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VOL. XXIX.

NUMBER 13.

# FARM AND DAIRY

## RURAL HOME

PETERBORO, ONT.

MARCH 31, 1910.



### SOME OF THE PRIZES AWARDED IN FARM AND DAIRY'S PRIZE FARMS COMPETITION

Would you not like to own one of these prizes? They are the cups that were won last year by those farmers who competed in Farm and Dairy's prize farms competition. The province was divided into four districts, fifteen prizes being awarded in each district. This year the final competition covering the whole province is being held. Next year we purpose holding another competition that will again be open to the province, excepting only this years prize winners. The giving of these handsome prizes was made possible by the liberal cash contributions towards the expenses of the competition given by Dr. Jas.

W. Robertson, by the De Laval and Empire Cream Separator Companies, Mr. E. G. Henderson, of Windsor, and the Gould, Shapley & Muir Co., of Brantford.

DEVOTED TO  
BETTER FARMING AND  
CANADIAN COUNTRY LIFE

# He Didn't Blame the Cows

He was one of these men who look for a reason for everything. When the cheese factory closed, and he started using a separator and sending his cream to the nearest butter factory, his pay cheques were not as large as he thought they should be. He investigated. His cows were milking well. He was getting a good price for his cream. Evidently he was not getting all of the cream. He decided to get a new separator. What make should he buy?

After looking carefully into the merits of a number of machines,

# He Bought a SIMPLEX

He was delighted with the results. The size of his pay cheques increased. His new separator turned easier than any other separator he had ever handled. He was never troubled with the bowl getting out of balance, because it was fitted with the SELF-BALANCING BOWL, an exclusive feature of the "Simplex" Separators. His wife was delighted, too. The new separator could be washed in half the time it took to wash the old one.

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### Warning to Buyers of Seed

Editor, Farm and Dairy—Instances have come to light this spring of corn-seed dealers offering so-called pedigreed seed for sale, when such seed is of very doubtful quality and of uncertain origin. Every spring we hear of cases where farmers have been induced to buy such seed, only to find that they have been duped. There is only one recognized bureau of registration of seed in Canada and that bureau is located at the headquarters of the Canadian Seed Growers' Association at Ottawa.

To be eligible as pedigreed or registered seed, all seed must be grown according to the regulations and uniformity and must be so certified by the Executive of a quality control board to be entitled to public recognition. All registered seed offered for sale by members of the Association must be accompanied by a certificate of registration.

Buyers who desire registered seed should insist that these certificates accompany such seed, otherwise they are leaving themselves open to the trickery of the seed sharp. H. Newman, Secretary C.S.G.A., Ottawa.

### Leaves Experiments to Public Institutions

Editor, Farm and Dairy—I was pleased to note in a recent issue of Farm and Dairy a few remarks by W. J. Kerr, particularly those in regard to our experimental farms. I call "ours" because I think these institutions are supported by the Government for research and experimental work in order to benefit us farmers.

Too many of us look upon these institutions as simply a bill of exchange on the country. This view is held on account of the ignorance of farmers regarding the benefits which these institutions confer upon some of us directly and upon us all indirectly. For instance, many farmers are growing every year varieties of grain that have been originated or imported and distributed by these very same farms which they despise.

If those who already do not do so would write to the Department of Agriculture for their free bulletins and reports, and put the knowledge therein contained into practice, our experimental farms would become more popular.

Like Mr. Kerr, I too have been humbugged with potatoes. One spring I sent for a number of varieties, and must have received them from the same bin that he did. At last rate, in the fall I had a barrel of scabby potatoes and my experience, since which I intend to let our experimental farms experiment for me.—James Ferguson, Carleton Co., Ont.

### Silo Corn for Carleton Co., Ont.

L. H. Newman, Sec. C. S. G. A., Ottawa.

Successful farming in the county of Carleton depends very largely upon crop for silage purposes. In Carleton the silo is evidently gaining in popularity. The great question for the corn grower is what variety will give the greatest food value per acre.

A good ensilage variety is one that produces a large amount of fodder with a liberal amount of fairly well matured grain. There are many different varieties of corn, but these may be divided into two classes, namely, Flints and Dents. The dent varieties are natives to southern districts, where the growing season is much longer. They are characterized by deep kernels with a rough or dented crown. The shallower the kernel, the sooner will the ear mature. This is the reason why our shallow kernelled

\*An extract from an address delivered at Kinburn on the evening of Feb. 23.

flint varieties will mature so much earlier and may, in fact, be matured in our northern climate.

The dent corns, as a class, produce a heavier foliage than do the flints, and where early maturing types may be procured, these should give the greatest amount of good ensilage per acre, especially on the lighter earlier soils. Where the season is late and planting is delayed until early June, it is not recommended, however, that even the early types of dent corn be planted upon. In Carleton county, before frosts become dangerous. By this time, corn for the silo should be in a firm dough condition, otherwise the silage will not be good.

The objections to green silage are as follows: A large percentage of the water, which will lower the value of the fodder and is being handled for nothing, thus entailing considerable loss through extra labour; green silage is of much poorer quality, contains less substance and is likely to become acid. The quality of the dry matter, moreover, is of a lower grade, thus reducing the food value of the whole. Farmers should not be misled by the fine appearance of the fodder in some of these late varieties. They should keep in mind that an ear of corn which will reach the firm dough stage before harvesting is worth several feet of stalk for feeding purposes. It is better to sacrifice a little of the fodder for the sake of the grain and the advanced maturity of the plant as a whole.

The following varieties are recommended for the county of Carleton: Compton's Early (Yellow Flint) and White Cap Yellow Dent. Early Leaming and Early Mastodon also give good satisfaction on early soil, providing the season is suitable and seed of the right quality is used. The danger with these varieties has been the difficulty of securing the right sort of seed every year. Generally speaking, the White Cap and the Compton are the safest.

### Dairying Brought Up-to-date

Editor, Farm and Dairy—In going through the country I cannot help but notice that many farmers who used to let their cattle browse all day round the straw stack have changed their mind of caring for their stock and now upon entering their stables we find their cows all lying comfortably in their stalls with water basins convenient.

In many cases a fine pure bred dairy bull is kept and he is given the run of a box stall. The scrubs are out of date. In fact, the only scrub that is in any use about a dairy is the scrub-brush.

The erection of so many fine new milk houses in the dairy districts is conclusive evidence that the dairy industry is becoming more and more a science. In these buildings, which are separated from the barn buildings, all dairy utensils may be kept in a perfectly sanitary condition, and the milk is handled in a manner that would certainly prove encouraging to the dairy instructors who have so faithfully endeavored to forward the cause of the dairy industry. I trust that the day is not far distant when our own fair province will occupy first place in this interest.—M. L. Haley, Oxford Co., Ont.

The success of the short courses in Waterloo County was due in a large measure to the fact that the local Farmers' Clubs co-operated with the Dist. Representative. The members of these clubs took a special interest in the course, and it is through the time that the arrangements were so complete and satisfactory. At both the Galt and Elmira short courses this winter a different farmer was in the chair at each meeting.

# FARM AND DAIRY

## RURAL HOME

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Vol. XXIX.

FOR WEEK ENDING MARCH 31, 1910.

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### DAIRYING, FROM THE BUTTERMAKERS' STANDPOINT

H. B. Love, Waterloo Co., Ont.

**The Buttermaker must be a Man of Many Parts. Some of the Problems He Must Contend With. Points Wherein Producers—Farmers—May Well Pay Close Attention and Co-operate with the Buttermaker.**

DAIRYING is the leading branch of Canadian Agriculture to-day. Its products are valued at nearly \$100,000,000. Stop and think of this enormous sum! When we consider that Canada is only as yet in her infancy we may well look with pride towards the glowing future that the dairy industry has before it. For a buttermaker to look at the situation from his standpoint it should cause his chest to swell with joy to think that he is engaged in such a business. To him it is not only a business, but a trade, a science, a profession, accompanied by much hard labor and anxious thought. Dairying is full of problems, which come almost daily to the lot of the buttermaker.

The average farmer looks upon dairying merely as a side issue. He looks upon the creamery as a convenient place to send his cream during the summer when it becomes too hot for him to churn at home, or when too busy with other work to attend to it; and when prices at the corner store or on the market for dairy butter fall below zero. Farmers look upon the buttermaker as one who is in that position simply because he is not employed in some other calling and I have often heard them remark: "what a snap those creamery men have."

#### A BUTTERMAKERS' LIFE WORK

From the buttermaker's standpoint it is quite to the contrary. Dairying is or should be the object of his life's energies and interest. He must take an active interest in all its branches. He must know all the minute details of his work both practical and theoretical and work out his knowledge to the best of his ability. He must know the markets of the world. He must buy right. He must sell right. He must be progressive, tactful and honest in dealing with his patrons. He often has to listen to a great deal and say nothing or if he does reply, he must soften his speech very materially and overlook numerous defects on the part of the producers.

When a man—a buttermaker—has about 300 farmers to please, not to mention the buyers and the consumers who are becoming more critical every year, he must needs be master of the situation. Again, to run a large creamery a buttermaker must be an engineer and a mechanic of no

small means; for, unless he has an engineer to do the work, he is often called upon to do repairs to engine, boiler or machinery. In brief, a buttermaker must be almost a genius, to do what is sometimes expected of him.

#### BLAME FOR THE BUTTERMAKER

A certain farmer complains that his herd is making only about \$2 a cow per month. He at once blames the buttermaker, who advises him to test each cow individually for a month or a year and find out what they really are doing. This, the farmer complains, would be too much expense, and would take up too much time. When asked what breed his cows are, he replies: "Oh, just common grades of no particular breed." When asked why he does not try one or other of the

it is essential that the buttermaker know what he is talking about. He can do a great deal of good service by visiting his patrons, or by having a friendly talk with them when they come to the creamery. It has been said that "the less the patrons know about the business the better it will be for the manufacturer." This may be the case with a creamery owned by a private individual, but not so with a co-operative concern. I find from experience that the more the farmers know of the detail and working of the business, the greater will be the interest taken in it, and they then have more confidence in the buttermaker and management.

I regret that I was unable to be present at the creamerymen's meeting held at Guelph in December last when the question of "covering the other fellows territory," came up for discussion. It is not always the buttermaker who is to blame for this kind of work. When he is hired by a proprietor or a creamery company, he is expected to canvass for and get as much cream as possible providing that the cream will pay for the handling.

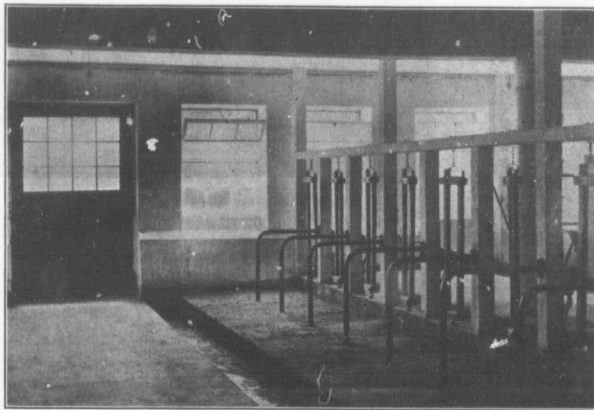
#### DAMAGING OPPOSITION

Opposition to a certain extent is good for trade, but when carried to extremes it is the forerunner of evil, and the downfall of either one or the other—"the survival of the fittest." It would be far more pleasant for the buttermaker if the farmers in a given territory could be prevailed upon to produce more cream and thereby enable the haulers to secure a load without the long drives which some of them have. Then there would not be any necessity for covering or overlapping the ground covered by a neighboring creamery. Prof. Dean hit the nail on the head in his address to the dairymen at St. Thomas in January, when he said: "We want more cream per cow per

acre and more butter-fat per gallon of cream." It is to be regretted that more producers do not avail themselves of the opportunities afforded them by being present at such meetings.

#### A WIDE VARIATION

When we consider that the cream from 235 patrons varies in fat content from 10 per cent. to 52 per cent. butter-fat, and the average for the whole year is only 26.1 per cent., we may well consider the advisability of securing a standard for the percentage of butter fat in cream delivered to creameries, and the individual can system for collecting the same. One patron keeps nine cows on 25 acres and in six months produces 131.5 lbs. of butter-fat per cow, or 47.3 lbs. an acre.



The Ideal in Light and Sanitation in a Cow Stable

Our ideals as to what constitutes enough light in a cow stable are in dire need of being brought up to date. There are exceedingly few, if any, stables that have too much light, whereas hundreds upon hundreds of stables are so dark and unsanitary as to be a positive disgrace to their owners, and a serious menace to the health of stock. A section of the stables at the Canadian Experimental Farm, Ottawa, is shown in the illustration. Why not have more window space in that stable of yours? It would pay.

dairy breeds, he replies: "What use would they be to us farmers who want beef steers?" This is but one common case of simple ignorance or lack of education on the principles underlying profitable dairying,—a man wants to breed beef cattle and go in for dairying with a herd of scrub cows bred from a scrub sire. This example strongly emphasizes the necessity for farmers to specialize either in dairying or beef raising and to let the other severally alone, instead of making a miserable failure of both.

#### THE BUTTERMAKERS' POSITION

It is necessary then that the buttermaker be in a position to give instruction and to educate farmers along dairy lines. Before attempting such

Other patrons with more cows and 100 acres produced less than 10 lbs. of butter-fat an acre. This is conclusive proof that the small dairy farm has a decided advantage over the larger ones.

DAIRYING ON HIGH PRICED LAND

In some of the dairying countries of Europe where land is rented at \$15 to \$25 an acre per year, the farmers have to work every inch of it to good advantage to make it pay. There, we see cows tethered to a stake by a rope or chain and allowed only to eat from a certain area—not roaming all over the field eating a little here and a little there. These dairy cows eat up clean, everything within their reach. Then the stake is moved and they have a fresh patch to work on. By the time a field of two or three acres has been covered in this way the grass has had time to grow on the part which was grazed first, and the cows go through the same process again and again. Many farmers keep one, two and sometimes three cows an acre on the Island of Jersey. They have learned the art of intensive farming. They make large profits from small farms.

SUPPLY AND DEMAND

As the population of Canada increases, the demand for dairy produce will be greater than the supply if the farmers do not see to it and produce more milk and lessen the cost of production. If we do not do this, other countries will be called upon to supply us with dairy products, which should have been produced within our own Dominion and instead of an exporting country, we shall become an importing country. But, with united effort and co-operation on the part of Canadian farmers, with increased production in the older provinces, with the advent of dairying in the West where the soil is showing signs of depletion from over-cropping, with the growth of the industry in the valleys of British Columbia and the opening up of the great clay belt of Northern Ontario I do not hesitate to predict that in the distant future, Canada will lead every other country in the output and wealth of her dairy products.

Pruning the Apple Orchard

J. C. Harris, Ingersoll, Ont.

In your young trees, do not start more than three or four main limbs and avoid crotches as much as possible. If you want young trees to make fast growth and have large trunks and limbs at ten years of age, do not trim heavily or head back. I only trim enough to keep the tree symmetrical and balanced, cutting out only the cross limbs and a few suckers. If your trees grow fast, you must leave plenty of top which will spread the root system and have an abundance of sap flowing up trunk and limbs. As an example, I grafted a number of Wealthy (a slow grower) trees over seven years ago to Baldwins and Greenings (fast growers). The trunks and limbs of these grafted trees to-day are about double the size of the Wealthys alongside in the same row. A tree pruned heavily annually will make little growth.

After your trees are well into bearing keep them open to admit sunlight and air to give plenty of size and color. Encourage fruit spurs along the limbs so that the sunlight may get to almost every part of the tree. Endeavor to get all the bearing space possible in your tree, but by trimming do not have an abundance of fruit spurs in any one part.

In pruning the old neglected orchard, a few fair-sized cross limbs will have to be taken out. Cut these on the under side of large limbs and nearly horizontal if possible to avoid these fresh cuts holding the wet and rotting. After these cross limbs and dead limbs are cut, commence with a ladder on the outside and thin the ends of branches to admit sunlight and air freely to all parts of the tree. Encourage fruit spurs down the limbs on the inside of the tree to get all the bearing space you can without crowding.

To sum up: If you want fast wood growth, leave plenty of top; if you want good large fruit from your old trees and plenty of it, trim rather severely each year.

Economical Management of Hogs

S. J. Goodlife, Kings Co., N.B.

Our main business as far as pigs are concerned is the raising of litters to supply Agricultural Societies and others with pure bred breeding stock. I used to fit pigs for the Amherst Winter Fair and in 1905 we took the first three premiums for dressed carcasses in pairs.

Those pigs were from April and May litters. We put them out on a rape field as soon as possible. In addition to the rape they received skim milk. In the fall they were brought to the piggery and fed mixed shorts and crushed oats with skim milk for about two months. Their dressed weight averaged 160 lbs. a piece.

HANDLING BREEDING STOCK

Our breeding stock we similarly turn out on to a pasture field as soon as possible in the spring. They are given shelter in portable buildings. Those buildings are on skids and are taken by the team to a field of rape as soon as this latter is ready. Once a day while out they get a small feed of middlings and what skim milk we can spare them. In winter up till this year we have made a prac-

made and last for ever. With three of sand to one of cement made alush wet and poured into forms made of two boards placed on their edge and cores attached to cleats nailed across the upper edges of the boards. You can soon make them. It is an endless job making wooden troughs.

I am not able to give but very few figures as to quantity of feed; but we give the pigs as much grass and rape in the summer as they can eat and the same with pulped swedes in winter; these with a little skim milk will enable the pigs to grow and hold their own.

Grain must be used with judgment to get the pigs in flesh. We used to use it lavishly, but of late we must learn to do without. The price of middlings eight years ago was \$18, and now it is \$28. Of necessity this means a change of feeding customs.

Sheep on the Average Farm

A. Stevenson, Perth Co., Ont.

Every farmer should have a few sheep. Weeds do not need to be trimmed in a sheep pasture. It is almost impossible for weeds such as sow thistle and burdock to get any headway whatever when sheep are around. They will keep them trimmed to the ground, and none of them will get a chance to go to seed. Sheep are splendid for running over the stubble fields; they turn into money what would otherwise have gone to waste.

They will even lick peas up off the ground. And, again, what would we do in this cold country of ours without woolen clothes?

Sheep furnish us with both food and clothing. Some say sheep are hard on pasture, and cattle will not pasture with them. Perhaps they are hard on pasture, but not nearly to the extent that some people think. A good many farmers do not have enough pasture over for their other stock. Then, when it becomes short, if there are sheep

around, the sheep get the blame for it. Of course sheep can graze closer than any other animal, and when pasture becomes short and dry, and there is very little growth, the sheep get ahead in the race.

SHEEP ON 100 ACRES.

It is a good policy to have a rough or an old pasture for the sheep. Keep them on this and by themselves until some of the harvest is off. Then they will feed on the stubble and not bother the pasture very much. I would not advise keeping too many sheep, about 10 or 19 breeding ewes on the average 100-acre farm are enough; that is, where mixed farming is practised.

Clover hay is the ideal feed for winter feeding. A feed of pea straw may be given once a day. If no clover hay is to be had, give good pea straw, well threshed, with a few turnips—not more than one fair-sized one to each ewe—with a little timothy once a day and a light grain feed each day. If any clover is being fed, then don't feed roots. They have a bad effect on the lambs. They will be very large and weak. Better save the roots until the lambs come, or until a few days before; they will help the milk supply. Give the ewes plenty of exercise. Feed in the open on the snow or dry ground. Let them run out and in as they wish. They will care for themselves.

Photos of farm buildings, farm houses and rural scenes are always welcome for publication.



A Thrifty Bunch of what is now Exceedingly Valuable Stock

These hogs went on the market three weeks ago at \$8.85 a cwt. Since then the price has soared still higher. Mr. Baker, of Durham Co., Ont., who owned the pigs illustrated, is one of those who has stayed by hogs through both low and high prices. Mr. Baker keeps his swine clean (as may be noted from the picture) by cleaning their pens each day, as one would do with cattle or other stock.

notice of feeding a steamed ration consisting of pulped turnips, middlings and bran. But owing to the excessive price of mill-feeds I found their use created a deficit on the pigs annual profit and loss account. Accordingly this year we are feeding just raw pulped swedes and a small quantity of skim milk, except to sows that had late fall litters and needed to gain up a little. Results so far are entirely satisfactory. Later I shall add shorts to the ration for the sake of the sow's milk for the litter but the pulped turnips entirely satisfies them.

EXERCISE

For exercise we give them a turn in the manure shed under the cow stable. We recognize that exercise for breeding stock is most necessary, winter and summer, also that a good dry bed is needed.

Our piggery floors are of concrete. On one side each pen is 10 feet x 12 feet, suited for sows with litters. They have portable wooden floors. Between alternate pens are gutters to which the concrete floors of the pens slope. Chaff is thrown in these gutters to absorb the liquid manure. Thus the pens remain dry and valuable manure is saved. The pens opposite are deeper and narrower with a raised bunk on the back with smaller portable wooden floors. Troughs are along the midwalk.

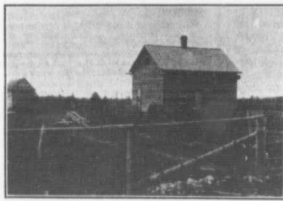
All the troughs are of concrete. They are easily

### Foundation Stock and Its Importance

Chester Nicholson, Wellington Co., Ont.

For many years the choice of foundation stock in our live stock industry has received great attention, but it is only recently that we have learned of the great importance of suitable foundation stock in the improvement of our crops.

Plants differ in their characteristics just as animals do. As in animal life, so it is in plant life,—like produced like. This might be more truly stated by saying that "like tends to produce like," for there is a continual variation in all



Prosperity (?) on the Sand Lands, Durham Co., Ont.

The illustration shows a typical farm standing on some of the better land in the north-eastern portion of Clarke Township, wherein much non-agricultural land is situated. The other illustration on this page shows a pasture field nearby on the same farm.

We cannot wholly understand the causes of variation although environment is one of the chief factors. It is by means of this law of variation that we are able to improve our seed. By continuous selection we can fix in our cultivated crops desirable characteristics such as productiveness, strength of straw, resistance to diseases, etc. It is through selection that we have the Dawson's Golden Chaff fall wheat and No. 21 barley, each variety having originated from a single plant which showed superiority over the entire crop in which it was growing.

#### ARTFUL SELECTION OF SEED.

In our work in the improvement of our crops probably the most important agency is the artful selecting of the seed. By continuous and systematic seed selection great results have been accomplished. In nature, selection is continually taking place through what might be called "natural selection," or the "survival of the fittest." In plant life and in animal life there is a struggle for existence going on continually. In nature we find that the strongest live and the weak die, or in other words, those plants most fitted for their surroundings survive. This is why we have to eternally fight weeds as they possess characteristics such as productiveness, vitality, etc., which enables them to survive, and often to greatly decrease the yields from our cultivated crops. Thus by aiding nature we can do a great deal towards preserving and improving upon the desirable characteristics of our farm crops.

Productiveness with good quality are the most important points that we have to consider in plant improvement. The choosing of a variety is one of the most important features to consider. It is rather difficult to say which variety of any particular crop is the best suited for a locality. One variety will do best in one locality while another variety will do best in one locality. I am working on the Banner variety of oats, as I have found by experiment that this variety does best in my district. At the Experimental Farm, Guelph, the Joannette and the Siberian have given the best results, yielding over 15 bushels more per acre than the Black Tartarian and some other varieties. At the Ottawa station, the 20th Century stands first, while Joannette stands 23rd, the 20th Century yielding 24 bushel 20 lbs. more an acre than Joannette, and so on with the different varieties.

The only way in which we can determine the varieties that are best adapted to each district

is to test them, side by side. I know of no way in which to carry on careful and accurate tests of varieties to greater advantage than through the medium of the Experimental Union. According to the last report of the Union I notice that experiments are now being conducted on 4,420 different farms in Ontario. The work of the Union is carefully and systematically planned so that it is not difficult to make accurate tests.

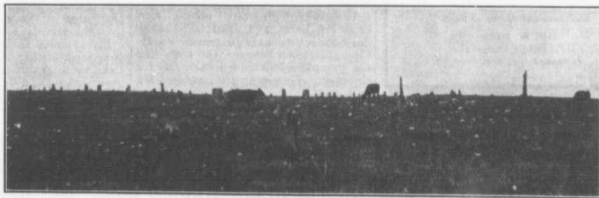
#### VALUE OF LARGE PLUMP SEED

The size of seed is also important. It is generally known that the largest, plumpseed seeds always give best results. During the past three years I have grown No. 21 barley which has taken first prize each year at our fair at Mount Forest. The crop of barley grown each year from this selected barley has shown a marked improvement over the crops grown from seed not so well selected. According to tests at the Experimental Farm at Guelph, results show that in every instance the largest seed produced the largest yields, and in the case of oats, where continuous selections were made for 12 years from heavy plump seed and from light seed, there was an average annual difference the first four years of 10.4 bushels an acre. During the next four years, there was an annual difference of 15.8 bushels an acre and in the last four years there was an annual difference of 22.4 bushels an acre. In every year the large plump seed produced a greater yield and a heavier weight per measured bushel than did the light seed, and the difference between the two selections became greater with each succeeding year.

#### Examine Clover and Grass Seed

T. G. Raynor, B.S.A., Seed Branch, Ottawa

Farmers should exercise the greatest care in the purchase of their seeds to see that they are getting pure, good vital seed. This cannot be determined unless a careful examination is made of the seed by spreading some out on a white piece of paper. One or two thimblefuls of red clover is sample enough. A thimbleful represents about 1,000 seeds of red clover. If there are more than five noxious weed seeds like buckhorn or ragweed in the sample it should not be offered for sale as it is contrary to the provisions of the Seed Act.



Pasture Land, which were it not for the Stones and Stumps would Blow Away

The photograph reproduced above was taken early in June last year, on the sand areas of Durham Co., Ont. Note the farm home also pictured on this page, and of which this field is a part. This land is quite unsuited for farming. It is well adapted to forest trees, for proof of which note the stumps that give evidence of recent luxuriant forest growth. In order to reforest these waste areas, the United Counties' Council of Northumberland and Durham approached the Ontario Government for a loan of money.

—Photos by an editor of Farm and Dairy.

Even 5: 1,000 spells 1,450 noxious weed seeds per pound or 10 pounds per acre and you have 14,500 noxious plants per acre.

This is simply outrageous and yet frequently samples of such seed are found being offered in the trade by dealers. Farmers too, in trading among themselves are getting even worse samples.

Old fashioned facilities will not do for the modern business. We do not want the old time cow, but let us have the best. Then give her the food that she always needs; give her the home that she surely requires; give her the air that her health demands, and give her product the care that its purity deserves and you will have accomplished all that can be asked of a good Canadian dairyman.—Dr. C. A. Publowl, Cornell University.

### Value of a Good Pure Bred Dairy Bull

C. F. Whately, Ottawa, Ont.

Dairy records prove conclusively the marvellous value of a good pure bred sire. Every dairy farmer ought to be keenly alive to both the value and economy of using only dairy sires for dairy purposes. Special dairy quality is a marked feature of some breeds and some families, their power and perfection come by reason of having been bred with a definite purpose in view from long lines of ancestors of like quality, veritable dairy kings and queens. Then, if breeds are crossed, or grades used on grades one can only be working at random, worse than that, actually demolishing the painstaking and patient building of the intelligent breeder who for years had striven for definite improvement.

What can be expected of a "scrub lull"? The very name, a term of reproach and contempt, is an instant index of his utter worthlessness. It is a good investment, and an excellent one, and will pay better than anything else on the farm to put \$150 into the right kind of dairy sire, for he will return practically 10 times \$150 within three years. There will be a gain in milking capacity of his daughters of about 1,000 lb. milk, over their dams, worth \$10 a year. They are likely to be more persistent milkers, while there will be a marked improvement in the general efficiency of the herd as the good blood, the better breeding accumulates.

Men seeking real herd improvement should cooperate; 15 or 20 men could club together under a six-year agreement and purchase three good lulls. With the herds in three groups, the members of each group could have one bull two years; then redistribute the sires, and at the end of the second two-year period change again. Thus there is the use of three good sires for three years each at far lower cost than if each man bought one himself.

Pure dairy type is of utmost importance, some breeds of animals may produce milk and beef, but not with economy, and net profit is our object in view. A trotter is not expected to haul a load of hay, nor a pampered pug dog to go deer hunting—economic milk cannot be expected from beef type. The sire must not only be pure bred,

but he must be a good pure bred. Mere entry in a herd book is neither a guarantee of personal excellence nor a sound reason for a lofty price. See that the dam and grand dams have been fine producers and that the sire is a good individual of dairy type, not coarse and beefy. Don't worry delving in the archives for records of five or six generations ago, the immediate ancestry counts.

The carefully selected sire should be used as a mature animal. A youngster is not ready for general or extensive use till three or four years old, about the age many are killed, but can continue till the age of 10 or 12, at least. Of untold damage, most serious detriment to herd improvement is the young, immature scrub sire running loose in a herd.

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**A 100 Acre Dairy Farm**

Wm. W. Whitton, Northumberland  
County, Ont.

Nine years ago, I purchased a 100 acre farm in the township of Seymour, Northumberland county. The farm is located in a fine neighborhood, but it had poor fences and very inferior buildings. A few days after I made the purchase, I met a friend who said, "Well, William, start right and you will come out all right." That was my policy. The following deals more pertain to date.

The first spring I bought \$25 worth of clover seed. I always sow lots of clover. I have since fenced the farm and in 1908 I built a new barn with stone basement 40 x 70 feet. The front cover illustration in Farm and Dairy last year (illustration in Farm and Dairy last year) the barn cost \$2,500. Last year I built a drive house, 22 x 40 feet. The floor of the drive house is cement which keeps down all odors from the hogs.

My farm and farm practices is so planned that I can keep 11 cows, six calves and colts along with some young cattle and grow 1,000 bushels of grain every year. From three to four acres of corn provide my cows with fall and winter feed.

My herd of 11 dairy cows was entered in the dairy herd competition conducted by the Eastern Ontario Dairy-men's Association last year. They won second place averaging 21.60 the six months of the test, 5,140 pounds. I April, I feed straw and corn stalks all winter and start them on hay the first of March. I am by no means a heavy feeder as I do not think it pays.

When my cows freshen, I start feeding hay, oat and barley chop mixed, two quarts, up until about May 24th, at which time I turn them out to graze up to their knees. Last summer my cows averaged \$61 a piece in returns from the cheese factory from April 10th to November 1st. They also made \$50 worth of Lutter.

Cows in summer time require plenty of grass, lots of salt and good water. They require to be milked at regular hours and by no means should they be abused.

The orchard illustrated on the front cover of Farm and Dairy last week has been set out only 10 years. Pumpkins are grown in the present day. The trees and the pumpkins are full for the cows. They are excellent feed for milk.

I always exercise great care in buying a cow. I go to a man that I can depend upon and pick the best from

his herd. I have to pay a good price for such cows, but they are the kind that pay.

**How to Detect Sweet Clover in Alfalfa Seed**

The detection of sweet clover in alfalfa seed is very important to the man buying seed; doubtless many are not aware that it is comparatively easy to detect it, if one is familiar with a few very characteristic points. To examine seed successfully one needs a small lens, magnifying five to 10 times, to determine the form of the seeds.

Alfalfa seeds are produced in spiral pods. Normally the seeds are "bean" or "kidney" shaped, and the scar of attachment is usually near the center of the seed. The over-crowding in the alfalfa pods causes irregular shaped seeds, so little dependence can be placed on the shape of the seeds of alfalfa; but the seeds of sweet clover are very regular in form as the seeds are produced singly in little pods. The scar of attachment on the sweet clover seed is usually on one end and the seed is nearly oval in form, and quite regular, never in shape like alfalfa seed.

By spreading a sample of seed thin on a sheet of paper, any seeds suspected of being sweet clover can be separated with the aid of the lens; and then, by chewing them fine, their taste will determine their identity without a doubt. Alfalfa seed has a distinct beany flavor. The sweet clover will taste like the sweet clover plant smells, strongly vernal. The form of the seed, and the taste, are the characteristic points to determine the identity of the seed; and with a little practice, especially if one compares the two, there will be no mistake in determination.

**Testing Seed Corn**

E. G. Montgomery and C. W. Pugsley, Lincoln, Nebraska

Testing every ear of seed corn will cost about five to 10 cents an acre, and may mean five to 10 bushels an acre increased yield. Do it now before the state not only tests the seed corn will grow. Reports from Farmers' Institutes in various sections indicate that the vitality is very low.

First make a preliminary test of your seed. Select 100 ears at random. Take three grains from each ear, each grain from a different part. Place 300 in shallow box for germinator. Use sawdust, sand or soil in the bottom. Cover with clean cloth or blotter. Scatter grains, cover with another cloth or blotter and put some more sawdust, sand or soil on top. Wet down thoroughly and keep in a warm place. Grain should be sprouted in four to six days.

If 85 per cent. of the grains germinate in the preliminary test, your corn is safe to plant. If less than 85 per cent. germinate, it will pay to make the ear test.

**THE EAR TEST**

Lay out all your seed ears side by side on floor, shelves or boards. You should have at least 12 ears for each you care. Keep them in such an order that you can easily locate any ear after the test is completed. This is easily done by marking the ears which occupy the first space of each row in the being each ear to correspond with the number of the squares in the tester. Prepare the germination box by placing two to three inches of sawdust, sand or soil in the bottom. Cover with white cloth marked in 2-inch squares.

Remove six kernels from each ear, two from near the butt, two from the middle and two from near the tip. Turn the ear partly around each time. Place the six grains from each ear in the germination box in the same order

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In His Claims

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APRIL 7th

that you have the ears laid out. Remove the husk with a knife blade, and be careful not to injure the germ.

Cover the kernels with a cloth, and over this place some sawdust, sand or soil. Keep well moistened and in a warm room. In four to six days germination should be complete. Discard all the ears that do not show a good, strong germination.

A handy rack for drying seed corn and for keeping track of the ears in testing may be made by the use of 2 x 4's and heavy smooth wire. The squares in the rack correspond to the ears in the germinator, so that it is not necessary to number either the ears or the squares.

A representative test after it has been in the germinator for three days (it should be left longer to get the best results) in which six grains from each ear were taken, showed some of the sprouts were weak, while with some the sprouts were vigorous. If you lose one acre out of every 400 acre made. It is a very simple matter to need be purchased. No material possesses rough lumber of which the boxes can be made, and cloth that can be used for the cover. The only thing that is necessary is to keep an accurate record of the ears and to keep the germinator moist and in a warm place.

I very much appreciate your efforts to produce such an up-to-date farm journal as Farm and Dairy. It should be a weekly visitor to every person engaged in rural pursuits. Enclosed is \$1 for my renewal.—Jas. Nicholson, Bruce Co., Ont.

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**Cow Sucks Herself—Dehorning**

Can you give us a satisfactory way to keep a cow from sucking herself? We have used a halter on the head, a girch behind the fore legs and a straight stick from halter to girch. It prevents sucking but we think it decreases the milk flow. We have heard of a straiting the tongue. Would it cure? Would there be any danger of bleeding to death? How far or how long should it be kept on and effective? Would this be cruelty to animals? Would it be worse than dehorning? Can you tell me what companies sell dehorning devices that are the best for local use? I would like to dehorn our own herd. What would stop bleeding in stubs of horns?—M. J. S. Grenville Co., Ont.

There have been many devices tried, some of which have proven effective in preventing cows from sucking themselves. Every effective device that I have seen tried has also been so unpleasant to the cow that she has fallen off greatly in her milk. My experience with cows that sucked themselves and the experience of most men with whom I have talked to this matter is that the best plan to follow is to fatten them up and send them to the block. It seems to be an incurable and certainly a most annoying habit. Splitting the tongue might possibly stop them sucking but I have no personal experience on the matter nor have I seen any one who claims to have had any success by this means.

Dehorners are sold by most hardware firms of any consequence. The operation is very simple, the effects usually quite inconsequential, the bleeding generally stops in ten minutes after the operation. If it is desired a hot iron might be used to sear the wound or some lime sprinkled thereon; or tar applied. However, in my experience they do as well when nothing is applied. The horn should be cut in such a way as to remove about 1-8 or 1-4 of an inch of skin at the same time.—J.H.G.

**Imaginary Diseases of Cattle\***

The names of the three old fallacies or superstitions known as hollow horn, loss of cud, and wolf in the tail, wherever and wherever used, seem to be invariably applied to some form of digestive derangement or disease of cattle having its origin in the stomach and bowels. It should be noted at the outset that the horns of all animals of the ox tribe are hollow. The horn cores are elongations of the frontal bones of the skull and the frontal sinuses, which are the larger of the air spaces of the head, are prolonged into the horn cores. When a cow is sick, if the horns are hot it is an evidence of fever; if they are cold it indicates impaired circulation of the blood, but these manifestations of sickness are to be regarded as symptoms of some constitutional disease and do not in themselves require treatment. The treatment should be applied to the disease which causes the abnormal temperature of the horns. The usual treatment for the supposed hollow horn, which consists of lancing the horns with a gimlet and pouring turpentine in the openings thus made, is not only useless and cruel, but is liable to set up an acute inflammation and result in an abscess of the sinus.

**LOSS OF CUD**

It is very common among farmers, when a cow or ox is illing, to say that the sick animal has lost its cud. If it is meant that the animal does not ruminate or chew the cud and that it consequently must be sick, no fault can be found with the expression. In most cases, however, the remark is intended to convey the idea that the loss of cud is a disease of itself. Such is not the case. It is simply a cessation of rumination, and frequently the first indication of some form of sickness, since ruminants stop chewing the cud when feeling much out of

condition. Loss of cud is a symptom of a great many diseases, and when its existence is detected should lead the farmer to try to discover other symptoms upon which to base a correct opinion as to the nature of the disease from which the animal suffers. No local treatment is required.

The so-called wolf in the tail is most generally treated by those who, as possessed of this fallacious belief by splitting the end of the tail with a knife, filling the cut with salt, and lancing it with a cloth. This imagined trouble is nothing more than a debilitated condition of the system, resulting in a relaxed or softened condition of the tail, especially at its extremity. It is evident that it is the constitutional disorder which requires treatment and not the relaxed tail.

When the immense volume and complicated arrangement of the gastric pouches of ruminants are considered, together with the great quantities of aliment required in the elaboration of milk and for the animal's nutrition, it is small wonder, in view of the enormous amount of food, that both the kind and quality of food, that disease of the digestive organs in these animals is of more frequent occurrence than in other classes. It is believed that a recognition of the facts contained in the foregoing statements will not only tend to dissipate any remaining belief in these old fallacies, but to a more humane and rational treatment of the various forms of indigestion or dyspepsia, of which those manifestations giving rise to impressions of hollow horn, loss of cud, and wolf in the tail are but symptoms.

**Forage Questions Asked and Answered**

After delivering an address on "Tough Forage for Dairy Cattle," at the recent Dairyman's convention at Belleville, Ont., Mr. J. H. Grisdale, of the Central Experimental Farm, Ottawa, was asked a large number of questions. Some of these questions and Mr. Grisdale's answers follow:

Q.—How much corn do you grow at the farm at Ottawa?

A.—We grow about 50 acres a year, and it takes quite a little while to cut it. I would like to see every farmer grow that proportion of corn. We have a 200-acre farm, and we grow 50 acres of corn, and I would like to see every farmer who owns a 100-acre farm grow 25 acres of corn. You will say, "Where are we going to get the manure?" That may be the trouble for the first year or two, but that you will soon right itself, because you will be able to keep a lot more cattle. We can grow roughage with any other country under the sun. We have ideal conditions for growing alfalfa in this country, and if we will cultivate our fields and crop them in the right way, we will have a solution of the whole problem.

Q.—Do you cut the hay and straw?

A.—No, I feed the hay long. I do not like to cut the hay but I would cut the straw.

Q.—Is green alfalfa better to feed in the summer than corn?

A.—Yes, it is better.

Q.—Is it a good practice to ensile alfalfa?

A.—No, I would not ensile alfalfa, my experience is that we lose anywhere from 50 to 75 per cent. I do not know just how, but I think that we lose that proportion, therefore I would say, feed alfalfa green or else cure it for hay. There is no difficulty in growing alfalfa in hay and alfalfa is such a rapid growing crop that if you have five acres and you are testing it green, by the time you get over a five acre field, the first side is ready to cut again, and had a herd of sixty cattle on a fourteen acre field last year and we made it carry them until the end of July. We divided that field and gave them eight acres on the one

side, upon which they ran and the other side we kept a strip alongside the fence and fed them, and by the time we got to the end the other was ready to cut again.

Q.—You did not really pasture them?

A.—We pastured eight acres and then fed the other six acres until the end of July, and then we gave them the whole thing.

Q.—Tell us how you manage the 200 pigs you have there, do you feed mangel?

A.—Yes, we feed these 200 pigs between 50 and 60 tons of mangels and sugar beets and we have 10 acres of pasture that we run as a pig farm.

Q.—Do you have 10 acres set apart for pigs?

A.—Yes, and we follow a three-year rotation. The first year roots, second year mixed crops, seeding down with different mixtures. We have tried two kinds of grass mixtures and clover mixtures. We cut a crop early if it is going to fall; if it stands up we let it ripen and then the next year the pigs are pasture on that grass and clover. They have runs running right across and in that way we get a variety of feed for the pigs. Each run is a little over three acres.

Q.—Do you use a horse planter for corn?

A.—No, I use a common seed drill.

Q.—How much seed to the acre?

A.—About half a bushel.

Q.—Do you plant corn in drills?

A.—We plant corn in rows 42 inches apart, 7 or 8 inches in the rows or in hills 42 inches apart each way. You will get just as good results and it is a little nicer to harvest in rows and a little easier to keep it clean in hills. If you have dirty fields I would advise planting it in hills.

(Continued on page 13)

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\*Extract from Circular 68, by A. J. Murray, M. R. C. V. S., U. S. Dept. of Agri.

## HORTICULTURE

### Fruit Growing in New Ontario

Chas. Young, Algoma District

In the past, fruit growing in New Ontario was attended with few failures. This was caused by planting unsuitable varieties and by planting on unsuitable soil. The heavy impervious soil, so common in New Ontario, is not adapted for the tree fruits, and it is quite a troublesome matter to make it suitable. All bush fruits do exceedingly well except blackberries. There has been a general belief that there is no use trying to grow fruit in the north. This impression has almost entirely disappeared, chiefly owing to the perseverance of many who refused to accept this common opinion.

The effects of this persistence may be seen today in many of the older settlements where the orchard is bringing more money than the rest of the farm and which bids fair in a very few years to supply this vast district with all the more hardy fruits. In small fruits, this is done now and about the only difficulty is in winter fruit. Pears and grapes will never be a success here, that is at present. The cherries and plums can be grown at less expense than in the east, as many of the posts common there are entirely unknown here. The necessity for spraying is not apparent. With the information we now have we may quite easily grow all the fruit we require and some for export farther north.

### The Soil for Strawberries

W. T. Macoun, Central Experimental Farm, Ottawa

If possible, the site for the strawberry plantation should be chosen where the snow will lie in winter. A good covering of snow usually ensures a good crop of fruit. One of the most important requisites in a soil for strawberries is thorough drainage, as where water lies on or near the surface, the plants are sure to suffer either in summer or winter. While too much moisture is bad, too little moisture is unfavorable to the development of fruit, hence a soil should be retentive of moisture while not saturated with it. Warm soils, such as sandy loams, will produce early fruit, but friable clay loam will usually produce the best crops. Much, however, depends on the richness of the soil, as strawberries need an abundance of available plant-food to give the best results.

Soil which will grow good crops of roots will usually grow good crops of berries. A soil should be chosen, if possible, which does not bake naturally or which by thorough tillage may be brought into such good condition that it will not bake. It is difficult to keep the plantation free of weeds in soil that bakes and it is also hard to conserve soil-moisture in a dry time. That has been proved in a measure, by growing a crop of roots which have been heavily manured. After the roots or other crops have been removed in the autumn, the land should be stirred deeply, it being a good practice to use a subsoil plow after an ordinary kind for this purpose. By using the subsoil plow the soil may be loosened to

the required depth without bringing the subsoil to the surface, which would probably happen if it were plowed very deep with the ordinary plow. Clover sod plowed in the autumn is also good, the soil furnishes humus, but grass-land should be avoided as there is great danger of injury from the white grub. In the spring the soil should be brought into good tilth with the harrows and when it is thought best it may be plowed beforehand.—Extract from Bull. No. 92.

### The Use of Lime-Sulphur

The increasing importance of the lime-sulphur wash as an aid to fruit growers was well attested by the interest taken in Professor Harcourt's lectures on this insecticide and fungicide at the short course in fruit growing that was held at Guelph. The professor stated that lime-sulphur, as a spray material, is a compound made by boiling together lime (fresh stone) and sulphur, either the flowers or the finely ground flour. From 45 minutes to one hour's sharp boiling is sufficient. Once the lime has entered into combination with the sulphur, further boiling causes the wash to deteriorate in value and at the end of two hours the wash may be up to half its value than at the end of one hour.

There are two general classes of these compounds used, the home-boiled and the commercial brands. The home-boiled is usually made by boiling together 15 lbs. of sulphur and 12 lbs. of lime (fresh stone) in about 1/2 of a barrel of water. When boiled sufficiently well it may be up to 40 gals. and applied while warm. This gives a great excess of lime, which when the wash cools, causes the sulphides to crystallize, thus lessening the value of the spray. If crystallization takes place, heating will remove the crystals again. The excess of lime is useful as an aid to holding the wash on the tree and making it easy to see what you have covered. This wash is always used as a winter spray and is prepared at home.

#### COMMERCIAL BRANDS

The commercial brands are made in factories. In these a great excess of sulphur is used and they are made up in concentrated form and shipped to the grower who is directed to dilute for a winter spray at the rate of about 1 to 10 or 12, according to the make. As there is an excess of sulphur in these compounds, crystallization does not take place so that cold water can be used to dilute the spray and it can be applied cold. It has been generally found useful to add lime to these sprays in order to make them stick and to indicate the thoroughness of the application.

Home-made concentrated lime-sulphur is being used now as a substitute for the commercial brands. This is made by boiling together 50 lbs. of lime and 100 lbs. of sulphur in 15 gals. of water. When done boiling it is made up to 40 gals. This can be stored in barrels the same as the commercial article and diluted from 5 to 8 times for a winter spray.

As many factors enter into the question of the strength of a spray, there is a great variability in the strength of both of the commercial washes and lime-sulphur. A large number of were doing effectual work were gathered from various parts of Ontario and tested at the O.A.C. The average showed a specific gravity of 1.028 in the United States. Experiments made in a good winter spray should be. It would seem that the hydrometer testing a spray. Many times unnecessarily strong sprays are applied which are weak useless ones. By means of a hydrometer every barrel of spray applied can be made of uniform strength. If too strong, dilute; if too

weak, boil down. It will also form an accurate test for commercial sprays.—D.S.

Although I am not actually engaged in farming, it is refreshing to get a paper like Farm and Dairy. It seems to come right from the solid rock. It is sound and shows what the farm can be made.—Chas. Blake, Frontenac Co., Ont.

The popularity of Farm and Dairy is growing greater than any other agricultural paper published. This new feature Farm and Dairy has of conducting prize competitions in farming and dairying should certainly tend to improve farming and dairying throughout this Province, especially wherever Farm and Dairy goes.—W. G. Smith, Enfield, Ont.

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POULTRY YARD

Early Experiences of an Expert

Experiences of when he first started in the poultry business 27 years ago were related by Mr. A. G. Gilbert, Poultry Manager at the Experimental Farm, Ottawa, at the recent Poultry Institute held at the O. A. C., Guelph. Commencing with a four-acre plot, a house, three Plymouth Rock pullets and one cockerel, and a dozen eggs, nine of which were laid, Mr. Gilbert soon raised birds for the market which took everyone by surprise. At first he kept as many birds as possible in a tightly plastered, unventilated house, and fed them in the then most approved fashion.

But he got no eggs in winter. A friend advised him to put half the birds to another house. He did so and got a few eggs. Having learned by experience, he soon made such rapid strides that he was offered the position of Poultryman at the Experimental Farm. He accepted it and, with the increased facilities, showed a return of 17,000 eggs, 13,000 of which were laid from December to May. He could then speak and lecture to farmers by experience, and he has ever since held strongly to, and always advocates the doctrine of "making hens lay in winter when eggs are scarce and fetch from 45c. to 50c. a dozen."

He urged that farmers should not let the business of poultry raising be so much in the hands of the specialist, and should try to do away with the "middle men," who are unnecessary if the farmers will only work together properly. He quoted instances of farmers who were very hostile to poultry raising, had tried it, had succeeded and were most enthusiastic about it now, proving that if only the indifferent men could be influenced, every farmer could raise poultry to enormous advantage.

A question was asked: "Is winter laying due to breed?" "No," said Mr. Gilbert, "it is due to strain and to treatment. As with milk cattle, when they are developed, so can poultry be developed to lay well. When you have got the strain, develop it."—W. J. S.

Rheumatism in Hens

A week ago I found one of my hens unable to walk, and it acted as if its back was badly injured. I gave a pill of red pepper and lard, and it is now coming on all right. Recently I found another lying apparently dead with water running from its mouth after discovering some life still in it, I took it to the house and forced a pill of pepper and lard down her throat, and then laid it on top of the furnace in the cellar. Today she is able to look after herself. Can you tell me what ailed her?—J. H. S., Ontario Co.

Quite likely the trouble is rheumatism. The red pepper and the heating on the furnace relieved the trouble for the time being. The only permanent cure is to remove the cause, whatever it may be. Keep hens in perfectly dry place. Give plenty of laxative food, such as roots or grass. Allow fresh air and exercise.—F. C. E.

Hens Sickening and Dying

I have a sick hen, have lost one. They are heavy; in fact, one was fat. They mope, then refuse to eat. The skin is quite yellow; the head not particularly pale; the droppings are greenish and a little white, but not foamy. Have had similar cases other winters. It does not appear to be contagious. They usually die in less than a week after becoming affected. Have been liberally fed on grain and fresh vegetables and mash occasionally.—E. W. H., Adirondack Co., Ont.

From your description the trouble is not such as to cause alarm. Frequently a hen becomes out of condi-

tion and acts as you state. It may be a case of indigestion or liver trouble. Give a spoonful of castor oil and a Carter's little liver pill.—F. C. E.

The Farmer's Friend—The Hen

One of the most practical and sensible articles that we have seen in a long time upon the subject of poultry raising is that by Mr. Geo. C. Conroy, president of the Connecticut Poultry Association, which he wrote for the managers of the Connecticut Fair to use in connection with the educational work of the exhibition.

Comparatively few farmers realize how profitable the keeping of hens on the farm may be made. The old-fashioned farmer considers the hens as something for the women folks to look after, as not worthy of a man's time and attention. He thinks they are a kind of nuisance anyhow, and although he does not object to good, fresh eggs for breakfast or fried or broiled chicken for dinner, he grudges brood chickens for food, and absolutely will not clean out the poultry houses, or take any pains to make the hens happy and comfortable which has so much to do with their being also profitable. With reasonable care and attention, the ordinary hen will lay a net cash profit of a dollar and a half a year. Estimating the hen's value at 75 cents, she pays a net profit of 100 per cent. The eggs are where all the grain and feed is bought. If the farmer had to buy all the hay and grain he feeds his cows, how many herds would pay even 50 per cent. profit? And yet the farmer is contented to keep cows.

The farmer has greater facilities for profitable poultry-keeping than the ordinary man; a field adjoining his poultry yards can be sown with wheat, oats and barley, and as soon as it ripens, the growing young chicks turned into it will save him all the trouble as to harvesting, and all the care as to feeding at the same time.

The writer of this article has made a good living for himself and family for 15 years from poultry keeping and has never kept over 500 hens to do it. And this has been done from commercial poultry keeping; that is, eggs and poultry sold at market prices. The prices obtained and the profits of 'fancy' poultry are beyond the belief of the average farmer. When Mr. Northup, in New York State, obtained \$1,000 for a rose-combed Black Minorca cock, it was then the top notch as to price, but since then the wife of Paderewski—the pianist—paid Mr. Kallerstrass of St. Louis \$7,000 for a half dozen White Orpingtons, and Mr. Charles Brundage, of Danbury in this State, has sold an Old English Game cock for \$20,000 because the chicks sired by that bird in one year have actually sold for an amount equal to six per cent. increase on \$20,000. But only a few men are skillful enough as breeders to obtain such prices, the statement above is made to show what is possible.

People are realizing more and more that poultry keeping is a business that needs special knowledge, and most of the agricultural colleges now give a short course in poultry keeping for the benefit of those who cannot attend the regular college course. Attendance at one of these courses will show the farmer where he is all wrong in his housing and feeding poultry, and will teach him methods whereby the profits may be materially increased.

There are seasons when the farmer finds the market glutted with milk or butter, and it is almost impossible to dispose of his products, but there is never a time when good, fresh eggs are not saleable, and the equiv-

alent of cash almost anywhere. On the farm all the green food for winter—cabbage, mangels, beets, etc., may be easily raised on an acre or two of oats, tied in bundles and stored in a rat-proof corn house, makes an ideal litter to throw in the scratching sheds, in which to scatter the wheat and cracked corn and thus compel the exercise which is so necessary to the production of eggs in cold weather. No fear that any of the oats will be wasted, the hens will prove most excellent threshing machines. Among the points in favor of poultry keeping for broilers usually pays the expense of raising the pullets to the laying age.—F.C.E.

Anna C. Webster says nearly all the disease of poultry, summer and winter, can be avoided under one or two classes: inherited or caused by unnatural conditions of food. If we classify them thus broadly, it may be simplifying matters for some so they can more intelligently stamp them out.

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### J. A. Caskey's Holstein Sale

Buyers from all points of Ontario, Nova Scotia and New Brunswick, the east, and from Manitoba in the West, attended the big auction sale of Holsteins held by Mr. J. A. Caskey at Madoc, Ont., on Friday, March 25th. The sale was a pronounced success. The cattle were of grand breeding and were brought out in good working shape. Col. D. L. Perry Wood, of Columbus, Ohio, wielded the hammer. The 43 head, many of which were young calves, brought \$6,760. The 24 mature cattle averaged \$223.75 each. The list of cattle and buyers follows: Jessie De Kol Echo, E. A. Lloyd, Stouffville, \$240; Countess Zoo De Kol, P. Allison, Chesterville, \$185; Heifer calf, Brown Bros., Lyn, \$85; Dolly Echo De Kol, Der Bros., Camp Chase, Ohio, \$295; Bull calf, W. L. Wood, Hillier, \$35; Jesse Inka Keyes, A. F. Stevenson, Russell, \$215; Heifer calf, Brown Bros., Lyn, \$80; De Dik Kerr Echo De Kol, Thos. Davidson, Spring Valley, \$175; Pauline De Kol, 2nd, A. D. Foster, Bloom-

field, \$155; Seymour Meethilde De Kol, R. L. Hicks, Delton, \$150; N.B., \$250; Heifer calf, James Seymour, Boleycow, \$100; Sylvia, Wort-Brown, \$100; Frankford, \$20; Bull calf, Lula and bull calf, W. A. Meadows, Port Granby, \$235; Jessie Inka De Kol, B. E. Hagerman, Minto, \$270; Ottawa Echo De Kol, R. A. Heron, G. H. Wellman, Kingston, \$225; Bull, De Bik Kerr Cornucopia, J. Seymour, Boleycow, \$250; Bell Echo Cornucopia, \$150; Inka Jewel Echo De Kol, Dorothy De Kol, H. H. Norwood, \$235; \$210; Heifer calf, S. H. Lane, Winnipeg, \$20; Inka Jewel Echo De Kol, W. H. Smith, Winnipeg, \$125; \$150; Countryman's Cornucopia, G. H. Wellman, Kingston, \$170; Beautiful Cornucopia, Mr. Banks, Weston, \$185; Brothen, De Kol Cornucopia, A. F. Stevenson, Russell, \$115; Inka Jewel A. F. Stevenson, Russell, \$115; Beta Cornucopia, J. R. Anderson, Mountain View, \$300; Dolly Echo Cornucopia, \$130; Debrah Cornucopia, Thos. Curtis, \$125; Lula Cornucopia, D. C. Platt, Millgrove, \$140; Dolly Sly Cornucopia, A. Derrick, Merrickville, \$75; Bull calf, \$45; Duchess Echo De Kol, G. A. Brothen, \$35; Beautiful Cornucopia, heifer calf, Brown Bros., Lyn, \$70; Jessie De Kol Echo, bull calf, S. Elliott, Tweed, \$35.

The great bull Sara Jewel Hengerfeld's son, sold for \$400 to Mr. B. E. Hagerman, Minto.—G. A. B.

disease almost invariably comes on after the horse has been resting two or three days during a storm and kept on full feed. Reduce the grain at least one-half while the horse is not at work.

Founder is caused from too much feed, a sudden change of food, or a warm. Distemper is especially liable to attack the young horses in the spring of the year, just when their services are most valuable. This disease is contagious, and care should be exercised against exposing the young horses to the infection. The most common way that young horses get this disease is when they are taken to town and allowed to drink out of public watering troughs and tied to

of gravitation, supplying the horse and then flowing on to the barn. Water is before the cattle in individual drinking basins. In addition, two large troughs in the yard are full of water at all times and stock have access to it when outside. The supply of water is so liberal that much more of it runs to waste than is used.

In addition to the crops ordinarily found upon dairy farms, Mr. Duncan, the Jersey breeder at Don grows silos, having a combined capacity for this crop. Silage is fed extensively. In winter the milch cows are given silage, cut pea straw and hay, roots and grain, all being mixed together several hours before feeding. In addition to the meal ration provided for each cow alike in this mixture, the herdman uses a mixture of shorts and bran and pea meal doles out to the fresher cows such increased meal ration as serves to meet their requirements.

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

## New Dairy Books

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If you want some good, clean seed oats, lots or more, at 70c a bushel (bags 20c each, plus 3 bushels) F. G. B. Tinto, White Abundant, Sensation, Waverly, Prince Royal. Send for samples.

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"GOLD" Brand Alfalfa Clover . . . per bush, \$13.00  
"OCEAN" Brand Alyka Clover . . . 6.00  
"SUN" Brand Red Clover . . . 6.25  
"FANCY" Brand White Clover . . . 17.00  
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We also quote No. 1 Government Standard Alfalfa, Alyka, Red and White Clovers and Timothy at 50c per bushel less than above prices. When ordering, remember bags—25.

If you order 200 lbs. or more of clover and timothy, we will pay the freight in any railway station, in Ontario, east of Sudbury.

### SEED GRAINS

PRESENT PRICES. per bush.

Mandachauri Barley	95
Two-Rowed Barley	1.10
Black Tares	2.25
Emmer (40 lbs.)	2.10
Buckwheat, Silverhull	1.10
Corn: White Cap, Pride, North, Red Cap	90
Cleod's Early	25
Corn: Compton's Early, Longfellow	25
Smut Nose, North Duke	1.25
Peas: Canadian Beauty	1.25
Black Eye	1.40
Potatoes: Early Ohio, per bag	1.25
Carman, No. 1	1.00
Wheat: Wild Goose	1.40
White Russian	1.40

### Forage Plants

per lb.

Japanese Millet	5c
Southern German	4c
Hungarian	3c
Casper's Dwarf Essex Rape	3c
Dwarf Essex Rape	7c
Sand or Watly Vetch	2c
Thousand Headed Kale	19c
Sorghum or Amber Sugar Cane	5c
Sunflower	5c
Evergreen Sweet Corn	5c

### Fertilizers

per 100 lbs. per ton

Muriate of Potash	\$3.95
Sulphate of Potash	4.50
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Animal Manure	1.50
Nitrate of Soda	27.50
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### Spring Care of the Farm Team

Spring is at hand and it is time to be getting ready to put in the crops. Among other things to think of in this connection is the matter of getting the horses into condition. The first work in the spring is the hardest of the year, and the horses are the least prepared to do heavy work. To be deprived of the use of a horse in the spring is serious, even though the horse is not greatly depreciated in value or lost entirely. Young horses, especially, should be broken and given some work during the winter and should be fed some grain. This will toughen their shoulders and at the same time they will have become accustomed to grain and will therefore, be less liable to colic, and in every way better able to stand the work.

A sudden change of food in horses is always dangerous, but to start a colt in on grain, with heavy work, that has never had either, is almost sure to be disastrous. A young horse especially cannot stand heavy pulling all day on soft ground unless his shoulders are well hardened by regular work in the collar.

Here are a few suggestions which will be well worth remembering: When a horse is tired he is much more subject to colic. Do not change the feed on the horse during heavy spring work. There is much more danger in feeding corn or wheat than there is in feeding oats. Water your horses when you first bring them in from the field; then let them eat hay for a half hour, and give them their grain last. Pull their shoes off while doing the spring work.

Remember, the horse will have a heavy coat of hair, and will, therefore, sweat easily and be all the more likely to catch cold and get pneumonia. For the first week or two bathe the neck and shoulders with hot water every night and after the day's work is done. See that the collar fits snug tight, that the hames are buckled up to be scalded, and harnessed without a pad than with it. If the horse gets sweated, he will have to be laid off for several months. Guard against that dangerous disease—astoria. This

### From Seven to Nine

As we are unable to secure pigs for premiums in return for clubs of new subscribers to Farm and Dairy at prices formerly paid, we are obliged to raise the club from seven to nine new subscribers.

Since March 10 note that it requires a club of 9 new subscribers to obtain a pure bred pig. Circulation Manager, Farm and Dairy, Peterboro, Ont.

hitching posts where other horses have been tied that had the disease.—G. H. Glover, D.V.S., Colorado Agricultural College.

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The undersigned will sell at public auction on lot 11, in 7th concession of August, on APRIL 28th, 1910, the following chattels: Two work horses, one brood mare in foal, one seven registered Holstein cows, one stock bull, Francy 3rd's Admiral, one light grade cow, 10 sheep, a number of calves, a quantity of hay and grain, and all farm implements. Sale to commence at One O'clock. All stock in good condition and of good quality.

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from the corn sets the steel, and they soon rust out. There is always a large amount of waste envelope around the edge caused by frost. A CONCRETE silo is absolutely no waste of corn. Costs less to build than steel silos, and there is no rust. Send for Catalogue. We manufacture a complete line of Concrete Machinery.

Any size with the London Adjustable Silo. Steel Silos have a very short life, as the steel is so liable to rust. A CONCRETE silo is absolutely no waste of corn. Costs less to build than steel silos, and there is no rust. Send for Catalogue. We manufacture a complete line of Concrete Machinery.

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## Our Legal Adviser

**ANXIOUS ABOUT SURVEY**—By two lots but on A's you do wanted a blind line run. A agreed to pay half, the old line being almost obliterated, and besides he wanted other lines run, which this would necessitate. Old line was a measurement by township surveyor according to Crown Patent, two years ago, and was undisputed until last winter, when B entered suit against A for trespass, but later dropped it. The P. L. S. employed two of his line nearly five chains off south end of A's lots and added to B's. On west side, however, P. L. S. took land from C and added to A's. This is contrary to patent description too, but as C would pay no share of the heavy cost, A has no objection to this line, which Council has recognized as road allowance and granted money on. A wishes to reclaim land lost on south. P. L. S. says A expressed satisfaction with his survey, and A, fearing interested persons may corroborate this false statement, wishes to run lines for fear of its annulment and future trespass action. A fence is necessary on west side. If A puts fence on accepted line, disputed only by B, it is considered by Crown as his acceptance of all lines run by P. L. S. The work of two early provincial surveyors met here but did not agree.

Would A gain or lose by delay in re-survey of blind line. Death or emigration of witnesses being likely to result favorably to A.)—Rural, Frontenac Co. Ont.

A is not bound to accept as conclusive the lines run by the land surveyor. Even if A expressed satisfaction with the survey that, in our opinion, would not affect the matter. It is a question of fact where the lines should be properly placed and A is entitled to get other surveyors if he sees fit. A can place his fence on the line as run by the surveyor between himself and C without being considered as accepting the line as run between himself and B.

A is not bound to act promptly in the re-survey of the blind line, but very long delay on his part might be used as an argument that he had accepted the recently made survey.

**DRAIN FROM CHURCH**—There is a church to be built on a lot adjoining my farm. The building committee intends to lay tile around the foundation wall to drain off the water from the building. The lot on which the church is to be built is almost a dead end towards the street and along the roadside until they would get an outlet. They want to take the drain through my field, which is seeded down to clover. There is more of a fall through my field. Will I have to let them take the drain through my field? If so, will they have to pay me for damage?—G. H., Grey Co. Ont.

The church authorities have no right to drain the water across your land without your consent even if they are willing to compensate you therefor. It would be possible for the parties to proceed under the drainage act with the consent of the township council, but this is an expensive procedure and is not at all likely to be resorted to under the circumstances of the case. If such proceedings were taken you would have to be fully compensated.

## Fattening Horses Rapidly

In one of the large horse feeding establishments of the West the following method is practiced. The horses are purchased when their teeth are flouted and they are all put in the barn and fed gradually, as great care must be taken for a few days to avoid colic. It seems most profitable to feed them grain about five times a day, due to the fact that the stomach of a horse being proportionately smaller than the stomach of a cow, he needs his feed in smaller quantities and oftener. The hay is placed in racks so that they may have access to it at all times. They are given

all the water they will drink twice a day. The following method is used in feeding the grain: Corn is given at 5 o'clock in the morning; water at 7; the hay racks filled at 9 o'clock, when they are also given oats and bran, the proportion being two-thirds bran and one-third oats. Then at 12 o'clock they are fed corn again; at 3 in the afternoon oats and bran, and the hay racks are re-filled; at 4 o'clock they are given a second watering; and at 6 the last feed of corn is given. The proportion for each horse when upon full feed is as follows: Corn, from 10 to 14 ears at each feed; oats and bran, about three quarters each, making in all from 30 to 40 ears of corn and six quarts of oats and bran a horse per day.

The horses are not given any exercise. It seems impossible to give them all sufficient exercise, thus they are not given any from the time they are put in the barn until a few days before they are to be shipped. As a substitute for exercise, in order to keep the blood in good order, thus preventing stock legs, Glauber salts is used. This is found to be quite satisfactory and will in most cases prevent this trouble. It is mixed with the oats and bran, as in this way the horses eat it quite readily. These salts are fed about twice a week. They can be purchased very cheaply from the druggists who bought in considerable quantities. They are not so strong as the Epsom salts and they have a desirable effect upon the blood. The same firm also feeds oil meal. They claim that it aids greatly in putting on flesh; also that it gives the skin a soft, melon touch.

The mangers and feed boxes should be cleaned out twice a day, and the cobs and all other refuse thrown out behind the horses and taken out with the manure. The horses should be given sufficient time to rest their stomachs, and this can be done by giving the first feed at 5 o'clock in the morning and the last between 6 and 7 at night. Horses fed as described usually make good gains.

In more expensive than formerly and the price of wood shingles has advanced. One feels that what he requires is something that will be durable and can be easily and quickly laid.

In our neighborhood the majority of farmers are using metal goods, which present a fine, clean and neat appearance, and which can be laid by anyone in a very short time.

## Comparison in Favor of Farm

One of our exchanges has in its pages a controversy going on as to the comparative success of country and city boys in reaching high positions. The protagonist for the country boy gives the following figures secured by him in the United States:

CLASS OF MEN	CITY	COUNTRY
Presidents	..... 2	23
Governors	..... 4	41
Cabinet Officers	..... 15	111

This would seem to be very favorable to the country boy. To make the figures more useful there should be some statement as to the relative number of inhabitants found in the cities and rural localities from which the statistics are gathered. It is interesting to read the opinions of several prominent men who have spoken of the country environment as being more favorable. One railway president says: "Life on the farm is pre-eminently in my judgment, which develops independence and self-reliance and, therefore, I think, the spirit of achievement more than any other I know of." Another railway president remarks: "I believe that farm life lays a good and broad foundation for healthy vigorous manhood in both mind and body."

President J. Hill of the Great Northern Railway says: "My present home is on a farm and my principal reason for making my home there, rather than at some of the lakes or in the city, is that I have three boys of my own, I am trying to give a fair start in life. I believe there is no end of arguments that living on the farm gives the best chance for a growing boy. While my making the farm my home sometimes works an inconvenience to me, I realize that the benefits to my children are well worth the inconvenience to me of getting in and out between my office and the farm."

## Metal Roofing Stands the Test

W. E. Murdoch, Haldimand Co., Ont.

The question of roofing is very important, now that labor is much more expensive than formerly and the price of wood shingles has advanced. One feels that what he requires is something that will be durable and can be easily and quickly laid.

In our neighborhood the majority of farmers are using metal goods, which present a fine, clean and neat appearance, and which can be laid by anyone in a very short time.

I have a metal roof and an well satisfied with it. I intend using more of it this year, because the dust never collects on it and when it came through the wind storm in April last year without being injured in the slightest, it seems as if it would stand any gale and never leak.

**Fine Barley**—The two bushels of barley which Farm and Dairy sent to me for a club of four subscriptions received, it is fine plum grain. I am much pleased with it.—D. N. Anderson, Lambton Co. Ont.

## NORTHERN ONTARIO

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

One-ninth of the world's reported output of this iron 1888 was taken from Ontario mines.

New discoveries of undoubted richness are being constantly reported from sections far distant from the famous Cobalt. Yet a more certain reward 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 Construction, Lumbering, etc., afford work in abundance to those who have not the means to remain on their farms continually. These also provide a market for farm produce at prices unequalled anywhere.

Gocharn, the terminus of the T. & N. B. Ry. on the G.T.P. Transcontinental Railway, now under construction, is in 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

# MOVING PICTURES

OF THE WONDERFUL WORLD CHAMPION

## DAN PATCH 1:55

**ABSOLUTELY FREE TO STOCKOWNERS**



**It is a New Invention that you can carry in your pocket and show your friends instantly day or night, either once or a hundred times and without much candle or light. The original is the first successful moving picture ever taken of a World Champion horse since his wonderful race on the 29th of August, 1895.**

**A MILE OF 2400 MOVING RACE PICTURES OF DAN PATCH 1:55** and every picture shows the King of all Horses "in action as plainly as if you stood on the track and actually saw Dan Patch race." This is a distinct improvement over the old-fashioned moving pictures taken of a horse in one minute and fifty-five seconds. You can see his Thrilling Finish as he strains every nerve to reach the wire, and you can see his career take his way through the crowd and throw a beautiful track from the back seat of a high powered second all the way around the end of the race. You can see Dan Patch in a distinct and powerful automobile. You can see Dan Patch better than the actual speed mile because you can see Dan Patch before you for every foot of the entire mile. When first this wonderful picture was taken, this marvelous picture caused people to stand up all over the theatre calling "Come on Dan!—Come on Dan!"

This remarkable Moving Picture in the Most Romantic and the Most Thrilling ever presented to the public. It makes a part of the Original 2400 Wonderful and Sensational Pictures and makes them into a new and improved Moving Picture that you can carry in your pocket and show to your friends at any time, day or night. It does not need a machine and it does not need a current of land or any power.

**MY NEW MOVING PICTURES MAILED FREE TO STOCKMAN, postage prepaid, IF YOU ANSWER THESE THREE QUESTIONS**

1st. In what paper do you see my Moving Picture Offer? 2nd. How many heads each of Horses, Cattle, Sheep, Hogs and Poultry do you own? 3rd. How many acres of land do you own or how many acres of land do you want?

**IF YOU ARE NOT A STOCKOWNER AND WANT THE MOVING PICTURES SEND ME 25 CENTS FOR POSTAGE.** For Packing, etc., in Silver or Stamps and I will mail you this Wonderful Moving Picture of Dan Patch 1:55, The Fastest Harems Horse The World Has Ever Seen.

Address - - INTERNATIONAL STOCK FOOD CO., F. H. SAVAGE, Proprietor, TORONTO, CANADA. 49

## FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



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

**2. SUBSCRIPTION PRICE, \$1.00** a year, strictly in advance. Great Britain, \$1.25 a year. For all countries except Canada year's subscription free for a club of two new subscribers.

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

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

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

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

## CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed \$650. The actual circulation paper sent subscribers is about 1000 in arrears, and sample copies, various other accepted copies. No subscription rates are given. The actual circulation is about 1000. No subscription rates are given. The actual circulation is about 1000.

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 advertisers' reliability. We try to admit to our columns only the most reliable advertisements. Should any advertiser be dissatisfied with the treatment, we should we find reason to believe that any of our advertisers are unscrupulous, even in the slightest degree, we will discontinue their advertisements. Should any advertiser be dissatisfied with the publication of their advertisements, we will discontinue their advertisements. Should any advertiser be dissatisfied with the publication of their advertisements, we will discontinue their advertisements. Should any advertiser be dissatisfied with the publication of their advertisements, we will discontinue their advertisements.

## FARM AND DAIRY

PETERBORO, ONT.

## TRICKS IN THE SEED TRADE

It is difficult to adjust any trade so that there will not be misrepresentation in the goods offered. In the seed trade the temptation is strong and there is reason to believe that a good deal of trickery is practised. It is often done in such a way that it is hard to secure a conviction if it were tried. For instance the other day a seed dealer was offering some red clover seed of last year which would probably run three or four noxious weed seeds to the thousand, for 20 cents a pound. No grade name was given. Only the price served to indicate that the seed was represented as No. 1. This is unfair competition to other dealers who really have No. 1 seed to sell.

Again, one dealer sells his best grades at a certain price. Another dealer, who only handles inferior grades, says to the buyer: "This is my best seed," and he charges two or three cents a pound less than the first dealer, and yet there may be

fully ten cents a pound difference in the value of the seeds. Herein is where purchasers of seed should be able to judge the quality of seed in order that they be not misled and for the sake of a few cents a pound buy the cheap seed, which is often the dearest seed in the long run.

Then again it is alleged and there is ground for suspicion on this point that some dealers place good samples of seed at their front doors, but when you buy, you are given seed kept in a rather dark place and much inferior in quality to what you saw at the front door. Thus it is evident that we should be able to judge the seed we buy to see that it lives up to what is required of good seed. We should remember too that we have only seven days from the time we purchase seed to take an official sample so that if seed is wrong we may get redress against the dealer from whom the seed was purchased.

In every case buyers of seed should compare the seed they get with the sample they purchase by. Many dealers might take this advice too when they order from representatives of the wholesale houses. Furthermore, remember that it is a foolish policy to take notice of a lead seal on an open bag of seed, as inferior seed may have been emptied into such a bag.

## A COMMENDABLE BILL

Hon. Frank Cochrane is the author of a bill introduced in the Ontario Legislature entitled "An Act Respecting Town Sites," which provides that where any lot or parcel of public land, which has not heretofore been sold or staked out by the province is opened for settlement, one-fourth of such land shall be reserved for the province whenever subdivided for sale. It would have been better had the bill provided one-half.

The public is slow to recognize that it owns the undeveloped lands of the province. Hitherto speculators have been allowed to rush in when new land was put on the market and reap fortunes when the land should have been sold and the proceeds used for the benefit of the people of the province at large. This is how many millionaires have been created. The proposal to hold part of this land in order that the public may reap the benefit of its increased values is a move in the right direction. It shows that public opinion is becoming educated and that we are beginning to recognize and demand our rights.

## DAYLIGHT IN FARM STABLES

About 10 per cent. of the dairy farms visited by the members of the Ontario Milk Commission were reported to be totally unfit to be in the business of producing human food. In the case of probably 60 per cent. of these, an expenditure of \$10 to \$25, and a little extra work would effect an improvement of 50 to 75 per cent. Just why it is that any intelligent man is content to keep stock in stables little better than dungeons is hard to comprehend. Scores and scores of stables, yes thousands of

them, throughout the Dominion, are so dark and dirty and have so little ventilation that it is little short of marvellous that the stock contained therein thrives at all.

Very slight expenditures will change all this and work a marked improvement. Why is such improvement not made? It must be largely because owners of such stables through long years of association with such conditions, have little realization of the need for improvement. Many do not go so far as to brush down the cobwebs that accumulate, seeming to think that this is part and parcel of conditions that should go

Light and air above all things are needed in any stable. Without daylight, the air in stables cannot be the best. Small windows in old stables should be enlarged. More light should be put in. This question of light should receive first consideration when planning new stables. There is small danger of overdoing the matter in this particular.

The demonstration farm idea is developed to a considerable extent by Good Farms Competitions, such as those conducted by Farm and Dairy last year, and which are being continued this season. The practical information relative to modern farm practice as gleaned from inspection of these farms and made public through the columns of Farm and Dairy is of prime value to those who read. The essays by these practical and successful farmers, a series of which will shortly be featured, will be of even greater value. Although the competition from this standpoint is of most benefit to those who read, the prize winning farms themselves stand as object lessons, which may well be recognized as such in their respective communities.

What is the Ontario Government going to do with the request of the united counties of Northumberland and Durham for aid in reforesting the thousands of acres of waste land in the united counties? Here is a case where the Government, which has had the question of reforesting the waste lands of Ontario under consideration for several years, has deferred action so long that finally the counties have initiated the movement for reform which should properly have come from the Government. Now, that a definite proposal has been made to the Government, which, if it is accepted, need not cost the Government a cent, the question is what is the Government going to do about it?

There should be a spray pump of some kind on every farm where fruit trees are grown. One season's trial will prove its worth and the owner will wonder why he did without it so long. There are many different kinds of spray mixtures to use. Good ones may be purchased from manufacturers. Buy a spray pump, find out what mixture to use and spray, spray!

## Another Burden for the Farmer

(Weekly Sun)

Some rather startling figures were given by C. C. James in the address in which the Deputy Minister of Agriculture dealt with the decline in rural and increase in urban population of Ontario.

The change that has taken place is largely the result of legislation favoring certain classes of the community at the expense of agriculture. The balance between profit and loss is so nicely adjusted in all lines that a very little favoritism in one direction will make certain lines unduly profitable at the expense of others.

## Care with Firearms

(The Globe, Toronto)

If every handler of firearms could be taught never to let a gun for a moment point towards himself or toward anyone else, many of the serious and fatal accidents of each returning season would be averted. It is this habit that distinguishes the experienced sportsman from the stupid tyro, and the man of experience, after watching a friend with a gun for a few minutes, can tell whether he is a safe companion or a man to be avoided. The rule should never be relaxed. Even if a man has looked through the barrels and knows they are empty he should still be careful every moment to cultivate the habit of avoiding a position of danger. The man who intentionally points a gun towards another deserves no consideration, and should always receive the punishment rightly provided by the law for that offence. It is the man who is sure the gun is not loaded who is guilty in this class of accidents. The doubtful man never offends.

It is unpardonable to allow a gun to point towards a companion. This offence occurs most frequently in boats, when climbing over logs or fences, or when walking single file through the woods or on the open shore. It becomes specially dangerous when loading or in any way adjusting or handling the mechanism of the gun. The most common and frequent piece of recklessness is the lifting of a gun by the muzzle. This most frequently occurs in boats, and the lives and arms that have been sacrificed in this way would make an astonishing list. Modern guns have done away with the old danger of an unsuspected load, but they have tended to induce recklessness. The half-raised hammers and shining caps were a perpetual warning. And the modern hammerless gun is much more likely to be discharged by a jar or shock than were guns of the hammer lock. In addition to the careless handling of guns, there is the danger of bursting through an obstruction of sand or snow scooped up by the muzzle. A very light obstruction will burst a gun, and there is always the possibility of serious consequences.

Even when no blunder has been committed there is a possibility of danger. It is on record that a particle shooter was watching some wood-choppers, when a large chip flew from a log, striking one of the

**For the Farmer**

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hammers and discharging the gun. It kicked out of his hand, and, falling to the ground, was again discharged, the contents of the second barrel tearing away part of the sportsman's foot. In that case the hammers must have been down. If properly carried, the accident could not have occurred. Safety can be insured only by eternal vigilance, and it is unfortunate that so healthful a recreation is discarded by carelessness that is unpardonable.

**Depth of Cultivation and Soil Bacteria Activities**

Among the numerous agencies which help to produce a fertile soil, bacteria perform an important role. Comparatively little is known as to what extent these minute organisms play in their action on the soil. This much has been found out, that they are very necessary in maintaining and developing a fertile soil.

- The Kansas Experiment Station, in Bulletin 161, reports experiments on the influence of depth of cultivation upon soil bacteria and the results of these preliminary experiments suggest the following conclusion:
1. Deep plowing (eight to ten inches) tends to increase the number of soil bacteria in both sandy and silty soils.
  2. Deep plowing tends to increase bacterial activity. More ammonia is produced.
  3. Deep plowing tends to decrease denitrification, or the reduction of nitrates and the liberation of the free nitrogen.
  4. The volumetric method of quantitative bacteriological soil analysis has the following possible advantages over the gravimetric method: (a) It is more simple and convenient; (b) there is less danger of contamination; (c) the results are placed on a more accurate basis for comparison. The volumetric method can be used to advantage when comparative results are desired.
  5. Increased soil temperature increases bacterial activity.
  6. An excess of moisture in soil reduces the number of bacteria and is detrimental to bacterial activity.
  7. The maximum number of bacteria is found within the fifth and sixth inches. Either side of this zone the numbers of bacteria decrease.
  8. Due to certain conditions, different species of bacteria are present in soil, at different times in predominate numbers.
  9. Bacterial life and activity seem to rise and fall with more or less regularity. These periods of maximum and minimum activity are to a certain extent independent of moisture, temperature and are possibly due to the presence of bacterial by-products.

**Forage Questions Asked and Answered**

(Continued from page 7)

- Q.—What do you use for fertilizing for manure?  
A.—Just ordinary manure. We put on from 15 to 20 tons per acre.
- Q.—Rotted or fresh?  
A.—Fresh every time. Don't use rotted manure. A ton of rotted manure is not worth any more than a ton of green manure, and to make a ton of rotted manure takes two tons of green manure.
- Q.—Do you not get more growth from rotted than fresh manure?  
A.—No.
- Q.—Do you hoe any corn with the hand hoe?  
A.—Yes, we do, and I think it would pay any one to do it; you cannot get quite as close to the corn with a horse hoe. Being on an experimental farm we probably give a little more attention than the average farmer would and when our corn crop is off,

we want our fields to look as if we had been growing corn and that is what it does look like; there is nothing else there.

Q.—How do you mix millet and sorghum for fodder?

A.—I take about equal weights of Hungarian, millet and sorghum and use about 10 pounds of each and mix them together thoroughly and sow by hand 30 pounds to the acre. If you use Hungarian alone you want to use about 10 pounds but if you mix the three it is not necessary to sow quite so much.

Q.—You have plenty of men. Do you think it would pay to have these men cut the corn by hand?

A.—We have been experimenting with them for some years and we find that we lose about half a ton of corn by cutting with the binder and a man will only cut about an acre, and the men just work the regular hours, and if the foreman is not looking they do not get a bump on them.

Q.—Do you feed clover hay in connection with that feed?

A.—Yes, but not very much.

Q.—How many pounds?  
A.—Four or five pounds a day. We would feed more if we had it, but when you have 20 horses you would be astonished how many tons we use. You will get better results if you feed clover with the ensilage. Ensilage is not a good food in itself, but it helps other foods.

Q.—There is a fermenting element in silage that helps digestion. Is not the binder twine injurious to the ensilage?

A.—No; we never had any trouble except one time a fool calf thought that binder twine was hay and after we opened it we found a ball of twine inside.

Q.—Do you recommend feeding twice a day?

A.—Yes, we have tried it over and over again and twice a day is enough.

Q.—Do you pulp the mangels?  
A.—Yes, when we feed them with the ensilage; if you have a cow that is giving an extra supply of milk; for instance, I was testing a cow last year that was giving 65 pounds a day of 5 per cent. milk; that cow was working and I used to give her a little bit of mangels between meals and a little bit late at night. We encouraged her.

Q.—I suppose you would not pulp these mangels?

A.—No, I gave them to her whole.

Q.—Is there any rule for estimating the amount of corn in a silo?

A.—Find the cubic contents and multiply that by about 45 and that will give you the contents, 45 pounds to the cubic foot after it has settled. If it has settled for a long time it may weigh a little more; the height of the silo has something to do with it, but there are not many low silos.

Q.—That would be a thirty foot silo?

A.—Yes, if you get a forty foot, the silage is densely packed at the bottom.

Q.—Do you prefer finely cut ensilage or coarse?

A.—The finer it is the better and the more the cattle will like it.

Q.—Is there more leakage?

A.—I think there is.

A member.—I am feeding finely cut ensilage and I find the cattle like it better than the coarse.

Q.—At what stage do you prefer to cut the corn?

A.—About a week after you would like to eat it. I do not like it ripe.

Q.—Would you run the risk of frost?

A.—I have not found that frost does a great deal of harm except that you lose weight.

I like Farm and Dairy and would not like to be without it. I intend getting some new subscribers at our factory meetings which will be held soon.—B. E. Roy, Hastings Co., Ont.



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IS THE  
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Yes, but where will you get it? Farm and Dairy has secured a quantity of seed corn that is guaranteed. It is from a reliable and well-known source in the corn belt of Essex Co., Ont. This seed will be delivered on the cob if requested. Seed corn of the following varieties is available:

**King Philip (Flint), Early Leeming  
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Farm and Dairy offers any one of these varieties as follows:  
**Two Bushels for Four New Subscriptions to Farm and Dairy; One Bushel for Two New Subscriptions** (Subscriptions to be taken at \$1.00 each). The corn will be delivered f.o.b. at the grower's station in Essex County, Ont.

This great offer means much to you as a corn grower. It means that you can secure reliable seed corn, which will insure you, so far as the seed is concerned, a good crop of corn this coming season, all for the little trouble of canvassing your friends.

If you will grow corn during 1910 take advantage of this offer. Don't put it off until to-morrow. Take this matter up now. Show Farm and Dairy to your friends. Tell them of its many bright featured supplements and of the special articles from prize winning farmers that will be featured during 1910. They are sure to subscribe. Name the variety of corn that you want, whether on the cob or shelled, and send in your subscriptions at the earliest possible date to

**Circulation Manager  
FARM and DAIRY - Peterboro, Ont.**

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, 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.



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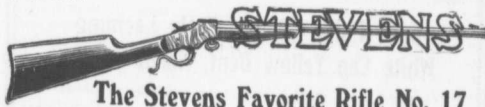
We guarantee it to be the most accurate .22 caliber Repeating Rifle in the World—remember it carries the Stevens' Guarantee.

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CROWS, HAWKS, WEASELS, GOPHERS,  
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Remember, we guarantee this rifle to be the most accurate .22 caliber Repeater in the World.



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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, to ask questions on matters relating to butter making, and to suggest subjects for discussion. Address letters to Creamery Department.

### More about Cream Testing

James Stonehouse, Ontario Co., Ont.

The question of cream testing has apparently reached an acute stage judging by the articles appearing in Farm and Dairy during the past few months on this question. One would be led to think that a great injustice was being done to the patron sending rich cream to the creamery. Whether there is injustice or not under the present system of testing, creamery men, generally, will admit that patrons sending the richest cream are almost invariably the best satisfied with the creamery.

The 17.6 c.c. pipette should, undoubtedly, be condemned and prohibited for testing cream, as is not so, however, that we are going to cure all the evils by discarding the 18 c.c. or the 3 c.c. pipette and adopting the scales. Farm and Dairy of March 10th gives the data from the Agricultural College of Ithaca, N.Y., showing a remarkable difference in results between testing by the 17.6 pipette and the scales. Such discrepancies have not been found in comparison made at the Kingston Dairy School by Mr. Singleton during the past two or three years, and while not disputing the data from Ithaca, N.Y., would it not be a satisfaction to hear from Mr. Singleton and have him give us some conclusions which he has reached?

I have understood Mr. Singleton to say that where the 9 c.c. was used and the work carefully done, the difference between that and the scales was slight. However, it would be more satisfactory to have data from our own institutions and let us see how results compare and if results warrant the change we will have to discard the old method. There is no doubt but what a good deal of carelessness has been allowed to creep in in connection with testing by the pipette and where an operator does not rinse his pipette, a double injustice is done the patron with rich cream because a much larger proportion of rich cream sticks to the pipette.

The 9 c.c. pipette is much more satisfactory than the 18 c.c. because of water to be used in rinsing out the pipette whereas the old style of bottle and where an operator does not pipette only allows for a small proportion of water which is not sufficient to clean out the pipette.

Where the patrons of a creamery are all sending fairly rich cream and the testing is carefully done, I do not consider that much injustice is done to anyone and we know this, that the patron sending the rich cream always gets the best price for his cream one month and down the next, as is nearly always the case with a poor cream.

### Inspection at Western Ontario Creameries, 1909

Frank Hens, Chief Dairy Instructor, London

There were in operation this year 73 creameries, four less than last year; 73 creameries, four less than last year; 73 creameries, four less than last year; 73 creameries, four less than last year; 15307 patrons sent milk and cream to these creameries—1162 more than last year, and only 1678 less than are sending milk to the 211 cheese factories. This makes a total of 32,292 patrons engaged in producing milk and cream for the factories in Western Ontario, 2862 more than last year.

In 1908 there was produced in Western Ontario from the creameries 3,270 tons of butter, a gain of 358 tons over 1907. In 1909 there was produced from the creameries 3,280

tons, a gain of 10 tons over 1908. The average per cent. of fat in the cream for the Eastern and Southern Group was 26.5 per cent., for the Eastern Northern Group 25.3 per cent. The average per cent. of fat in the cream this year was 24.8. This is a gain of 2.8 per cent. in the average per cent. of fat in the cream for the season, showing that we are gradually beginning to secure a richer cream.

### DETERMINATION OF BUTTER FAT

Sixty-six creameries are cream collecting and seven are both cream collecting and separator. Sixty-three creameries are now using the Babcock test, while only 10 are left which use the oil test. It is to be hoped that these 10 creameries will see their way clear to discard the old oil test churn before the beginning of another season and adopt the Babcock test. The patrons of four of the 10 creameries using the oil test held annual meetings in December and gave their presidents power to sign a mutual agreement to the effect that they would change from the oil test to the Babcock test for 1910. This arrangement will no doubt be carried out which will leave only six creameries using the oil test.

Forty-nine creameries are using the pipette for taking the sample for testing, nine creameries are using the scales, and five the scales and pipette together. This is six more than last year. Only three creameries are now using the box churn, fourteen creameries are using the pasteurizer the same as last year, twenty-four creameries are using the individual cans for collecting cream, 12 more than last year, twenty-two creameries are using large cans for collecting cream, nine are using jacketed cans, one creamery small cans, and only 17 creameries are now using the cream tank for collecting cream.

### VISITING PATRONS

There were 290 full day visits, 73 call visits made, making a total of 303 days at the creameries; 416 patrons were visited by the instructors going out on the cream routes at 100 creameries and while the drawer was getting his cream weighed and sampled the instructor had a short talk with the patron regarding the care of the cream and separator. This is evidently doing a considerable amount of good particularly in sections where the creamery has been receiving too thin cream and cream which is far too sour. In some cases the instructors found the separators in bad shape and pointed out to the patrons the necessity for proper cleaning and skimming of a richer cream to get best results.

There were 382 tests made for moisture in butter, the average moisture content for the season was 16.66 per cent., last year it was 14.33 per cent., five samples showed over 16 per cent. moisture. These samples were taken from 30 creameries, 14 in the Southern Group, and 16 in the Northern Group. We would like to mention here that we are getting close enough to the line in the matter of moisture in butter, and I would strongly urge the creamery men to look out for this point, and leg to point out that we must not overdo this condition. The average highest test for moisture was 15.9 per cent., the lowest was 13.64. The average per cent. of moisture in the Southern Group was 14.77 per cent., while in the Northern Group it was 14.56 per cent.

The total expenditure amounted to \$16,159, made up of four new creameries \$10,365, and \$5,791, spent in the usual improvements.

The meeting held in Guelph on Dec. 8th, was exceptionally well attended. The change from having sent addresses and confining ourselves to discussions of special subjects seems to work well, and many valuable points were brought out by the makers.

## Cheese Department

Makers are invited to send contributions to this department on all matters relating to cheesemaking and other subjects for discussion. Address letters to The Cheese Department.

### Some Sound Advice to Makers\*

Dr. C. A. Pablow, Ithaca, N. Y.

Ontario cheese makers are internationally recognized as the best cheese makers in the world. I feel proud to be classed with them in anything of so high a rating. But let me say also that the making of cheese in itself is not the only accomplishment for us to observe both in the future and right now. What reputation we may have had to win by doing things, and if we are to hold our good name, then we must keep on doing things. A baseball championship is won or lost in a single game, and one man may be possible to win either; a horse may lose a championship in less than two minutes; the Americans lost the European export trade on cheese in a single season. It's hard to keep on top, and we can't win by standing still. New Zealand and others are after our markets, and we as factory managers must do more than manufacture cheese.

#### MAKERS AS INSTRUCTORS.

At present you have in Eastern Ontario about 30 dairy instructors. In the State of New York we have six cheese instructors, but we have over 1,400 persons who do not know how to instruct the farmers in the production of clean milk. Now to my mind there is no reason why every factory manager should not be a dairy instructor. He knows or should know best the needs of his own patrons, he meets them or can reach them any or every day, and if he is the right kind of what they will do as he asks. Think what it would mean to have 1,000 such instructors instead of 30, right here in Eastern Ontario. The regular instructors are all right, but they only get around about once a month. It seems to me that if the makers would do their part it would only be necessary to have the instructors attend to difficult or obstinate cases which the makers might not be able to handle, and results would be much more noticeable.

We say we are kept so busy in factory work we cannot find time to look after the patrons. But we can. I have been long enough in factory work

\*Part of an address delivered at the last convention of the Eastern Ontario Dairymen's Association.

### FOR SALE AND WANT ADVERTISING

**TWO CENTS A WORD CASH WITH ORDER**

**FIRST CLASS BUTTER MAKER** seeks position as butter maker. Apply to Box O. Rupert, Que.

**\$75 TO \$100.00** weekly made handling our goods. Salary or commission.—Fairfax Refining Co., Cleveland, O., U.S.A.

**WANTED**—Situation in large and up to date cheese factory. Can take any position.—Robert McMillan, Payne's Mills, Ont.

**WANTED**—Cheese makers the coming season to sell subscriptions to Farm and Dairy, Peterboro, Ont. Desires commission for each subscription taken. Write Circulation Manager, Farm and Dairy, Peterboro, Ont., for sample copies for your patrons. Samples sent free on application.

## WANTED

Persons to work mushroomers for us. Small waste space in yard, range on farm can be made produce from \$15 to \$25 per week. Write for illustrated booklet and full particulars.

**MONTREAL SUPPLY CO.**  
MONTREAL

to know we can. The trouble with most of us is we don't know how and don't try to find out. I tell you men enough. We are more like transfer companies carrying other men's ideas. Why don't we have more originality and more enthusiasm in our work? This country gives us strong bodies and brains. We use the body too much and the brains not enough. We talk about cheese makers' unions and raising the wage scale, but let me say right here that the best we can do can have a union with the patrons of our own factories. This is the union that will determine a man's worth and his salary; the union that brings greater profits to the farmer and the one co-operative necessity in successful factory management.

#### AN UNBROKE STATE OF AFFAIRS.

We criticize the farmer, but gentlemen, the farmers are the finest people in the land. They are the most generous in their own way, and willing to do the best they know how. They are conservative and content to let things alone till something else shows better. Now it's up to us to prove them the things that are better. The milk business is theirs, the product is theirs, and they should control their business. Did you ever stop to consider this peculiar and unique state of affairs? Farmers hire the work for them, but unconsciously the farmers work for the factory manager instead. They take his orders and his abuses, and in the great majority of cases do as he bids them, namely, they should not be the case. It is so in other businesses that I can think of. The farmers should know better their own part in the work and then be able to control the men they employ. Then and only then will our factory managers be compelled to perfect themselves in their chosen professions in order to hold their own positions and demand the larger salaries.

### Canadian Dairymen and Thoroughness\*

J. A. Rudlick, Dairy Commissioner, Ottawa.

It has been a sort of hobby of mine to study dairy conditions in other countries, and I have had exceptional opportunities for doing so.

I have been impressed with two things, namely, the apathy or general indifference to cause and effect, and a decided lack of thoroughness on the part of Canadian dairymen, as compared with those who compete with them for a share of the world's trade in dairy products. There is perhaps some excuse for this state of affairs in the fact that those other countries which I had in mind, like New Zealand, Denmark and Holland, specializing in dairying, and having their energies and thought directed along one part and more far-seeing in that particular direction than we do, who have our attention divided among several lines. Nevertheless, this carelessness or lack of thoroughness is a serious danger to the dairy industry.

#### AN INSTANCE OF LACK OF CARE.

Allow me to draw your attention to a circumstance which Dr. Connell mentions in his report of an investigation made last summer into the question of the pasteurization of whey, which illustrates this point very aptly.

You all know that the cheese factories have a long way to go with the whey, or at least to heat it to a temperature of 155 to 158 degrees, in order to destroy nearly all bacteria in it and thus prevent to a large extent the curdling of the whey. The milk cans and improve the feeding value

\*Part of an address delivered at the Ontario Dairymen's Convention last winter.

of the whey. Careful experiments and considerable experience have proved the value of this practice. Dr. Connell states that at two out of the five factories which he visited, the heating was being done without any tests of the actual temperature being made. The cheesemakers admitted that they had never used a thermometer to determine whether the work was being done properly or not. In view of the warning and advice given by those who have recommended this practice, that overheating would coagulate the albumen and thus prevent the proper distribution of one of the most valuable feeding constituents which whey contains, and that underheating would fall entirely in the object aimed at, and might be positively harmful, it is not hard to find a very strong enough hard to find a very strong enough to properly characterize such slipshod practice, especially in view of the careful work in this connection.

Here we have a case where somebody has incurred the expense necessary to carry out the work, where somebody was paying for the fuel to heat the whey, and yet nobody knew whether the result aimed at was ever attained, or whether positive injury was not being done to the whey. Does the cheesemaker who deliberately neglects his plain duty to such an extent deserve to succeed? Do the owners or managers of a factory who will permit of such laxity on the part of employees deserve the confidence or support of the patrons? Do the patrons themselves who are so neglectful of their own interests as to allow themselves to be imposed upon in this manner deserve any letter treatment than they get? I leave it with you to find the answers.

#### NO INTENTION OF BEING PERSONAL.

I may have been treading on the toes of some in this audience in mentioning these cases. If so, I desire to say that I have no intention of being so personal. I do not know what factories are referred to in the report of Dr. Connell. I have merely cited the facts reported as being typical of things which are occupying every day in connection with our dairy operations. They are not confined to any one class. In a case such as I have quoted I blame the patrons, in a sense, as much as I do the cheesemaker who had actual charge of the work. When they demand and pay for efficient service, they will get it; that is, if they study their interests sufficiently to know when they are getting it. As long as they accept slipshod, inefficient service, that is the kind of service they will get. In my judgment, constitutes a greater danger to the cheese industry.

When the temperature of the nights reaches 65 degrees or over we are bound to have over-ripe milk delivered at the factory the next morning, unless the milk has been cooled. Geo. H. Barr, Chit. Division, Ottawa, Ont.

Renew your subscription now.



Do not neglect a cow that shows signs of becoming a hard milker. You can't afford to keep cows that have Caked Bag, Sore or Obstructed Teats, Udder Troubles, Heavy Water, etc. Here is a very complete and inexpensive Veterinary outfit for every farmer and dairymen should have on hand when emergency strikes. The

## DRUMMOND HARD MILKER OUTFIT

Consists of a Test Bistory, Test Opener, Milk Tube, Test Expander and a supply of Antiseptic Soap, all fitted in a neat, compact case. Everything you need to remedy obstructions, and ensure free milking. This outfit is especially suited to calves, young and old cows. Full and simple instructions are complete set. \$3.00. Order to-day and let us send you our large Catalogue of dairy supplies.

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## PERFECT STEEL CHESE VAT

Our 1910 Steel Vat is going to be just a little better than ever before. Can't improve much over last year. —It was a tandy. The tin lining in this year's vat will be 30 gauge —the heaviest ever used—4 gauges heavier than your local tinmith uses. The outside frame will be all galvanized, and then painted, making it absolutely rust proof. It will interest you.

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Write for new catalogue with prices reduced. It will interest you.  
**THE STEEL TROUGH AND MACHINE CO., Limited**  
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**WE** are haunted by an ideal life, and it is because we have within us the beginning and the possibility of it. —Phillips Brooks.

## The Ways of Providence

By Agnes Booth

(Concluded from last week)

"I feel awfully worried about your pa, Luella. I've made up my mind that he goes to a doctor every day—and he looks terrible! I'm afraid it's his liver, Luella!"

"I hope it's his conscience," murmured Luella, but she strove to comfort her mother by reminding her that her father's appetite did not seem to be affected and that he did not usually conceal from them any trifling indisposition that he might have.

Luella felt strangely old and hard of heart. She could not forgive her father for what she deemed a great injustice, and she felt that the longed-for piano would never be hers.

One day, after her father had started on his mysterious daily trip, she remarked despondently, "Ma, I'm going over to Mrs. Maynard's and tell her she needn't wait any longer. She can let the piano folks have the up-right in part payment on the grand. There's no hope of my ever having it."

Mrs. Whitman looked at her with tearful eyes. "I suppose that is the best way, but, oh, Luella, your ma is so sorry!" and the poor woman put her apron to her eyes and sobbed.

"Don't you cry, ma, dear. I'm not going to. We can call this one of the ways of Providence that we hear so much about," said Luella bitterly.

As Luella passed the barn a proudly cackling hen fluttered out of the big open door.

"That old speckled hen!" Luella exclaimed wrathfully, "she is forever laying in the hay-mow, instead of staying in the hen-house where she belongs. I'll see if I can find her nest."

She climbed the straight ladder with accustomed swiftness and groped about in the dim, sweet-smelling hay-mow.

"Three, four, five," she counted aloud; then her memory turned back to the day when she and her mother had counted the bills, and the anguish of her loss came upon her afresh. A sudden desire for help overcame her and she knelt upon the hay with clasped hands and upraised face.

"Oh, Lord," she prayed, "send me back the money!"

A discouraging thought flashed into her mind, and she added, as if to some person beside her: "No, you can't do that, because pa's got it, but," renewing her prayerful attitude of mind and body, "send me some more, dear Lord; send me some more!"

She sat still for a few minutes, crying softly, but with a lighter heart. "I'm glad I asked the Lord, anyhow," she murmured, with childlike satisfaction, "it will show Him I really do believe!"

She put her hands down upon the hay, feeling again for the nest of eggs, when her fingers touched something smooth that rustled as it moved beneath her hand. She held the object up before her eyes. It was a long, narrow, unsealed envelope. She lifted the flap and pulled out the contents—her eyes growing wide and startled.

Was it—it was—money—bills! She scrambled hastily down the ladder and, seated on the barn floor, joyously examined the prize. Ten twenty-dollar bills! Crisp, and new, with a narrow paper band holding them together. Two hundred dollars!

"The Lord loveth a cheerful giver," quoted Luella devoutly, giving slight heed in her joy and excitement to the application of the quotation.

Across the meadow and through the orchard she hurried to the Maynard farmhouse, laughing and crying and murmuring indistinct words of praise and thanksgiving.

Mrs. Maynard warmly rejoiced with the breathless, panting girl. "You and your mother have worked hard, Luella," she said kindly, "and you have done well to save it up so soon."

"Can't it be sent over right away, now—this very minute?" pleaded Luella. "I've waited so long for it—"

"Why, I don't know, Luella. I'll blow the horn for Mr. Maynard and maybe he'll—"

Kind-hearted Mr. Maynard agreed at once; the piano was carefully wrapped in old quilts, a strong flooring quickly built between the axles of the low wheels used for drawing 1923, and with the assistance of his hired men M. Maynard soon had the instrument on its way to the Whitman farm.

Luella hurried home by the shorter route.

"It's coming, ma, it's coming!" she gasped breathlessly. "What is coming, Luella? Have you gone crazy, child?"

"The piano, ma! See, they're turning up the road now. The Lord sent me the money! Quick, ma, let's push the organ out of the way—we want the piano across that corner. Oh, ma, do help me," she begged. "I'll tell you all about it when they're gone. I prayed for the money and the Lord sent it!"

"I'm afraid, daughter, I'm afraid," repeated Mrs. Whitman when Luella had poured forth the whole story of her prayer and its seemingly miraculous answer.

"Afraid of what, ma? Don't you believe that the Lord answers prayers?"

"Yes, yes, of course, Luella," she answered hastily, "but—but not in that way. He—He uses some human instrument."

"Well, I don't see," Luella's tone was rebellious, "why the Lord couldn't just drop that package of bills down

"Mandy," he whispered.

Mrs. Whitman bent closely over him, gently stroking his pale forehead and scolding him.

"The old—organ's—pretty wheezy, ain't it, Mandy?"

She nodded in silence. "Mandy," he clutched her hand in a weak grasp, "I'm goin' to buy—Luella a pianer—when I git up—"

"So you shall, pa," she replied soothingly. "Luella'll be real pleased."

She believed him to be still wandering in his mind.

The sick man gained rapidly and the day soon came when, leaning on Luella's strong young shoulder, he made his slow way down the stairs and into the sunny parlor.

"Sit here in this easy chair, pa, and I'll put the crickets under your feet and then I'll play for you, pa!"

Luella spoke brightly, but she felt that a crisis had come, and her heart sank a little as she observed the shaking of her mother's thin hands.

Jabez stared at the piano while Luella was playing, but he did not speak until she rose from the seat and knelt beside him.



Fine Cement Farm Home, Owned by Mr. R. W. Walker

Of Ontario Co., Ont. One of the three highest scoring houses on the Farms entered in District 2, in the recent Dairy Farms competition conducted by Farm and Dairy. Read description and see floor plans also in this issue.

as easy as He could make some rich man come and give me two hundred dollars!"

Mrs. Whitman was silent. "I do think the Lord sent it, ma," Luella urged, with radiant face and shining eyes. "See, it is spick span new! You shall have this money, ma, for yourself—you need so many things."

"I'll take it, Luella, and put it away," said the mother with increasing anxiety, "we must tell your pa about it and ask him what to do."

But when they next saw Jabez Whitman they could not ask him that, or anything else.

He was brought home unconscious and laid upon the bed in the "best room," where two doctors sawed up a terrible gash in his head, while Luella and her mother watched in frightened awe the pale face that looked so unnatural without its accustomed frown.

It was weeks later when Jabez opened his eyes and reached out a gaunt, shrunken hand to his wife.

"Where'd you git it, Luella?" "Pa, dear," the girl answered solemnly, "I prayed for the money and the Lord sent it to me—two hundred dollars—new money, pa, just made—crisp and—"

"Luella!"

He tried to raise himself, but sank weakly back again. His eyes were strangely bright and a look of gladness, never seen there before, rested on his pale face.

"Luella," he whispered, "where'd you find it?"

"In the hay-mow, pa, right beside my knees, where I was praying."

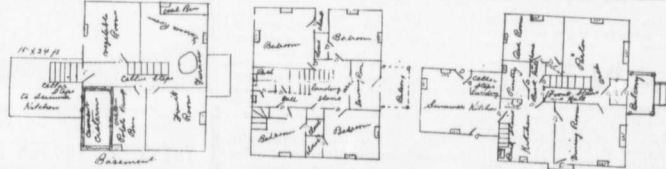
"The Lord be praised!" he said feebly.

"There, ma," cried Luella, "didn't I say the Lord could do that?"

"Mandy," said Jabez, almost tenderly, "set down—you must be tired."

She seated herself near him, crying nervously behind her apron.

"Mandy—and Luella!" the sick man spoke slowly, "I didn't put your money in the bank—that day. Instid I took out enough more to make two



Floor Plans of Farm Home of R. W. Walker, Ontario Co., Ont. See Description of House in this Issue



hundred dollars. I got 'em to exchange and give me new bills. I meant to buy the Allen wood lot. I thought I had the money on the way home, I thought. I had it for it every day, until—that time—the man got scared—"he began to tremble and cry."

"Oh, don't, pa!" cried Luella, in genuine distress. "Ma, and I will save up again and give it to you for the wood lot!"

"It ain't that, Luella, I'm glad you got the money—you deserve it. An' I guess the Lord sent it—in His own way—though His way was rather tough for me!" with a touch of the old grinniness. "But, Mandy, as I was sayin' is sort of faint, I was awful scared 't was a judgment of the Lord agin me."

He paused, breathing heavily. "The ways of Providence, pa—" began Mrs. Whitman, timidly. "They air inscrutable," affirmed Jabez, seriously, but with a gleam of humor flashing into his sunken eyes.

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**Friendship**

Mrs. M. C. Ellenboro, Rosencath

(Concluded from last week)

The friendship that comes to us when we ride on the crest of the wave will quickly disappear when we go down into the trough of the sea. The friendship that springs out of office and position will leave when the office is gone, and the friendship that comes when an office is wanted will vanish when the office is won. The friendship that is born of money or wealth will slip away when our bank account becomes low. Give me the friend who comes the closest, when my need is greatest; the friend that stands by me in the hour of trouble, that nestles up to me when the world frowns, that will not pass by when I lie wounded, stripped and beaten on the road, but will pour in oil and wine, and lift me up, and carry me to the inn and care for me with loving and tender hands. To have such a friend as that is better than gold, better far than all the world's cheap applause.

Oh, such a friend, He is in truth, Whatever his lot may be, A rainbow on the storm of life, An anchor on its sea.

**DO UNTO**

If there's something good you know Of another, friend or foe,  
Something meriting your praise,  
Though it be in little ways,  
Something kindly tender, true,  
That will hope and faith renew,  
And lead others the way to do,  
Always tell it.

If there's something ill you know Of another, friend or foe,  
Some mistake that he has made,  
And the penalty has paid,  
Something better out of sight,  
That to drag into the light  
Would not add the cause of Right,  
Never tell it.

Whatever you may know Of another, friend or foe,  
If the telling of it would  
Not result in any good,  
Know on you there is no call  
To give censure on him fall,  
Speak you well or not at all  
Of another.

—Henry Waldorf Francis.

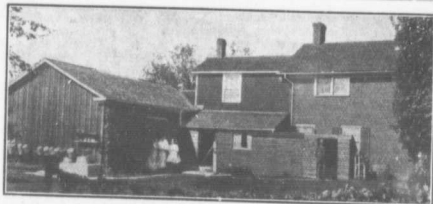
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**Improvements on One Farm**

"Since entering the recent dairy farms competition a cement era has dawned on us. Cement has been used in the following manner on our farm: walks made around the house, platform for well, floor for wood shed and a large cement cistern at the barn, in, to which the wind mill is attached and the water forced to the house. We also have a platform and stand made also of cement on which the milk vessels are washed in summer.

We have as has been said water forced to the house and this gives us many comforts, for it means water everywhere we want it in the house, in pantry, kitchen, basement, and bath-room. We have a coil of pipes in the furnace thus giving us both hot and cold water in each of the above places. This is a great convenience and comfort in the winter.

Another improvement is the addition of a nice lavatory pantry making the second one. We do not use it very much in winter and the last one is a great convenience. An outside or back porch was closed in, plastered

pointed with a heavy bead of marble dust. The balcony foundation is built the same way, with three courses of cement concrete rock faced blocks, built on two sides and cement floors and steps. A 10 inch round post stands on each corner which supports the top framework. This is covered with a cement concrete floor, with hand rail and banisters, on to which opens the front glass door from the second floor. The summer kitchen is 15 x 24 feet, with 8 foot ceiling, and is built the same as the main house. The walls and ceiling inside are sheathed with V. joint lumber.



Rear View of the Home of D. J. McClure, York Co., Ont.

This farm scored fifth in the recent dairy farms competition conducted by Farm and Dairy. Note the absence of all rubbish, shrubs around the house, and the every morning, each in its respective place. See Mrs. McClure's letter this page.

and made warm, and it lightens work very much. A refrigerator has also been added to our kitchen, during the past summer. Two very handy closets have also been arranged. We are quite satisfied with our water system which with our bath room gives great comfort and is a real luxury in a country home. Also the planting of some choice shrubs on lawn are the improvements, made during the past year for the benefit and comfort of our house."—Mrs. McClure, York Co., Ont.

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**A Concrete Farm House**

One of the best farm houses on the farms entered in the recent dairy farms competition was that shown on page 16, the home of Mr. R. W. Walker, of Ontario Co., Ont. This is practically a new farm home, built of cement, the plans of which we show herewith also. The description of Mr. Walker's house and how he built it makes interesting reading. He writes, "Our house was built in 1905 from plans which were prepared by myself. I also superintended the work of building from start to finish.

The basement is the full size of the main part of the house and is built with stone masonry. The house is built with a frame of 2 by 4 studs, with 9 foot ceiling below and 8 foot ceiling above. It is sheathed inside and out with inch lumber, then papered and lathed and plastered inside. It is veneered outside with cement concrete rock faced blocks 8 in. x 30 in. and 4 in. thick, laid in cement mortar. All the joints are tuckpointed with a half-inch bead of cement plaster. In laying up the blocks every 3rd course was suiked to the frame by 3 inch wire nails bedded in the mortar.

The blocks were made here on the ground with a mould which made two at a time. They are made of gravel and sand and gravel, 10 parts of gravel to one of cement, and faced with clean sharp sand, 3 to 1 of cement. The cement used was the Rathburn Star blocks, for all the doors and windows were made of sharp sand, 7 to 1 cement.

In making the blocks, three men could make 200 blocks a day. The stone masonry above the ground is built with dressed stone, laid up in the broken Ashley pattern and tuck-

The chimneys are all solid cement concrete to above the roof, then finished with rock faced blocks.

**HEATING THE HOUSE**

The house is heated by a hot-air furnace using either coal or wood. The attic is used for a store room. The roof is covered with steel shingles made by the Peoliar People of Ottawa, Ont. The soft water is supplied from a cistern in the cellar, 12 feet long, 4 feet, 6 inches wide and 5 feet deep. It is forced from the cistern to a tank in the attic, by a pump in the cellar. The water is then drawn from the tank by taps at the sink and in the pantry. The house gives good satisfaction, is perfectly dry and warm in winter and cool in summer. The cost to build this house, including all material, work and board, was about \$3,000.

**MRS. WALKER WRITES**

"We did not have many changes or improvements made for the Dairy Farms Competition, as our house was built very recently. We did not require any improvements in particular. I might say we have had the long distance Bell telephone put in the house and find it a great convenience. We also had a balcony built over the front door of the house which adds very much to the appearance. We did have a new iron pump in the hard water well near the kitchen floor, in place of the old wooden pump which had seen its best days. We have a new washing machine to help us in our heavy washing, which we appreciate very much."

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**A Woman Winner**

The pig I received from Farm and Dairy for securing a club of seven new subscribers for that paper is a beauty and far above my expectations.—Mrs. W. A. Pae, Peterboro Co., Ont.

By rubbing soap on the bottom of kettles before placing directly over the fire, the black may be washed off very easily. Grease will do, but not so well, as the soap helps when washing the vessels. A soft soap is preferable and many do not have this, boil up scraps of toilet soap and keep ready for this purpose.

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

\*\*\*\*\*  
**The Upward Look**  
\*\*\*\*\*

**God is Love**

God is love; and he that dwelleth in love dwelleth in God, and God in him.—1 John 4, 16.

The reason many of us do not receive more blessings from God is because we have not got sufficient faith in God's willingness to give us good in answer to our petitions. This is small because we have only a small conception of God's love for us. When we really believe that God longs to shower blessings upon us, more even than we desire to have, how much more ready we are to make our petitions known unto Him. And yet this is the case and we should never forget it.

People often doubt God's love. They wonder why there is so much trouble in the world and why Christ pointed out so frequently the trials and even in our sufferings Christians must be prepared to endure when they become His disciples. The reason is simple. God desires that we shall love Him above everything else. He is a jealous God. He is not willing that we shall allow anything else to reign supreme in our affections. If we do then we have idols in our hearts.

Christ knew our weaknesses. He knew that were He to emphasize the announcement that all who followed Him would receive wealth and honor here on earth many would be led to accept Him merely for the sake of earthly gain. Christ knew that such disciples would not be worthy of their name. Their motives would be purely selfish. Therefore, He gave far more than we could expect. We must be prepared to receive His cross daily. That they must be willing to renounce all earthly honors and comforts in order that they might become worthy to receive still greater blessings. That until they recognized that their souls were of vastly greater importance than mere material blessings they need not expect to receive such blessings from Him. But he added: "Verily I say unto you, there is no man that hath left house, or parents, or brethren, or wife, or children for the kingdom of God's sake, who shall not receive manifold more in this present time and in the world to come, life everlasting." (St. Luke 18, 29, 30).

When, therefore, we approach God with our petitions we must recognize that He reads our hearts better than we can ourselves. That He knows full well whether or not the motive impelling us to pray is a worthy one or whether it is a selfish one. And we may rest assured, if there is anything in our hearts that is displeasing to Him then we need not expect to

**Do farmers eat the proper sort of food?**

The farmer of today buys a much larger proportion of the food that goes on the table than he did ten years ago. It's a good thing that this is so because he has a great variety to select from.

He should, however, use great care in selecting for the best results in health and strength.

The widespread tendency in the city to increase the amount of Quaker Oats eaten is due very largely to the recent so-called demonstrations by scientific men that the Quaker Oats fed man is the man with greatest physical endurance and greatest mental vigor.

Farmers should give this subject careful thought and should increase the quantity of Quaker Oats eaten by themselves, their children and their farm hands.

have our prayers answered. We cannot fool God although the devil may often fool us.

In order that we may see our sin God may send trouble upon us. When this happens we should not lose faith in God's love or in His promise to give us the desires of our heart. What we call resignation is often only despair and lack of faith. Instead of giving up hope we should readjust and prayerfully endeavor to search out and remove the sins from our lives always believing that if we have faith God will ultimately give us even more than we can ask or expect. We should remember the exhortation: "My son, despise not thou the chastening of the Lord, nor faint when thou art rebuked of Him: For whom the Lord loveth He chasteneth, and scourgeth every son whom He receiveth. If ye endure chastening, God dealth with you as with sons; for what son is he whom the father doth not love?" (Hebrews 12, 5, 6, 7). When, therefore trouble comes upon us, we should always remember that it is only for a season and only for our own good that it is sent by the God of love, and that its purpose is to fit us for great blessings to follow. This though makes even our troubles seem light and prepares us to receive all the sooner the favors God has in store for us.—I.H.N.

**How to Make a Lawn**

(Concluded from last week)

There are two seasons at which a lawn may be successfully seeded, in the spring in April and May and in September.

**VARIETIES OF SEED**

The ideal lawn grass is one with creeping permanent stems. Kentucky blue grass, though in germinating, makes a strong, permanent turf, but it does not attain its proper development until the third year after sowing. Where immediate results are wanted the mixtures offer distinct advantages, because that God loves the quicker germinating varieties. If the quality of the land is uncertain or mixed, the grass mixtures are again valuable, because one or another will surely suit each special soil condition.

As the Kentucky blue grass will thrive in any but an acid soil it is the groundwork of all lawn mixtures. The most common addition to the blue grass is one or more of the henry or red tops, quickly germinating creeping grasses. These are expressly adapted to the drier sandy soils which are usually too acid for the perfect growth of the Kentucky grass.

Where a greensward for immediate effect is wanted, sow to each acre in the fall a mixture of ten qts. of Ken-

tucky blue grass, eight qts. of Rhode Island bent and three qts. of English rye. The English rye will plant to grow almost as soon as it is planted and by the end of the first month will make a presentable sheet of soft green. The Rhode Island bent comes along soon after the rye and if the soil is not just what it should be in the way of fertility it will take hold and form a good, close turf where the blue bent hardly makes a showing. The English rye unfortunately is a biennial and will disappear during the second summer.

Eventually the lawn will be of blue grass, and some persons seem to think that planting these quicker germinating grasses is only a waste, but they forget that the Kentucky blue will not make a turf before the third year and in the meantime you have been enjoying a beautiful temporary lawn.

Now, as to making a lawn by sodding, we never recommend it unless the lawn is small and the immediate effect is desired. In the first place it is next to impossible to get good sod in any great quantity; in the second there is the expense of cutting, lifting, carting and laying down the turf and then beating it down, and in the third place it is impossible to make perfect unions between different sods. If the sods are laid in the autumn it is likely to be seriously injured by heaving during the winter, while if it is laid in the spring it is equally certain to be so dried out that great gaping channels will be made where the sods should join.

**Many Improvements Made**

"We feel thankful to Farm and Dairy for many good things we have received by improvements in our surroundings owing to the recent Dairy Farms Competition. We have installed a tank over our kitchen which is filled from the eave of main house, and which has given us much comfort and also soft water with no pumping.

The men have whitewashed the stables and now keep them in a much cleaner condition than formerly. We also had a supply of wood which was obtained by cleaning up the yard, fence corners, etc. I very much enjoyed my husband competing in the competition. It was the means of many an improvement on our farm which was profitable. It also added to the appearance of our home. I would advise every woman who has a husband running a farm to make him join in the betterment of the home and life in general.—Mrs. G.L.H., Huron Co., Ont.

Renew your subscription now.

**Galt Shingles**

ANY progressive minded, unprejudiced man must admit that as a roofing material for any building, public or private, slate has only one advantage—durability. It is not water-tight. It is a very expensive material and expensive to repair. Its immense weight necessitates a heavy roof-frame and massive walls.

And you can't concede even permanence to slate in comparison with "GALT" Steel Shingles. In ten years that roof which keeps out snow and rain, is handsome and dignified in appearance and is lightning proof for 50 years is a better investment than one that leaks for three decades and is a disgrace to the owner. "GALT" Shingles are the only roofing material by any man and will last indefinitely without any attention whatever. They are easily cleaned and repaired. "GALT" Shingles are the result of years of study and effort to produce for a reasonable price, a practical roofing material suitable for all climates and all buildings.

Our free booklet "Roofing Economy" fresh from the press contains all the facts of modern roofing. Name and address?

THE GALT ART METAL CO., Limited  
GALT, ONTARIO.  
Winnipeg - DUNN BROS.



**OUR HOME CLUB**

WHERE IS THE HIRED MAN?

Where is that hired man? Poor fellow! I hope he has found a peg to hang his hat on.

Now there are but men and hired men, as there are farmers and farmers, and then, too, there is always the other side of the question. I would like to hear the old man's story—upon my word I would—and to know just why he fired you. Conditions must be vastly different with you to what they are in this county if you were sacked at this time of the year with spring at our doors.

I know of one young hired man who was under the delusion that he was "the boss" and thought "the old man," as you call him, should do the work he was hired to do. That couldn't be you? If a farmer can afford to pay a man to do his work he has as much right to sit and read his paper or go for a drive, as any other employer, and it is none of their business, that is, granted he has a fair share of work to do and is not overburdened.

A hired man, be he a clerk, office boy or farm boy, if he be true to his position whatever it is, makes himself so necessary to his employer he is not in much danger of being fired at any time of the year.

If all the work you speak of could be done why don't you get at it and do it? Some men have to be told to do everything. They walk all around a woodpile and can't see it unless the farmer says, "There is a cord of wood and an axe." If the farmer is away, they can't find it. If that farmer had lots of money (sometimes he has not) and sent a good man away just to save a dollar or two, why I do hope no good man passes his way again for a while, for money is of no moment when a good reliable man is in question. My sympathies are with the hired men, for as a rule they work faithfully just as much as in any other position, and it is their own fault if they are not happy. Many hired men think their lot a hard one, but it is their chosen lot for the present, and it is up to them to be as true to it as if it were the highest office in the land. It is the man at the work that ennobs or degrades it. Do not be a mere machine. Study, read and you will think your work a pleasure. Take up some special line of reading, work it out; it is worth the trial. I like to think of some who were "our boys" some far away who are working out the study they began when here. Their letters are a real delight. If you do not care to read or study, I pity you. But content yourself to like it and if not, have some hobby for recreation, even if it is only the farm chickens. Make yourself so necessary to the farm that they can't get along without you, and you will find that you can stay as long as you like and at an reasonable figure you name.—"Aunt Faithful."

**THE FARMER'S WIFE—AN APPRECIATION**  
We read recently of a prize offered for the best answer to the question, "Who is the greatest woman that ever lived." This question was given to a girl, who, for her answer to a simple world-wide celebrity, gave as her answer, "The wife of the farmer of moderate means"—and the answer was both clever and appropriate. Little fame or glory comes to these silent home workers who—in the shadow—are doing, after all, the greatest of all the great world's work. We are apt to take so much as a matter of course, and we are slow to realize the ultra-importance of these home mothers, who plod somehow through the busy days teaming with a multitude of duties, how great, only they

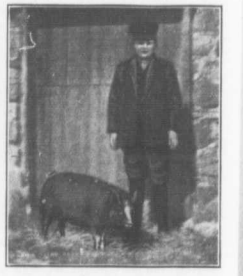
know. Wives of men in any walk of life are to be found capable of great things, but I believe the wife of the farmer of "moderate means" has more scope for her powers than many of her sisters.

With few conveniences she is expected to be housekeeper and housemaker. She goes through the endless routine of the common "day's work"—the washing, ironing, scrubbing, dusting, and all the baking and dish-washing attendant on the inevitable "three meals a day." She can cook a delectable meal and entertain her guests while they eat it; incidentally she finds time to bring up her children to be respectable and useful members of society; she is seamstress and nurse, "general factotum"—in short, a genius. Do you wonder that the clever girl called her "the greatest-est woman who ever lived!"—"Sister."

**Stanley and His Pig**

In a recent issue we published a letter from one of our boy readers who had won a pure bred pig in return for securing a club of seven new subscribers to Farm and Dairy.

We are in receipt of a letter from this boy, Stanley E. Canfield, and also a photograph of Stanley and his



Stanley E. Canfield and his Premium Pig

pig as shown above. Stanley writes, "I was only a week getting my club of new subscribers to Farm and Dairy. I went canvassing after school. One of the boys at school had a premium list and when I read in it the offer to give away a pig I decided to get one." Is there not some other boy who would like a pig of his own?

**Competitions a Good Thing**

I think farm competitions are certainly a good thing, because they induce farmers to improve in their methods of farming, keep better stock, better machinery and implements and to better their homes and surroundings. Farmers of favorable circumstances, improving their places and advancing farming in every respect, should be a good example to cause less unfortunate farmers to strive to improve their ways and methods.—Mrs. A. Smith, Durham Co., Ont.

**A Rack for Drying Jars**

For drying jars, large-mouth bottles, etc., a strip of wood of any length desired fastened to the wall,



A, side view; B, rack in use with six-inch pegs, five inches apart, slanting outward, is a very great convenience.

Renew your subscription now.

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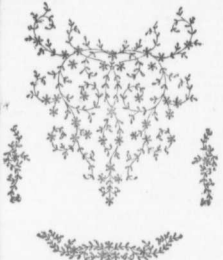
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March 31, 1910.

# FARM AND DAIRY

## Embroidery Designs

Designs illustrated in this column will be furnished for 10 cents each. Readers desiring any special pattern will confer favor by writing Household Editor, asking for same. They will be published as soon as possible after request is received.



477 Design for Embroidering a Blouse or Shirt Waist. Patterns for Front, Collar and Cuffs, or Sleeves are Given.



476 Design for a Braiding or Border. The border is five inches wide and one three-quarter yards are given. Soutache braid and rat-tail cord are suitable.



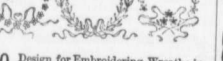
889 Initial Letters in Script.



473 Design for Embroidering a Veil Case.



484 Design for Embroidering a Border or Veil Case. The border is one inch in width and five and a half yards are given.



480 Design for Embroidering Wreaths in Three Different Motifs. Two large and two small wreaths of each design are given. The larger openings are 2 1/2, the smaller 1 1/4 inches in diameter.

### Care Must Be Given

We cannot urge too much on women ordering patterns, the importance of carefully giving name, address, size of pattern and number of same. Several orders are waiting to be filled, each of which lacks some one of these essentials.

# SPECIAL SPRING FASHIONS

Realizing the great interest that our readers take in the new spring styles, we shall continue to give special attention to the pattern department of Farm and Dairy for this week and next week only. Look over the illustrations we advise you, and we will do our best to get it for you. We will price plainly, giving name and address, size and number of pattern desired. Address, Pattern Dept., Farm and Dairy, Peterboro, Ont.

### PRINCESS GOWN 644.



The princess gown is graceful and attractive. This one can be made either in walking or round length and is adapted to a variety of materials.  
The gown is made with full length panels at front and back.  
Material required for medium size is 1 1/2 yds. 24, 8 1/2 yds. 32 or 5 1/2 yds. 44 in. wide with 1 yd. of all over lace and 6 1/2 yds. of banding.  
The pattern is cut for a 34, 36, 38, 40 and 42 inch bust and will be mailed on receipt of 10 cts.

### WORK APRON 601E.



The apron that is simply made while at the same time really protects the gown and can be slipped on and off easily and readily is the one quite certain to be well liked. This one fulfills all these requirements.  
Material required for medium size is 4 1/2 yds. 27, 3 1/2 yds. 36 in. wide.  
The pattern 601E is cut in sizes for a 34, 36 and 42 inch bust and will be mailed on receipt of 10 cts.

### TUCKED NEGLIGEE 630.



Such a negligee as this will appeal to every woman who likes a tasteful and becoming yet thoroughly comfortable morning garment. The slightly open neck and the short sleeves are graceful and attractive. It will be found suited to all the pretty, simple, washable materials of the season.  
Material required for medium size is 3 1/2 yds. 24 or 32, 2 1/2 yds. 44 in. wide with 2 1/2 yds. of banding, 2 1/2 yds. of ribbon.  
The pattern is cut for a 36, 38, 40, 42 and 44 inch bust and will be mailed on receipt of 10 cts.

### COMBINATION CORSET COVER AND DRAWERS 627L.



Every form of combination under garment is in vogue just now. This one is simple, practical and comfortable. It does away with all unnecessary bulk. It provides the snug fit wanted under the all fashionable gowns.  
Material required for medium size is 3 yds. 27, 2 1/2 yds. 44 in. wide with 2 1/2 yds. of narrow lace.  
The pattern is cut for a 34, 36, 38, 40, 42 and 44 inch bust and will be mailed on receipt of 10 cts.

### GIRL'S DRESS 600A.



The slightly long waisted dress is all ways a younger girls. This one can be worn with or without a sash. The shaped yoke is pretty and novel but is not necessary and can be omitted if a plainer dress is wanted.  
Material required for medium size is 6 1/2 yds. 32 or 27, 4 1/2 yds. 36 or 3 1/2 yds. 44 in. wide with 1/2 yd. 27 in. wide for trimming for yoke.  
The pattern is cut for girls of 6, 8, 10 and 12 yrs. and will be mailed on receipt of 10 cts.

### MISSES' SHIRT WAIST 658S.



Shirt waists that are made with tucks on the shoulders, concealing the arm hole seams are the latest. They mean broadness that is so becoming to girls.  
Material required for 16 yr size is 3 1/2 yds 21 or 24, 2 1/2 yds 32 or 2 yds 44 in wide.  
The pattern is cut for misses of 14 and 16 yrs and will be mailed on receipt of 10 cts.

### GIRL'S SEMI-PRINCESS DRESS 680L.



Semi-princess dresses are among the prettiest for younger girls, and are shown in many styles. This one is simple but dressy by means of the bertha and panel which is arranged over the plain dress.  
Material required for medium size is 8 1/2 yds. 27, 6 1/2 yds. 32 or 5 1/2 yds. 44 in. wide with 12 1/2 yds. of banding.  
The pattern is cut for girls of 8, 10, 12 and 14 yrs. and will be mailed on receipt of 10 cts.

### SEVEN GORED SKIRT WITH TUCK ON CHILD'S DRESS 630Z.



The simple little frock that is made full and joined to a yoke is the prettiest for tiny children. This one includes a panel at the front which allows use of embroidery or other trimming.  
Material required for medium size is 3 yds. 24 or 27, 2 1/2 yds. 32, 2 1/2 yds. 44 in. wide, with 2 1/2 yds. of embroidery 4 in. wide, 4 1/2 yds. of banding to trim as illustrated.  
The pattern is cut for children of 1, 2 and 4 yrs. and will be mailed on receipt of 10 cts.

### BOY'S OVERALLS 628S.



The active small boy needs overalls quite as much as any garment that his wardrobe can contain. Those illustrated are simple yet shapely and entirely satisfactory. They can be made from the traditional blue jean or brown denim or from heavy linen.  
Material required for medium size (6 yrs.) is 2 1/2 yds. 24, 2 1/2 yds. 27 or 2 yds. 36 in. wide.  
The pattern is cut for boys of 4, 6 and 8 yrs. and will be mailed on receipt of 10 cts.

### MEN'S NIGHT SHIRT 588S.



The roomy, comfortable night shirt is the one that every man likes, and the garment made at home is far more certain to mean such qualities than the one purchased ready to wear.  
Material required for the medium size is 6 1/2 yds. 27 or 4 1/2 yds. 36 in. wide.  
The pattern is cut for a 34, 36, 38, 40, 42 and 44 inch breast measure and will be mailed on receipt of 10 cts.

### BOY'S OVERCOAT 596E.



The simple overcoat is the one that is best liked for small boys. This one is adapted to all seasonable materials, the plain cloth or the mixtures as well as the checked. It is abundantly supplied with pockets. It can cut quite easily and readily be made at home.  
Material required for medium size (10 years) is 2 1/2 yds. 27, 1 1/2 yds. 44 or 1 1/2 yds. 44 in. wide with 1/2 yd. of velvet.  
The pattern is cut for 6, 8, 10 and 12 yrs. and will be mailed on receipt of 10 cts.

### MEN'S OVERALLS 621L.



The traditional blue jean, brown denim, galatea and similar sturdy materials are as well adapted to such garments as these. Every man whose employment means probable soil to his clothing will welcome them. There are inserted pockets in the front portions and there is a patch pocket on the back.  
Material required for medium size is 4 1/2 yds. 24 or 27, 3 1/2 yds. 36 in. wide.  
The pattern is cut for a 32, 34, 36, 38, 40, 42, 44 and 46 inch waist and will be mailed on receipt of 10 cts.





**HOLSTEINS**

**BULLS! BULLS! BULLS!**

At less than half their value for the next 30 days. Write

**GORDON H. MANHARD**  
MANHARD, Ont., Leeds Co.

**HOMESTEAD HERD OF HOLSTEINS**

Present offering—bull calves from high record cows and Dutchland Colantha Sir Abbecker (Imp), whose dam and sire's dam average 31.8 lbs. butter in 7 days. Write for particulars.

**EDMUND LAIDLAW & SONS**  
Aylmer West, Ont. Box 254 E-3-16-11

**SUNNIDALE**

Offers 2 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 Heiema family.

**A. D. FOSTER, Bloomfield, Ont.**  
Hallowell Station E-3-5-10

**LAKEVIEW HOLSTEINS**

One bull ready for service and a few ready shortly. All sired by Count Hengerveld Fayne De Kol son of Pieterje Hengerveld Count De Kol, whose daughter De Kol Creamline, has record of 19 lbs. milk in one day and 780 lbs. in 7 days. His dam, Grace Fayne 2nd (36.30 lbs. butter in 7 days), has a daughter, Grace Fayne, 2nd Homestead, who broke all record with 35.5 lbs. butter in 7 days, fat averaging 5.42 per cent. Visitors meet at Bronte, G.T.R., or Trafalgar Crossing, Hamilton Road. Write for particulars.

**E. F. OSLER, Bronte, Ont.**

**GLENSPRINGS HOLSTEINS**

Several fine young bull calves from A. B. O. and B. O. P. Cows now on hand. One or two YOUNG HEIFERS from good milking strains, left. Buyers will do well to order bull calves for next year. Will also sell one or two good COWS at a reasonable price. Speak quick. Price according to value as producers. (E-7-1-10)

**E. B. MALLORY, Frankfort, Ont.**

**FOR SALE—HOLSTEIN BULL CALF**

(Queen Netherlands' Favored the 2nd). Born Feb. 1st, 1910. Nicely marked; sire's four nearest dams average 25 lbs. butter in seven days. Dam gave a 3-year-old calf 50 lbs. milk a day for two months; grand dam gave a calf that yielded over 70 lbs. milk a day for three months, and 15.87 lbs. milk in ten months. Price of calf \$55 with papers.

**EDGER DENNIS, Newmarket, Ont.**

**THE SUMMER HILL HERD OF HOLSTEINS**

Is making some wonderful Records. This year it has produced the champion Canadian bred butter cow for 7 days record, 25 lbs. also 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 ten fine heifers, all in calf to an imported bull.

Come and make your selections AT ONCE. Prices at right and everything guaranteed just as represented. Trains met as usual if desired.

**D. C. FLATT & SON, Millgrove, Ont.**  
R. D. No. 2 E.T.F.  
Farm Phone, No. 2471. Hamilton.

**HOLSTEINS**

**WINNERS IN THE RING**

Gold Medal Herd at Ottawa Fair

**WINNERS AT THE PAUL**

See Our A.R.O. Records

Just think! Well wait. 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 Pouch, five times first prize bull at Toronto and London Fairs; also five of his sons, all from record merit cows. Also females of all ages.

**THOB. HARTLEY, Downsview, Ont.**

**LYNDEN HOLSTEINS**

Here handed by Kornycze Tenke No. 5809. FOR SALE—resulting by dam Lulu Glaser No. 5099, 1299 987 lbs. milk, 65.17 lbs. fat, 280 days, 3.70 per cent. fat. Also bull calves and females of all ages.

**SAMUEL L. LEMON**  
E-4-21-10 Lynden, Ont.

**HILL-CREST HOLSTEINS**

Bull calves fit to head any herd for sale. Sired by "Pontiac Hermes" and "Sara Jewel Hengerveld's Son." Dams are grand young cows, with good udders and teats, and best of breeding. These calves were from one to two months old and will be delivered at your station, at 15 lbs. per day dam.

**G. A. BRETHERN, Norwood, Ont.**

**LYNDALE HOLSTEINS**

We are now offering for sale a 13 month old son of "Count De Kol Preterji Paul" out of a 20 lb. dam; also a son of Sara Hengerveld Kornycze, from an 18 lb. cow. Both choice individuals, fit for service.

**BROWN BROS., LYN, ONT.**

**NORTH STAR HOLSTEINS FOR SALE**

Bull ready for service, out of high testing A.R.O. dams, sired by Count Hengerveld A.R.O., a son of Sara Jewel Hengerveld 3rd, the highest yielding, (38.30) high priced cow ever in Canada. Also a few females in calf to same bull. BTF

**J. W. STEWART, Lyn, Ont.**

**RIVERVIEW HERD**

FOR SALE—Calves, sired by Sir Aggie Beets Begia, son of King George's world's greatest 5 year old sire, dam Aggie Lily Pieterje Paul, champion J.E. 4 year old—33.5 lbs. butter 7 days. Dam of yearling 20 lb. bull, and 23 lb. 4 year old. Price reasonable considering breeding.

**P. J. SALLEY**  
E-10-6-10 Lachine Rapids, Que.

**AYRSHIRES**

**AYRSHIRE BULL CALVES**

BARGAIN SALE FOR THIRTY DAYS. All right good ones, from one week one month old, from Record of Performer sired cows and others, all good giving 54 lbs. and upwards per day on dry feed, guaranteed as represented. This is your chance at reduced prices. Also two yearling bulls fit for service.

**JAS. BEGG, Box 88, St. Thomas, Ont.**

**FOR SALE—AYRSHIRE BULLS**

From one month to two years old, all bred from large, good-milking stock. Also good cows and others. Apply to

**DANIEL WATT or HON. W. OWENS,**  
Manager, Proprietor,  
6-9-1910 Riverside Farm, Montebello, Que.

**AYRSHIRES**

Ayrshires of the right stamp for production combined with good type and quality. Write for prices. 10-12-22-10

**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.

**ROBT. HUNTER & SONS**  
Long distance phone. **Marville, Ont.**  
E-7-10

**BURNBIDE AYRSHIRES**

Having disposed of my 1909 importation, intend leaving about March 1st, for another lot. I 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 4 fine young bulls fit for service, on hand, of choice breeding, and females of all ages. Phone, etc. **R. R. NESS,**  
E-3-15-10

**Burnside Stock Farm, Howick, Que.**

**CHEERY BANK STOCK FARM**

FOR SALE—Bull calves, sired by Meth. Archal Milkman, the champion bull of Canada. One of two years old, also sired by Morton Maine Cheeseby, Junior, Champion at Toronto, 1909, and by Meth. Archal Dole 3rd, a grand 14m heifer, and a good milkier. Also females any age. Satisfaction guaranteed. Nothing but the best, is our motto. Visitors welcome.

**P. D. McARTHUR, North Georgetown, Howick Station O-6-8-10 Que.**

R. Ness, of Howick, Quebec, and left Howick on March 17th. This lot is killed to go under the hammer at Lacombe on April 1st. A mistake not this is the sixth car lot of Ayrshires taken west by Mr. Clark. This lot comprised eight young cows ranging in ages from four to six years, seven heifers ranging from one to six years old, one two year old, and two yearling bulls. Mr. Ness supplied several and the others were secured from the herds of J. P. Cahers and Chas. W. Moo, of Howick, Arch. Cameron, Dewittville, Wm. Brown, and J. A. Logan, Howick; S. A. Clelland, Hemmingford, and James McKell, Riverfield.

They were an even, typical lot. The bulls were of choice breeding; the cows all looked like producers, and the heifers give promise of combining quality with utility.

**MR. TRIMBLE'S SHIPMENT**

Satisfied with his venture last year in coming east twice and personally selecting, and having another lot consigned to him, Mr. Trimble lately arrived from the west, and with the assistance of Mr. E. Ness, has made another choice selection, numbering in all 23 head. This is an exceptionally fine lot, made up of 12 young bulls, nine cows and heifers and three calves. Five of the young bulls Mr. Ness selected last December from the herd of H. M. Parlee, Sussex, N. B., sired I presume by his champion bull, Lord Hercules of Spruce Grove, and all from imported dams. They are a grand lot. The one coming two next October was the winning bull under one year at the Maritime fairs last year. The other was the six months old winner at the same fairs. P. D. McArthur, North Georgetown, was the choice yearlings; James Bryson, Brysonville, was the choice heifers; A. Clelland, Hemmingford, a useful yearling, and the veteran Ayrshire breeder, Geo. Bustard, Havlock, a well brought out

heifer. Two choice females (a 2 year old cow and two yearling heifer) were selected from the herd of J. A. Logan, North Georgetown; from James Bryson, two grand cows, five years old; from James McKell, a grand young cow; from J. W. Logan, an extra choice four year old cow, a grand dairy type cow from W. H. Woodard, and two fine young cows and three heifer calves from the herds of Mr. Ness.

It is a choice shipment and Mr. Trimble is to be congratulated on his selection, which will not only redound to his credit, but to the advantage of the breed at the west. Some of the best Ayrshires bred in Ontario and Quebec have lately received inquiries from the western provinces and we look forward to other consignments in the near future—W. C. Stephen, Sec. C. R. A. B.

My herd is doing very good work this winter considering the shortage and the high price of feed. My mature cows are averaging from 40 to 50 lbs. a day without milking or roots. I am offering all my bull calves at reasonable prices. I have 14 months old from Nellie's Jewel. Her record appears in Farm and Dairy for Feb. 20th, also in the same paper for weeks. Her time was 20 minutes. She just milked 230 days. I have one pig calf from an exceptional fine heifer from the same dam. She also has one fine calf five months old, from Madeline B. R. O. P. Her sire was White Heather's Prince, 20th at White Heather, thus giving this calf R. O. P. on both sides and dam's side, Madeline B. and White Heifer appearing in the report of February 20th, also in the same paper. In right away, including three that have qualified for Advanced Registry, one four year old sire with 2.82 p.c. fat, milk in 11 months; two year old heifers, with over 7.000 lbs. each, testing 4.43 and 4.56, the four year old being the dam of record in Leeds County. I intend testing everything this year, and those that will not qualify will be for sale—James Beeg, Elgin Co., Ont.

**THE HOLSTEINS AT AVONDALE**

Avondale Farm, recently established as a dairy farm and for breeding high-class Holsteins, has attracted a great deal of attention in Leeds County during the last few months. The farm is situated about a mile and a half from the town of Leeds County. The owner, Mr. Arthur C. Hardy, intends his chief work to be the raising of high-class Holsteins, and has already got a small but choice herd together. He has in his herd the sire is Prince Hengerveld Peitje, an imported two year old bull, whose sire is Pieterje 22nd, a daughter of the great Hengerveld bull, she having made 20.34 pounds of butter at 23 months, and is considered one of the best of her kind. Her dam, A. Corley, Somerville, N. J. Her average fat in this record was 4.34. Her dam is Princess Johanna Rus, daughter of Johann Rus, 1st of Lad, and her calf is equally high in butter fat. This bull is as good an individual as he is well bred. U. S. sire and records are expected from him. Amongst other families the herd includes Lady Waldorf De Kol with 30.15 to her credit and Galatia Echo with over 11 records. The best cow in the Avondale herd is the young staff at Avondale Park, a Dione's heifer calf sired by Gordon Maschard's fine bull Brightest Canary, also Lady Woodard's fine cow's heifer calf sired by Pieterje 22nd.

The Ayrshire cow, Annie Laurie, owned by Dr. J. H. Hartnett, of Howick, Ont., has recently given 15,134.4 lbs. of milk; 598.5 lbs. butter fat, during 365 consecutive days.

I enclose \$1 for my renewal to Farm and Dairy. I have read the paper since it was first started many years ago. Farm and Dairy is the best farm paper printed in Ontario. I have tried the all and have gained many dollars from what I have found in Farm and Dairy—Johnson Robins, Lincoln Co., Ont.

Renew your subscription now.

**CRUMB'S IMPROVED WARRIOR STANCHION**



"My barn that was BURNED was fitted with Crumb's Improved Warrior Stanchions. I had not been in the case with Ness selected last December from the herd of H. M. Parlee, Sussex, N. B., sired I presume by his champion bull, Lord Hercules of Spruce Grove, and all from imported dams. They are a grand lot. The one coming two next October was the winning bull under one year at the Maritime fairs last year. The other was the six months old winner at the same fairs. P. D. McArthur, North Georgetown, was the choice yearlings; James Bryson, Brysonville, was the choice heifers; A. Clelland, Hemmingford, a useful yearling, and the veteran Ayrshire breeder, Geo. Bustard, Havlock, a well brought out

**WALLACE B. CRUMB, Box 102, Forestville, Mass.**

**Dr. Bell's Veterinary Medical Wonder cures kidney, inflammation of lungs, bowels and glands, and all other ailments. Write in every country. Will be free for trial \$1 bottle. This offer only good while limited to one bottle.**

**DR. BELL & WILK, Kingston, Ont.**

**AYRSHIRES**

**"La Bois de Roches" Stock Farm**

Here are kept the choicest strains of AYRSHIRES imported and home bred. Some of the best, bacon type, WHITE ORPINGTON, WHITE WYANDOTTES and BARRED ROCK POLY.

**HON. L. J. FORBET, J. A. BIRBAU, Proprietor, Ste. Anne de Bellevue, Que.**

**STADACONA FARM**

Show a Record for 1909

At Three Rivers, Quebec's Provincial Exhibition, at Sherbrooke, Canada's Great Eastern Show, at Ottawa, and Dominion Large Central Fair, at Barton, Vermont, and five other fairs. Also a grand FIRST PRIZES THAN ALL OTHER EXHIBITS COMBINED.

Cattle of both sexes and all ages for sale at very reasonable prices. O-6-3-10

**GUS. LANGELIER**  
Stadacona Farm, Cap Rouge, Que.

**FOR SALE**

Holstein bull, Queen's Tanco De Kol (reg.) 4 years old, produced a good getter and from deep milking dam. Selling to a gentleman for \$100. Price \$100.

Never beaten in show ring by animal of his age. Shown frequently.

**S. ARMSTRONG, Jermyn, Ont.**

**HILL FARM AYRSHIRES**

A few choice bull and heifer calves for sale. Also a grand 14m yearling bull, all from good milking dams. For particulars and prices, write to

**ALEX. DOIG, Lachute, Que.**

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# 'IDEAL'--The New Mammoth French ASPARAGUS

CONTROLLED ABSOLUTELY BY OURSELVES

Finest Flavour - Largest Size - Most Productive



A Small Fortune for the Market Gardener

Nothing approaching this magnificent Asparagus has ever been introduced upon the American Continent. Until we had thoroughly tested it we could not believe its high qualities.

The cut is from a photo of one bunch of 20 stalks which weighed two pounds. After photographing, the bunch was cooked and served to four people. There was no waste, the whole stalk eatable and no woody fibre. Quality ahead of anything in the asparagus line grown. We have cut fine, eatable asparagus second year from seed. This bunch on being shown to a leading fruit and green-grocer in Toronto, created great admiration. "Such bunches," he says, "would retail at \$1.50 each, the beginning of the season."

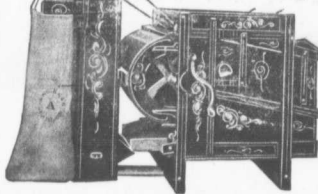
WE OFFER STRONG 2 AND 3 YEAR ROOTS

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## STONE & WELLINGTON - - TORONTO

## QUIT WORRYING ABOUT WEEDS

Let This Take the  
Weed Seed Out of  
Your Seed



Rid yourself of nine-tenths of the usual bother with weeds. Run any seed you plant through this easy-working, quick-running CHATHAM Mill, and you can be sure you are planting CLEAN seed—seed free from weeds—seed that will grow a BIGGER crop.

### Grade Up Your Clover Seed

The CHATHAM positively will add a dollar and more a bushel to the value of your clover seed. It will take out every trace of Buckhorn Plantain—the weeds that bother clover-growers so. You can be sure of a good catch of clover if you pass the seed through this combined Grader, Separator and Fanning Mill. And, if you have clover seed to sell in the Fall, you can get a much higher price for it if it has been cleaned by this Mill.

### Cleans Small Seeds Perfectly

This is the Combination Machine that handles the smallest seed efficiently. And it will handle large seed just as well—will grade the shrunken and immature or mishapen grains apart from the plump, healthy seed, and thus will raise the level of crop quality on anything you sow.

### Cuts Your Cultivating in Two

Not only does the use of the CHATHAM at planting-time insure a BETTER CROP (because it selects the seed fittest for sowing), but it means a material reduction in the amount of cultivation you will need to give that crop. It rids your seed of weeds; it brings that seed up to the highest standard of the best seedsmen; and thus it makes it needless for you to battle with weeds as you otherwise must do—the weeds won't be there to battle with.

You specially need this Mill, too, when you are ready to sell grain or seed in the autumn—clover seed and alike especially. The seedsman will not pay top prices for clover that contains more than ten weed seeds to the thousand. This Mill will bring your clover seed up to that requirement.



You cannot buy anything that will pay you better than my Mill. I guarantee it to do its work better and faster than anything else of the kind ever built. There is forty years of experience back of that Guarantee.

MANSON CAMPBELL, Prop.

With this Mill you can profitably employ a rainy day in cleaning up your barn floor. Probably there is enough timothy seed there to net you a good many dollars. The CHATHAM will recover it all for you, free from dirt, chaff, and weed seeds, and ready to market.

### Easy Terms - Closest Prices

Make up your mind to plant clean, mature, healthy seed from now on. Then write to us for our Special Offer and Credit Terms on the Chatham Fanning Mill (which is also a combined grader and separator), fitted with 17 twenty-five inch screens and riddles for every kind of seed. Send to-day for our New Catalogue about Chatham Special No. 1. The price will surprise you—it is so low; and the Mill will earn more than its cost on this Spring's planting. Write us about it TO-DAY. Don't think of planting until you hear what we can offer you.

## THE MANSON CAMPBELL CO., Limited, CHATHAM, ONT.

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