton tallow or cold cream on a sound cork before inserting it; then it will not stick in the you try to draw it out. The glue will also remain fluid. Glass stoppers may be treated in the same way.

WINDSOR BUTTER SALT

Trust the Farmer's Wife to get the right Salt for her Butter.

When she was a girl, her first lesson in Butter making was with Windsor Salt.

When she started housekeeping, of course she used Windsor Salt.

She knows—by years of experience—that Windsor Salt is best. And naturally, she won't use any other.

Are you using WINDSOR BUTTER SALT?

It is desirable to mention the name of this publication when writing to advertisers

and the geraniums are broken into slips and given to the children with instructions for planting them.



School-house Bare and Unadorned! An unimproved opportunity, and there are hundreds of others like it in Canada.

"We also have a few plants in our windows throughout the winter. These give a cosy look to the room and serve as a rest for tired eyes.

"Incidentally the children learn the value of birds, bees and beneficial insects; also something of the formation of soil. We rake and then burn the leaves and old plants on one of the beds, the ashes being thus preserved for a fertilizer or bury the leaves (all but the first to fall which are burned to destroy the insects) that they may decompose and so enrich the soil."

It may be well to sound a warning note, through the medium of *Farm and Dairy*, against the false nature study which teachers are so apt to resort to in the ordinary class room. About seventy-five per cent. of the lessons in this subject are not as valuable as lessons in grammar, geography or literature, because they are not the result of the children's experience nor do they incite the children to acquiring experience with nature first hand. Let this be the test of success in nature study—more outdoor study and less class-room work, more beauty created and less talk about the beauty of creation.

THE COOK'S CORNER

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

CLEAR STOCK

Stock forms the basis of many soups and meat sauces. Any bones and trimmings of roasts, steaks and other meats may be used. Cover with cold water, allowing 1 qt. water for every pound of meat and bone, add salt, and boil gently for several hours. Add boiling water from time to time, as the stock boils away. When cooked sufficiently, take out the meat and bones, and strain the liquor through a fine white cloth, wrung out of boiling water. The stock may be kept in a stone jar in a cold place for two or three days.

WHITE STOCK

To 4 lbs. knuckle of veal add any poultry trimmings you happen to have on hand, 4 slices of lean ham, 3 carrots, 2 onions, 1 head of celery, 12 white peppercorns, 1 blade of mace, a bunch of herbs, 2 oz. salt, 1 lb. butter and 4 qts. water. Simmer gently through 5 hours, then strain carefully through a fine hair sieve. Fowl cooked in this stock has a delicious flavor.

BROWN STOCK

Proceed in the same way as for white stock, substituting beef for veal, and add any remnants of gravy, trimmings and broken up bones of any other meats.

VEGETABLE STOCK

Boil together 2 oz. kidney beans, 2 oz. split peas, 1 onion, 1 carrot, 1 stick of celery, some parsley and herbs, pepper, salt, 6 cloves, one blade of mace, and 2 qts. water. Let boil 2 or 3 hours, then strain. This stock may serve as the basis for many good soups or gravies.

CONSOMME

Chop 1 1/2 lbs. lean beef, add 1 onion and 1 carrot, stir in 4 eggs, shells and all, and 3 qts. cold, clear stock. Put in a granite or porcelain kettle and let come to a boil, then skim thoroughly. Boil slowly 15 or 20 minutes, then strain through a clean, white cloth wrung out of boiling water. This soup is delicious, and clear as amber.

CHICKEN BROTH

Clean and joint a large, fat fowl and put in boiling water with a little salt. Cover closely and cook slowly 3 to 4 hours. Add a little well washed rice during the last hour. Remove chicken from the liquor and thicken the latter with a little flour. Add a lump of butter and serve hot.

MUTTON BROTH

Put 2 necks of mutton in a soup kettle with 1 gal. cold water, bring to boiling point slowly, skimming off all impurities that rise to the surface. After this add 1 carrot, 1 turnip, 1 onion stuck with 3 cloves, 2 bay leaves, and salt to taste. When vegetables are tender, take them out and cut them in small cubes and set aside. The cloves and bay leaves should be discarded. When the mutton is cooked tender, take out, cut in small squares, and set aside. Strain the soup liquor, let cool, remove fat, and then return clear soup to the fire. Add 1/2 cup well washed barley, and cook gently until the barley is tender, then add the diced vegetables and squares of meat. Boil up once more and serve at once. This is enough for 6 or 8 persons.

CARAWAY CAKE

Two cupsful of sugar, 1/2 cupful of butter, 1/4 cupful of water, 1/2 tea spoonful of soda and four cupsful of flour. Sprinkle with two-thirds of a tablespoonful of caraway seeds.

SPECIAL SPRING FASHIONS

Realizing the great interest that our readers take in the new spring styles, we have arranged to give special attention to the pattern department and send your orders early. If you do not see the style illustrated, that you would like, advise us, and we will do our best to get it for you. Write all orders plainly, giving name and address, size and number of pattern desired. Address, Pattern Dept., Farm and Dairy, Peterboro, Ont.

FANCY TUCKED WAIST 6572



The waist that is worn with a deep fitted girdle makes one of the later fancies. This one is laid in fine tucks and is especially well adapted to thin materials.

Material required for medium size is 3/4 yds 21 or 27, 1 1/2 yds 44 in wide, with 1/2 yds 18 for the yoke and lower portions of the sleeves, 3/4 yds of banding.

The pattern is cut for a 32, 36, 38, 40 and 42 in bust, and will be mailed on receipt of 10 cts.

MISSER'S COATS 6582



Coats of such length as this are among the newest and smartest.

Material required for 16 yr size is 5 yds 27, 2 1/2 yds 44 or 2 1/2 yds 52 in wide, with 1 1/2 yds of silk. The pattern is cut in sizes of 14 and 16 yrs, and will be mailed for 10 cts.

PRINCESS PETTICOAT 6586



The petticoat is full enough at the lower edge for comfort yet is perfectly plain at the waist line and over the hips while the corset cover is just full enough at the front to be pretty beneath this material.

Material required for medium size is 2 1/2 yds 36 or 2 1/2 yds 44 in wide, with 4 1/2 yds of edging, 3 1/2 yds of narrow, 2 1/2 yds of insertion and 2 1/2 yds of banding. The pattern is cut for a 34, 36, 38, 40 and 42 in bust, and will be mailed on receipt of 10 cts.

GIRL'S TUCKED DRESS 6573



The long waisted frock is always becoming for younger girls.

Material required for medium size (10 yrs) is 4 1/2 yds 24 or 27, 3 1/2 yds 32 or 2 1/2 yds 44 in wide with 2 1/2 yds of wide insertion, 3/4 yds of narrow.

The pattern is cut for girls of 6, 8, 10 and 12 yrs, and will be mailed on receipt of 10 cts.

FANCY TUCKED BLOUSE 6579



The lingerie blouse that is made with a square yoke is one of the latest. This one is embroidered in a simple but effective design and is so dainty and charming. If embroidery means too great labor the yoke could be made from some pretty all over material.

Material required for medium size is 4 1/2 yds 21 or 24, 2 1/2 yds 32 or 2 yds 44 in wide.

The pattern is cut for a 32, 34, 36, 38 and 40 in bust and will be mailed on receipt of 10 cts.

NINE GORED SKIRT 6578



The simple plain nine gored skirt is one that is always needed. It is admirable for wool materials.

Material required for the medium size is 11 yds 27, 5 1/2 yds 44, 5 1/2 yds 52 in wide. The pattern is cut for a 24, 26, 28, 30, 32, and 34 in waist, and will be mailed on receipt of 10 cts.

DRESSING JACKET 6803



Such a pretty dressing jacket as this cannot fail to find a welcome. It is dainty and attractive, it is absolutely simple and it is peculiarly well adapted to the incoming season.

Material required for medium size is 3 1/2 yds 21 or 24, 2 1/2 yds 32 or 1 1/2 yds 44 in wide, with 7 1/2 yds of banding, 3 1/2 yds of edging.

The pattern is cut in sizes for a 32, 34, 36, 38, 40 and 42 in bust, and will be mailed on receipt of 10 cts.

FRENCH CHEMISE 6652



The simple chemise is in great demand. It can be finished simply with a scalloped edge, or it can be more elaborately embroidered. Again, it can be worn over or under the corset. In the illustration it is held at the waist line by means of ribbon threaded through.

Material required for medium size is 3 1/2 yds 36, 2 1/2 yds 44 in wide, with 4 1/2 yds of insertion, 1 1/2 yds of narrow, 1 1/2 yds of wide banding, 3 yds of edging. 4 yds of embroidery for trim. The pattern is cut in three sizes, small, medium and large, and will be mailed on receipt of 10 cts.

TUCKED BLOUSE 6585



Lingerie blouses are exceptionally attractive this year, and here is one of the best. The shallow round yoke is pretty and smart, but neither narrow banding, or it nor the trimming is necessary, for the blouse can be made without it, as shown in the small view.

Material required for medium size is 3 1/2 yds 21 or 24, 2 1/2 yds 32 or 2 yds 44 in wide with 4 1/2 yds of narrow and 7 yds of wide banding.

The pattern is cut for a 32, 34, 36, 40 and 42 in bust and will be mailed on receipt of 10 cts.

MISSER'S FIVE GORED SKIRT 6576



The plain gored skirt is always needed. The model is designed for young girls and will be found appropriate for all skirting materials adapted to so simple a style.

Material required for 16 yr size is 5 1/2 yds 27, 5 1/2 yds 32, 5 1/2 yds 44 or 3 1/2 yds 52 in wide.

The pattern is cut for girls of 14 and 16 yrs and will be mailed on receipt of 10 cts.

GIRL'S DRESS 6588



Simple dresses such as this are always smart and practical. They are adapted alike to wool materials and to washable ones and they can be trimmed in various ways.

Material required for medium size is 6 1/2 yds 24, 4 1/2 yds 32 or 3 1/2 yds 44 in wide, with 1/2 yd 27 in wide for trimming.

The pattern is cut for girls of 6, 8, 10 and 12 yrs, and will be mailed on receipt of 10 cts.

BLOUSE OR SKIRT WAIST 6571



The shirt waist that is made with a yoke over the back extended to conceal the shoulder seams, is a favorite one. This one can be either tucked or gathered at the front, and the yoke can be used or omitted.

Material required for medium size, 3 1/2 yds 21 or 27, 3 yds 32 or 1 1/2 yds 44 in wide.

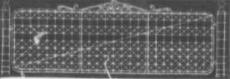
The pattern is cut for a 32, 34, 36, 38 and 40 in bust and will be mailed for 10 cts.

The electrically-welded, solid-piece frame gives strength and stiffness to

Peerless Farm and Ornamental Gates

We build Peerless Gates to last a lifetime—handy, convenient and attractive. They remain staunch and rigid through all kinds of rough usage. The frame is

THE BANWELL HOXIE WIRE FENCE CO., Ltd., Box H, Hamilton, Ont., Winnipeg, Man.



Made of heavy steel tubing electrically welded into one solid piece. The Peerless Gate, like the Peerless Fence, saves expense because it never needs repairs. We also make poultry, lawn and farm fences of exceptional strength. Write for free book.

Tolton's HIGH GRADE STEEL Harrows

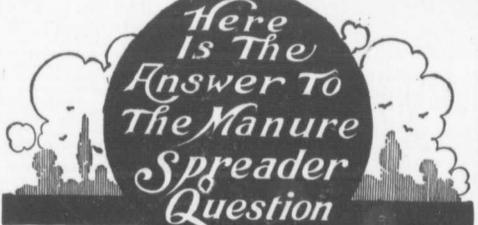


Section and Flexible All-Steel Harrows with an unequalled record.

A large variety suitable for the requirements of any country, made in different widths to suit purchasers. Pre-eminently the most efficient, strongest, and longest-wearing Harrows ever manufactured, is our unqualified guarantee. A Harrow bargain it will pay you to know more about. Free descriptive circular furnishes the facts.

Write for it to-day. Address Dept. K.

TOLTON BROS., Ltd., Guelph, Ont.



With progressive farmers it is no longer a question of whether or not to buy a manure spreader. Good spreaders have already proved their value. The real question is—which one will net you the most profit?

The IHC line answers that question. Among the many styles and sizes, you will find one that just meets your needs.

IHC Manure Spreaders

embody all that is best in manure spreader construction—all that makes for greatest manure profits. They have strength in abundance to withstand the hardest usage; they are simple, sure and steady in operation; they work perfectly with fertilizer in any condition; and such are exceedingly light in draft.

IHC manure spreaders are made in three styles; each style is made in three sizes, ranging from 30 to 70 bushels capacity. Corn King spreaders are of the return apron type; Cloverleaf manure spreaders have endless aprons. Two styles of feed are furnished—either ratchet or double pawl worn gear. There is an IHC to suit each requirement—large sizes for large operations, medium sizes for the average farmer, small sizes for home hoods, vineyards—for every condition. IHC spreaders have lime hoods to spread commercial fertilizers; drilling attachments to distribute manure in rows. Whatever IHC spreader you buy will pulverize and spread manure or commercial fertilizer perfectly. You will find it durable, and it will net you big dividends on your investment.

Manure is the cheapest and best fertilizer but it must be handled and spread right or most of its value is wasted. You must have an IHC manure spreader to get 100 per cent value out of the manure. IHC spreaders are doubling the crops of others. The one that suits your needs will do it for you.

See the local International agent, or write the International Harvester Company of America at nearest branch house for catalogue and full information.

CANADIAN BRANCHES: Brandon, Calgary, Edmonton, Hamilton, London, Montreal, Ottawa, Regina, Saskatoon, St. John, Winnipeg, Yorkton.

INTERNATIONAL HARVESTER COMPANY OF AMERICA
CHICAGO, U.S.A.



HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the official organ of The Canadian Holstein-Friesian Association, all of whose members are readers of the paper. Members of the Association are invited to send items of interest to Holstein breeders for publication in this column.

E. Laidlaw & Son have announced their sale for March 30th, when they offer as good a herd of grade cows as any in the Dominion. They are backed by milking and show ring records, as every animal that has freshens has a record ranging from 8100 lbs. milk in 10 months for 2 year olds, to 15,600 lbs. at full age. The poorest matured cow in the herd has given 63 lbs. per day. Members of this herd which will be sold, won at the Western Fair, London, 1906, and second in the grade class, and first and third in the dairy test, all breeds competing. The bulls to be sold are from Lord Roberts de Kol, whose sire has an A. record at 3 years old of 15.23 lbs. butter and is sire of Josie Pauline Posch, 15.65 lbs. butter at 2 years old.

Bell Dewdrop 5th, 14.57 lbs. at 2 years, Pauline Texal, 13.19 lbs. milk in one year, in record of performance test at 2 years, two months. The calves offered are from Dutchland Calantha Sir Abbecker, whose dam and sire's dam averaged in 7 days 15.93 lbs. butter. The sire's dam of the two of them average nearly 27 lbs. butter in 7 days.

This sale should prove a great chance to buyers as it will be a regular clearing sale.

CATTLE IN FINE SHAPE FOR THE SALE.

The Holstein cattle that are to be offered by public auction on March 25th at Madoc by Mr. J. A. Caskey is perhaps the best lot of young dairy cows ever offered for sale at public auction in Ontario. The heifers sired by Cornucopia Albin De Kol are marvels in production. From a two-year-old heifer with first calf, Mr. Caskey writes that he has got over 53 pounds of milk in a day on two milkings and she is doing that without hay. Another heifer of the same age is producing over 40 pounds of milk a day, testing better than four per cent. fat. Two other heifers, of the same age, promise to do even better when they freshen.

Some very fine show animals are included in the herd. Jessie Inka De Kol Princess calved August 13, 1909, is a model as a show heifer, and the same may be said of Belle Echo Cornucopia and Country Man's Cornucopia. Among the cows Jessie Inka De Kol and Duchess Echo De Kol are very fine individuals and are hard to beat as show cows.

Mr. Caskey's cattle are all in good, thrifty condition and may well be called a working dairyman's herd. It has not been Mr. Caskey's aim to produce a herd of big seven-day cows, but rather a herd of profitable cheese factory cows, and as such he has succeeded, as the factory records for years will show. In 1903, 13 cows produced an average for each cow of 9,295 pounds of milk in eight months, which record has never been equalled by the same number of cows in Ontario before nor since. In this record, as stated, the cows were not given credit for milk given to calves or kept for home use.

All the cattle offered will be sold, there being no reserve whatever. All interested in Holsteins should find it of interest to be present at the sale. Mr. Caskey says that if the boys will only come to the sale they will find themselves amply repaid when they see the cattle. Buyers from a distance are invited to come to the farm early in the day and get acquainted with the cattle.

GOSSIP

The Lynden herd of Holsteins is headed by the richly bred stock bull Kordyke Teakie No. 5809. He has 21 cows in his pedigree, with A. R. O. records that average over 24 lbs. of butter in seven days. He traces to De Kol 2d, 21.7 lbs. butter nine times, twice to Belle Kordyke, 25.76 lbs., twice to Kordyke Queen De Kol, 24.4 lbs. three times to Netherland Hengerveld, 26.66 lbs., once to Beryl Wayne, 27.86 lbs. The herd averaged for the past season 12,200 lbs. of milk, testing as high as 3.71 per cent. fat for the season under Record of Performance tests. The best cow produced 15,500 lbs. of milk. The stock offered are all well bred and in good condition.—S. Leson, Lynden, Ont.

Make Them Sound



A lame horse is a dead loss. Spavin, Curb, Splint, Ringbone, Swollen Joints and Bony Goutis won't cure themselves. Yet you can cure these troubles and make your lame horse sound with

Kendall's Spavin Cure

just as thousands have done, and are doing today.

In the 40 years that this world's famous remedy has been on the market, Kendall's Spavin Cure has saved millions of dollars to horse owners.

Mounds, P. O., Old, Alta. "I have used Kendall's Spavin Cure for a number of years with great success, and I think it can't be beaten as an all-around, stable liniment for Kicks, Strains, Swelling of all kinds, Ringbone and Spavin."

ARTHUR FLETCHER. No telling when you will need it. Get a bottle now—5t—6 for 5c.

Our book—"A Treatise On The Horse"—free at your druggists or write us.

Dr. R. J. KENDALL Co., Embury Falls, Vt.

NORTHERN ONTARIO

The Forest and Mineral Wealth of Northern Ontario has attracted many people from all parts of the civilized world.

One-tenth of the world's reported output of Silver in 1908 was taken from Ontario mines.

New discoveries of undoubted richness in Northern Ontario, reported from sections far distant from the far-famed Cobalt. Yet a more certain return is insured to the settler who acquires for himself

160 ACRES OF THE RICH AGRICULTURAL LANDS

now open for settlement and made accessible through the construction of Railways and Colonization Roads.

THE FERTILITY OF THE SOIL IS UNSURPASSED

The Timber is in demand at a rising price. Mining, Railway and Colonization Road Companies and Logging, etc., afford work in abundance to those who have not the means to return on their farms continually. These also provide a market for farm produce at prices which anywhere in the Province, the Terminus of the T. & N. O. Ry., on the G.T.P. Transcontinental Railway, now under construction, is the same latitude as the southern part of Manitoba, and 800 miles nearer the seaboard.

That the experimental stage is past is clearly demonstrated. The country is rapidly filling up with settlers from many of the other Provinces, the United States and Europe.

For information as to Terms of Sale, Homestead Regulations and for Special Colonization Rates to Settlers and for Settlers' Effects, write to:

D. SUTHERLAND
The Director of Colonization
PARLIAMENT BUILDINGS, TORONTO
HON. J. S. DUFF
Minister of Agriculture

Mention Farm and Dairy when writing.

MARKET REVIEW AND FORECAST

Toronto, Monday, March 14.—Activity in all departments of commerce is the outstanding feature of trade. Banks are loaded down with deposits, business men are everywhere preparing for enlargements in their passenger lines, railways are doing a splendid business, and steamship companies are making all preparations to cope with the rush that will soon be on. With regard to the wheat market, there is not the unbounded confidence in certain lines of investments that some would fain have us believe. There is no apparent reason why this should be and doubtless with the advent of spring and the consequent activity in all departments that will be in evidence in stocks and bonds.

General trade conditions are very encouraging, and money continues fairly easy. Call money rules at 5 per cent.

WHEAT.

The wheat market has been seeing-walk the traditional of rumours in regard to the definitely ascertained at last, however, that the pessimistic reports that have been current for so many weeks have had no really true basis in fact, and the consequence is that a good deal of the bullishness has been taken out of the market. The foreign market have steadily refused to be caught, and this factor in itself has had a very considerable influence in steadying the American market. At last advices from London in Chicago reached 113 1/2, July 11.05 1/2, and September 11.04. Local dealers quote as follows: Ontario wheat, fall wheat is quoted at \$1.06 to \$1.07; white, \$1.07 to \$1.08 outside. No. 1 northern, \$1.13; No. 2, \$1.11 on track, lake ports. On the farmers' market, fall wheat is quoted at \$1.05 to \$1.10 and goose wheat at \$1.04 to \$1.05 a bushel.

COARSE GRAINS.

Trade is quiet in all classes of grain, and prices are unchanged from last quotations. Oats, C. W. No. 2, 42c; No. 3, 41c; on track, No. 2 white, 39c; No. 3, 37c outside, 42c to 43c on track. Toronto. Penn, 80c to 84 outside; rye, 76c to 80c outside. No. 2, 55c; No. 3, 49c outside; buckwheat, 52c outside. In Montreal the market for coarse grains at last week's figures, 42c to 45c according to quality; peas, 90c; barley, 56c; maiting barley, 68c to 69c; buckwheat, 54c to 56c.

HAY AND STRAW

The offerings of hay are still light, and good prices are being realized. Such loads of timothy hay as have come on the market during the past week have found ready purchasers at from \$17 to \$21 a ton. Straw is normal at \$7.50 to \$8 and \$14 in bundles. At Montreal the demand for hay is brisk and supplies are coming in fairly well, the prices realized being from \$11 to \$15.50 according to quality.

MILL FEEDS.

The trade in mill feeds is quiet. Manitoba bran is quoted at \$2.50 to \$3 a ton; Manitoba shorts, \$2.50 to \$3 a ton; Ontario bran, \$2.3, and Ontario shorts, \$2.4 a ton on track, Toronto.

In Montreal the market is firm and Manitoba bran is quoted at \$2.2 a ton; shorts \$2.2 to \$2.3 a ton; Ontario bran, \$2.2 to \$2.3 a ton in bags, and Ontario shorts at \$2.3 a ton.

EGGS AND POULTRY.

Generous supplies from the States are helping to keep the prices of eggs down for the farmers, and fresh laid eggs are quoted now on the Toronto market at 7 1/2 to 20c a dozen in case lots. On the farmers' market fresh laid eggs are quoted at 20c to 25c and storage at 25c to 26c a dozen.

Montreal is also feeling the effect of American importations, and fresh laid eggs are quoted there at from 25c to 32c a dozen. There are no storage eggs now on the Montreal or Toronto markets.

Poultry are not cutting much of a figure in the market at the present time, and quotations by local dealers are nominally the same as for a fortnight past. On the farmers' market chickens are quoted at 15c to 16c; ducks, 15c to 16c; turkeys, 18c to 20c; geese, 15c to 16c, and fowl, 10c to 12c a lb.

HIDES.

The following are the present quotations for hides: No. 1 steers and cows, 11 1/2c; No. 2, 10 1/2c; bulls, 9 1/2c; calfskins, 11c to 12c; sheepskins, 9c to \$1.00; horsehide, No. 1, \$2.25; horsehair, 32c a lb.; tallow, 5 1/2c to 6 lb. a lb.

Montreal prices for hides are as follows: Best hides, No. 1, 12 1/2c; No. 2, 11 1/2c; No. 3, 10 1/2c; calfskins, No. 1, 14c; No. 2, 13c; sheepskins, \$1.10 to \$1.15.

SEED PRICES.

The prices for seeds are unchanged from last week's quotations, both here and in Montreal. The dealers apparently have all the seed on hand that they require for the coming season's purposes.

DAIRY PRODUCTS.

Prices are continuing firm in butter on the local market, and creamery prices are quoted at 28c to 30c; separator prices, 24c to 26c; and tub butter at 15c to 17c a lb.

On the farmers' market choice dairy butter is quoted at 25c to 26c and tub butter at 24c to 27c a lb. The trade is steady in cheese and large are quoted at 18c and twine at 13 1/2c a lb.

The market for butter in Montreal is firm and two cars of creamery butter from Calgary and the other for Vancouver, were reported last week at 26c a lb. on track, Montreal. There is a deal of inferior butter on the market, dealers either holding their best quality back for better prices later on. Manitoba dairy is quoted at 18c to 20c; western dairy, 20c to 22c, and tub butter at 18c and twine at 13 1/2c. There are very little export cheese left now in the country. White cheese for domestic trade is quoted at 12 1/2c and colored at 12 1/2c to 12 3/4c.

POTATOES AND BEANS.

The farmers are rushing in their supplies of potatoes, with the result that the prices are lower than they were last week. They are quoted here at 40c to 45c a bag in car lots on track, and at farmers' market potatoes are quoted at 60c to 75c a bag. The price of potatoes has declined in Montreal from the same cause, and Green Mountains are quoted now at 40c a bag in car lots. Last year they easily fetched 75c to 80c a bag at this time. Local dealers quote beans as follows: Primes, \$2 to \$2.10 a bushel, and three-pound pickers \$2.15 to \$2.25 a bushel.

In Montreal the market is quiet and beans are quoted nominally at \$1.95 to \$2 a bushel.

HORSE MARKET

The horse market is very active. Last week in one day at North Bay there were 50 carloads of horses counted, en route for northwestern points. This tells its own tale and should warn the farmers to guard against a possible famine in horse flesh in Ontario. The lack of army mounts is being again felt in England. So from more than one point of view it looks as if horses as well as the farmer to one day turn his attention to the following quotations are given: Heavy draft horses, \$180 to \$250; light

draft horses, \$150 to \$250; expressors, \$175 to \$250; agricultural, \$150 to \$175; drivers, \$100 to \$200; servicially sound horses, \$60 to \$80.

LIVE STOCK

There is a heavy demand for cattle in the local market, the supply has not been adequate, and high prices have been the rule. In Wednesday's and Thursday's arrivals of 90 cars were 1,603 head of cattle, 400 head of lambs and 120 calves. Following are the quotations: Choice exporters—\$4 to \$6.35; medium, \$3.65 to \$5.65; butchers' cattle—\$4.75 to \$5.00. Milch cows—Choice, \$5.65 to \$5.80; medium, \$5 to \$5.25; ordinary, \$4.50 to \$5. Stockers—Choice, \$4.25 to \$4.50; medium, \$4 to \$4.25; ordinary, \$3.75 to \$3.75. Feeders—Steers, \$3.50 to \$4.60; bulls, \$2.25 to \$3.25.

Milch cows—Choice, \$50 to \$65; medium, \$35 to \$40; calves, \$1.50 to \$2.50; calves, \$1.75 to \$7.50.

Sheep—Ewes, \$2.25 to \$5.50; bucks, \$1.75 to \$4.25; lambs, \$2 to \$3.25.

Hogs—F. o. b. \$9; fed and watered, \$9.25 to \$9.35.

There were generous consignments of hogs on the market last week, but despite this fact the prices show no signs of declining. It looks as if we were going to see a steady tendellar hog on the Canadian market yet. The Trade Bulletin-Canadian correspondent says: "Canadian hogs run 70c to 75c."

PETROBORO HOG MARKET.

Peterboro, Monday, March 14.—Danish hogs delivered on the English markets last week totalled 35,000. The demand for bacon in the country is only fair. The delivery of hog meat marines was somewhat heavier last week. The George Matthews Co. quote the following prices for this week's shipment: F.o.b. \$9.25 a cwt.; withed off cars, \$9.55 a cwt.; delivered at wharf, \$9.25 a cwt.

MONTREAL HOG MARKET

Montreal, Saturday, March 12.—Supplies of live hogs have been small and prices have been firmly maintained, the bulk of the offerings selling at \$10 a cwt. For selected lots shipped off cars. Unless supplies increase the price is not likely to any decline in price, as there is not sufficient to supply the trade.

Dressed hogs are advanced in prices owing to the high cost of live hogs and dealers are asking \$13.50 to \$13.75 a cwt. for fresh killed slaughter stock, and even at these high prices there is a good demand.

EXPORT BUTTER AND CHEESE

Montreal, Saturday, March 12.—The market for cheese has been very quiet with very little trade passing. The stock in store is being steadily reduced, and is getting down very quickly to the vanishing point. It would be a difficult matter to fill an order for about 10,000 lbs. There are several small blocks of unsold cheese lying in store in various districts in Ontario, and altogether there are probably 20,000 boxes still owned on this side. The stock in store here owned by English mounts to about as much point. It is not likely that any of these cheese remaining here awaiting shipment to Great Britain. The holders are getting anxious to sell, owing to the late date.

THE BEST LINIMENT

OR PAIN KILLER FOR THE HUMAN BODY

Gombault's Caustic Balsam

IT HAS NO EQUAL

For all rheumatic and for all other ailments, it is the best remedy for the human body. Perfectly safe and reliable remedy for Sore Throat, Chest Cough, Backache, Neuralgia, Sprains, Strains, Lumbago, Diphtheria, Sore Lungs, Rheumatism, and all Stiff Joints.

We would say to all who buy it that it does not contain a particle of poisonous substance and therefore no harm can result from its external use. Perseverant, thorough use will cure any old or chronic rheumatism, neuralgia, or any ailment that has stood on its feet for years. It is used on my case that I mention in my advertisement. It is a perfect safety with application a week.

REMOVED THE GORE—STRENGTHENED MUSCLES. The Gombault's Caustic Balsam, 415 King Street, Toronto, Ont. Price \$1.00 per bottle. Sold by druggists or sent by mail for 75c. The LAWRENCE-WILLIAMS COMPANY, Toronto, Can.

OUR STICKNEY GASOLINE ENGINE



Ontario Wind Engine and Pump Co., Limited, Toronto, Ont.

is simpler than any other on the market. You can learn to run in 10 MINUTES. Won't get out of gear. POWER IS GUARANTEED. Our Booklets No. 37 is full of information.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER. GARTON'S REGENERATED ABUNDANCE seed. Had particularly good crop in 1909 from imported seed—W. W. Balfour, Stratford, Ont. Phone.

Make this 60-Day Test of Brantford Roofing—then Test Any Other Make

Write us, or your dealer, for sample of Brantford Asphalt Roofing. Place it in water for sixty days. When you remove it, rip open with heavy knife, and you'll find inside—the vital part—perfectly dry. Life-like, solid—as before test. Just think of severeness of this test! The result is evidence you cannot overlook. Then make this test with any other Roofing. You'll find the wood pulp—jute or cotton-cloth, inside soaked—softened—lifeless. It will not withstand severe weather, which is, at its worst, not one-twentieth so severe as Brantford's way. How could you expect such a foundation to fight off roofing enemies? For resistance, it must depend upon animal fat, grease, or other refuse coating, themselves veritable mines of danger. They evaporate—wear off—expose the foundation to awaiting enemies. This coating cannot prevent penetration—protect defences inside from harm. But Brantford Asphalt Roofing Foundation is one sheet own. A secret mixture of Asphalt is forced into it, soaking every fibre. After mixture dries, foundation possesses resisting power no amount of soaking or bending can effect.



Brantford Roofing

after special Water-proof coating, into which Silica Sand is rolled under pressure, is applied, becomes a solid mass of resistance. It is weather, acid, alkali, frost, water-proof. Cannot freeze, crack or melt. Wonderfully pliable. Brantford's Roofing has one coat—first. Write for free Book and Samples.

Brantford Asphalt Roofing, No. 1, 2, 3. Brantford Rubber Roofing, No. 1, 2, 3. Brantford Crystal Roofing, one grade only. (Heavy). McHawk Roofing, one grade only. BRANTFORD ROOFING CO., Ltd., BRANTFORD, CAN.

HOLSTEINS

MAPLE LEAF STOCK FARM GORDON H. MANHARD Manhard, Ontario

Breeder of Choice Holstein-Friesian Cattle. At present I will sell 25 young cows, due to freshen in the early part of the winter. Also a few young bulls. E-11-10

HOMESTEAD FARM OF HOLSTEINS

Present offering—bull calves from high record cows and Dutchland Colantha Jr. Abbecker (Imp. young dam and sire) dam average 31.85 lbs. butter in 7 days. Write for particulars.

EDMUND LAIDLAW & SONS Arimer West, Ont. Box 254 E-2-16-11

SUNNYDALE

Offers g-sons of Pieterje Hengerveld Count De Kol, the champion bull of the breed, the only one that has two daughters that have made officially over 25 lbs. butter in 7 days. Book your orders now for calves to be born February and March from good official record dams in our Helena family.

A. D. FOSTER, Bloomfield, Ont. Hallowell Station E-2-5-10

LAKEVIEW HOLSTEINS

One bull ready for service and a few ready shortly. All sired by Count Hengerveld Fayne De Kol, a son of Pieterje Hengerveld Count De Kol, whose daughter De Kol Ornelia, has record of 119 lbs. milk in one day and 790 lbs. in 7 days. His dam, Grace Fayne (25.25 lbs. butter in 7 days), has a daughter, Grace Fayne, had Homestead, who broke all records with 35.55 lbs. butter in 7 days, fat averaging 5.62 per cent. Visitors met at Bronte, G. E. H. or Trafalgar Crossing, Hamilton Road. E-11

E. F. OBLER, Bronte, Ont.

GLENSPRINGS HOLSTEINS

ONE BULL CALF, three months old, from a dam that gave 12.70 lbs. last year, testing 3.4 fat. One or two YOUNG HEIFERS from good milking strains, but a few more to do well to order bull calves for next year. Will also sell one or two good COWS at a reasonable price. Write for particulars. Price according to value as producers. (E-2-10-10)

E. B. MALLORY, Frankford, Ont.

LYNDALE

Offers for sale young bulls sired by a son of the highest record cow ever owned in Canada. SARA JEWEL HENGERSVELD 3RD, A. B. O. 30.39 lbs. butter in 7 days, 121.37 lbs. in 30 days. These bulls are all from official record dams, some of them from daughters of "Count De Kol Pieterje Paul," one out of a daughter of "Brightest Canary." E-5-5-11

BROWN BROS., LYM, ONT.

THE SUMMER HILL HEAD OF HOLSTEINS

In making some wonderful Records. This year it has produced the champion Canadian bred butter cow for 7 days record, 29.15 lbs., and the champion 2 year old of Canada, for yearly production. We have some younger ones that promise to be just as good. We offer for quick sale fine heifers, all in calf to an imported bull. Come and make your selections AT ONCE. Prices are right and everything guaranteed just as represented. Write for Trains met at Hamilton if advised.

D. C. FLATT & SON, Millgrove, Ont. R. D. No. 2 E.T.F.

Farm Phone, No. 5471 Hamilton.

HOLSTEINS

WINNERS IN THE RING Gold Medal Herd at Ottawa Fair

and WINNERS AT THE PAIL See Our A.R.O. Records

Just the kind we want. They combine CONFORMATION and PRODUCTION

Bull and Heifer Calves for Sale from Our Winners

"LES CHENAUX FARMS" Vaudreuil, Que.

Dr. Harwood, Prop. D. Boden, Mgr.

HOLSTEINS

FOR SALE—Cornelia's Posch, five times 1st prize bull at Toronto and London Fairs; also five of his sons, five record of merit cows. Also females of all ages. E-4-38-10

THOS. HARTLEY, Downsview, Ont.

LYNDEN HOLSTEINS

Herd headed by Korndyke Teako No. 2809. FOR SALE—1 yearling bull, dam Collo 1909, 29.27 lbs. milk, 463.173 lbs. fat, 260 days, 3.70 per cent. fat. Also bull calves and females all ages. E-4-21-10

SAMUEL LEMON Lynden, Ont.

HILL-CREST HOLSTEINS

Bull calves fit to head any herd for sale. Sired by "Pontiac Hermes" and Sara Jewel Hengerveld's Sons. Dams are grand young cows with good udders and teats, and best of breeding. These calves are from one to two months old and will be delivered at your station. Also two young service bulls, one out of a 72 lb. per day service cow. E-2-10-10

G. A. BRETHERN, Norwood, Ont.

FOR SALE, HOLSTEIN BULLS

One born Dec. 18, 1905. Dam's official record at three years old, 696 lbs. of milk and 21 lbs. of butter in 7 days. Milk calf born March 10th, 1909, dam Canadian Champion of her age; official record at two years, 434 lbs. of milk and 20 lbs. of butter. DAVID GAUGHNELL, Yarmouth Centre, Ont.

NORTH STAR HOLSTEINS FOR SALE

Bulls ready for service, out of high testing A.R.O. dams, sired by Count Hengerveld De Kol, a son of Jewel Hengerveld 3rd, the highest tested, (30.38), highest price cow in Canada. Also a few females in calf to same bull. E.T.F.

J. W. STEWART, LYN, ONT.

RIVERVIEW HERD

FOR SALE, 2 Bull Calves, sired by Sir Aggie Bessie 5g, son of King Bessie. One of greatest 5g, son old sire, dam Aggie Lily, Pieterje Paul, champion Jr. at 1 year old—25.35 lbs. butter 7 days. Dam of cows, 23 lbs. and 23 lbs. year old. Price reasonable considering breeding. E-10-10-10

P. J. SALLEY, Ripley, Ont.

AYRSHIRES

AYRSHIRES.—Record of Performance work a specialty: young bulls from R. O. C. cows, all cows that will go on at next freshening. Milk reports, E-T-F dams, for everything. E-T-F

JAMES BROS., Box 58, Thomas

FOR SALE—AYRSHIRE BULLS

From one month to two years old; all from large, good milking stock. Also Yorkshire pigs. Apply DANIEL WATT on to HON. W. OWENS, Manager, 6-10-10 Riverdale Farm, Montebello, Que.

AYRSHIRES

Ayrshires of the right stamp for production combined with good type and quality. Write for prices. O-12-23-10

R. M. HOWDEN, St. Louis Station, Que.

SPRINGHILL AYRSHIRES

Imported and home bred stock of all ages for sale. Stock shown with great success at all the leading fairs. Long distance phone. Maxwell, Ont. E-7-1-10

ROBT. HUNTER & SONS

Having disposed of my 1909 importation, I intend leaving about March 1st, for another lot. Expect to have a number of bulls through quarantine by first week of June. Orders entrusted to me will be carefully attended to. We have a few young bulls fit for service, on hand, of choice breeding. Write for details of all ages. Phone, etc. R. R. NEWBERRY, Burnside Block Farm, Howick, Que.

CHERRY BALK STOCK FARM

FOR SALE.—Bull calves, sired by North Star Milkman, the champion bull of Canada. One of our best week old, sired by Morton Mains Quebeck, Junior Champion at Toronto, 1908, and by North Star Milkman, a top waffer, and an early doer. Also females any age. Satisfaction guaranteed. Write for the best, in our motto. Visitors welcome. P. D. McARTHUR, North Georgetown, Howick Station O-6-30-10 Que.

ed up at from 12c to 12½c a lb, the latter prices being asked for white cheese, which are very scarce.

The market for butter is very firm, with prices tending upward. Finest creamery butter is selling freely at 25c a lb, and some of the dealers are preparing to mark the price up at the end of the present week. There is practically nothing in the shape of creamery available under 25c. Pure butter is, of course, scarce and commanding a very high price as compared with creamery. Dealers are asking 25c and 25c for selected Ontario dairy, lower grades fetching about 20c a lb. There has been considerable enquiry for butter from Great Britain during the week and although we have not heard of any business being done, there is a possibility of some export trade being done. The demand from all parts of Canada is very good, and stocks are being steadily reduced.

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CRUMB'S IMPROVED WARRIOR STANCHION

Send for my booklet and learn why stallion owners are being installed in the stables of many farms.

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WALLACE B. CRUMB, Box 24, Forestville, Canada.

Dr. Bell's Veterinary Medical Wonder cures inflammation of lungs, bowels and kidneys. The sixth century wonder. Agents wanted in every county. Write for a free trial 1/2 bottle. This is affy good for 60 days. Limited to 300 bottles. DR. BELL, V.B., Kingston, Ont.

AYRSHIRES

"Le Bols de la Roches" Stock Farm

Here are kept the choicest strains of AYRSHIRES, imported and home bred. YOKESHIRES of the best bacon types. WYAN-DOTTES and BARRED ROCK PLY. HON. L. J. FORBES, J. A. BIRBAU, Proprietors, Ste. Anne de Bellevue, Que. E-5-26-10

STADACONA FARM Show a Record for 1909

At Three Rivers, Quebec's Provincial Exhibition, at Sherbrooke, Canada's Great Eastern Show, at Ottawa, the Dominion's large Central Fair, at Barton, Vermont, U. S. A., and at Quebec, my Ayrshires under five different judges WON MORE FIRST PRIZES THAN ALL OTHER EXHIBITORS COMBINED. Cattle of both sexes and all ages for sale at very reasonable prices. O-6-9-10

GUS. LANGELIER Stadacona Farm, Cap Rouge, Que.

MISCELLANEOUS

TANWORTH AND BERSHIRE SWINE—Boars and sows for sale. J. W. Todd, Corinth, Ont. Maple Leaf Stock Farm, E.T.F.

SUNNYSIDE STOCK FARM

Chester White Swine, Single and Double bred, all moose Bronze Turkeys of the choicest breeding for O-3-2-10 Glenworth, Ont. Proprietor

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A GATHERING OF PRIZE-WINNING FARMERS

A great gathering of farmers who own prize winning farms and of their friends was held in Moose Creek, Stormont County, on Friday evening the 12th inst. The occasion was the presentation of the prizes won by the farmers in District No. 1, who competed last year in the Dairy Farm competition between the Dairy and Dairy. Most of the prize winning farmers in that district were present, including 150 prize winning farmers. Victor Begg of Moose Creek, and Mrs. Begg; the second prize winner, J. A. Anderson and Mrs. Anderson, of Dickson; the third prize winner, Angus Grant, of Grant, and his son, James, of Moose Creek; the fifth prize winner, J. E. Caldwell, of City View, in Shelton County; the sixth prize winner, A. A. McLennan, in Glengarry County; and Mr. James Begg of Gravel Hill. The chairman of the meeting was Mr. D. H. McDermond of Ansonville.

The interest taken in the proceedings was manifested by the large number of newspaper men present. The first prize was presented to Victor Begg, Editor-in-Chief of Farm and Dairy; the second prize by Mr. C. W. Young, editor of the Cornwall Free Press; the third prize by Mr. Smith, K. C. M.P., of Ottawa; the fifth prize by Mr. R. B. Faith, editor of the Ottawa Valley Journal; the sixth prize by Mr. L. J. Forbes, of Ansonville; and by Mr. Begg, by Mr. A. Fennell, editor of the Maxwell paper.

The interest increased greatly by the fact that the wives of the prize winners were brought to the front and received the prizes jointly with their husbands. The husbands spoke in glowing terms of the assistance their wives had rendered them, not only in the competition, but also in their married lives as well. Mr. Begg's description of how he and Mrs. Begg had gone on their farm when it was nearly all brush and swamp, and how they had cleared the farm with the final outcome, and his words of praise for how Mrs. Begg had stood by him through the years, and how she had kept the log cabin that was their first home, to the winning of the first prize in district No. 1, was so touching and so true, that he is not likely to ever forget. Mr. Angus Grant, of Moose Creek, had composed some poetry for the occasion as well as a song, which were greatly enjoyed.

The whole-souled manner in which every person present entered into the proceedings, the hearty congratulations extended to the prize winners, and the utter lack of any sign of jealousy, which sometimes is apt to disturb the efforts of the prize winners, made the occasion one to be remembered. Features of the evening were a recitation by Mr. D. Bennett of Tayside, and musical numbers by one of the present Mr. Parent, and Mrs. McCulloch, as well as a recitation by Mr. J. E. Caldwell.

Arrangements are being made for similar presentations at Churchillville, and York Mills, in District No. 3. If there are any other sections whose friends of the prize winners would like to arrange for public presentations, they can count on the assistance of the editor of Farm and Dairy in making it a success. Care should be taken to see that the ladies are given an opportunity to take part in the proceedings.

OUR FARMERS' CLUB

Contributions Invited.

PRINCE EDWARD ISLAND

PRINCE CO., P. E. I.

RICHMOND - Fine weather with good roads. The majority of people are engaged in hauling muskrat skins...

NOVA SCOTIA

KING'S CO., N. S.

WATERVILLE - In January, the soft weather was unusual, and plowing was going on in all directions...

QUEBEC

SHERBROOKE CO., QUE.

LENNOXVILLE - Sap has been running freely for a few days and many sugar bushes have been tapped with prospects for a good season...

COMPTON CENTRE - Sugar making is coming on now.

COMPTON CO., QUE. LENNOXVILLE - Sap has been running freely for a few days and many sugar bushes have been tapped with prospects for a good season...

ONTARIO

HASTINGS CO., ONT.

CHAPMAN - The supply of hay and straw seems to be sufficient for all local demands but there is little if any for export.

PETERBORO CO., ONT.

NORWOOD - Marked interest is being taken in the recently organized farmers' club. We recently had a debate between members as to which is the more profitable - grain-growing or stock raising...

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grow enormously wealthy, while the workers find it difficult to earn more than a bare living. By means of a black board, Mr. Cowan showed in a simple manner how monopolies are formed, and how they gather wealth from the masses...

VICTORIA CO., ONT.

BURY'S GREEN - Owing to the recent thaws, the roads are fast breaking up. Considerable cold and blustering weather may be expected yet.

HALIBURTON CO., ONT.

KINMOUNT - Cattle are wintering fairly well. There has been plenty of feed so far. Four cars of horses have been shipped to the coast during the last two weeks.

WENTWORTH CO., ONT.

KIBIKWILL - Most farmers will have plenty of feed, but a large number are still in need of bedding. Scarcely anyone has sold their fat cattle for spring delivery as yet, but are expecting the price will be somewhat in advance of last year as there is less cattle as compared with other years.

BRANT CO., ONT.

ST. GEORGE - With the coming of the first spring month and all with such spring weather as we have had recently, one's thoughts go towards the land, and it is encouraging to find the wheat and clover in such fine condition.

METZ - There seems to be a good supply of feed of all kinds on hand. The farmers are very much satisfied with their work on account of the deep snow, as some could not get their horses on the road.

OXFORD CO., ONT.

NORWICH - There are some complaints about clover and wheat being smothered out in places. Timothy hay is selling at \$12 a ton; oats, \$4 a bush; wheat, \$1.05 a bush; bran, \$23 a ton; middlings, \$25 a ton; eggs, 75c a doz.; butter, 25c a lb.; potatoes, 10c a bush; milk cows, \$15 to \$20; pigs, \$2.50 a cwt. - J. McK.

LIVE HOGS

We are buyers each week of Live Hogs at market prices. For delivery at our Packing House in Peterborough, we will pay equal to Toronto market prices. If you cannot deliver to our Packing House, kindly write us and we will instruct our buyer at your nearest railroad station, to call on you.

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THE GEO. MATTHEWS CO., LIMITED

PETERBOROUGH, - HULL, - BRANTFORD

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SOUTH WAIRINGHAM - Hogs are selling for \$9 a cwt.; beef, from 6c to 7c in lb; eggs, 25c a doz.; butter, 25c; wood, \$1.50 to \$2 a cord. Stock all looking well, feed and water plentiful.

ELGIN CO., ONT.

ST. THOMAS - We have had a fine, steady winter, over 70 days sleighing and no extreme cold. There is going to be a serious shortage of feed.

MUSKOGA DIST., ONT.

GRAVENHURST - The ice harvest is mostly all done. Cattle are wintering fine. Feed is holding out well.

ALBERTA

RED DEER DIST., ALTA. BUENT LAKE - After a very mild winter and spring almost in sight, the dairymen of this "Land of Sunshine" are looking forward to another successful season.

MANITOBA

MACDONALD CO., MAN. DACOTA - This winter has been exceptionally favorable with us. No extreme cold to report and thawing the last few days. Farmers are nearly all ready for spring work.

THE DRILL THAT BRINGS BIG CROPS



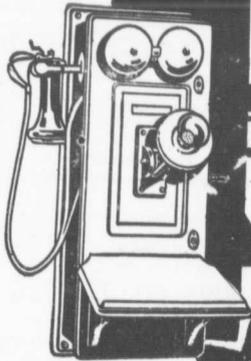
The LEADER is not just an ordinary drill by any means, but every part has been designed and built just as well as it is possible to make it, and every operation it has to do has been considered, and the drill built to do it as well as it can possibly be done.

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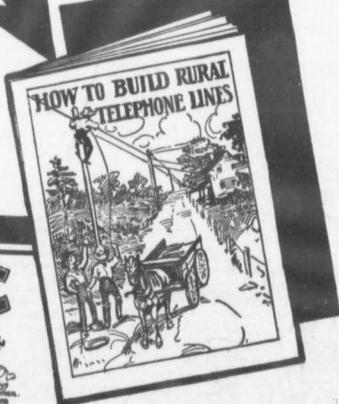
what you would have to do if your community wanted to organize and operate a little telephone company of its own—the precise steps it would be necessary for you to take if you yourself wanted to promote such a company among your own friends and neighbors. You know now without our telling you how, if you were able, to approach your neighbors with every fact—every detail—at your finger ends, you would be able to command their attention, interest and support on such a proposition.

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